Appendix D
Laboratory Analytical Reports

Data Usability Review: Data Package

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-145929-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Laboratory Data Package Signature Page included?	☑	☐	☐	
Date of sample collection included?	☑	☐	☐	
Sample receipt temperature ≤ 6^{o} C?	☑	☐	☐	
Signed COCs included?	☑	☐	☐	
Field ID included?	☑	☐	☐	
Laboratory ID included?	☑	☐	☐	
Date of analysis included?	☑	☐	☐	
Date of sample preparation included?	☑	☐	☐	
Detection levels included?	☑	☐	☐	
Method reference included?	☑	☐	☐	
Sample matrix included?	☑	☐	☐	
Sample results included?	☑	☐	☐	
Case narrative included, where required?	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative Percent Difference; RRT - Relative Retention Time; RSD - Relative Standard Deviation.

COMMENTS
VOCs: J-HT, UJ-HT
Metals: J-FD, U-MB, J-MS
TPH GRO/DRO: No DV flags applied

Data Usability Review: VOCs (GC/MS), SW-846 8260B

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-145929-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☐	☑	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (use limits listed below or specify lab limits). Reject %R <10%.	☐	☑	☐	
R5 Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (laboratory specified limits)	☑	☐	☐	
RPD criteria met? (< 20% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%RSD criteria met for CCC? (<30% RSD for CCC, >15% RSD must have fit)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%D criteria met for CCC? (20% Max, Qualify >25%D)	☑	☐	☐	
Instrument Tune documentation included in lab package?	☑	☐	☐	
Instrument Tune Criteria met?	☑	☐	☐	
Internal standard data included in lab package?	☑	☐	☐	
Area within limits? (within -50% to +100% of last calibration check?	☑	☐	☐	
RRT within limits? (<30 sec. Difference from last calibration check?	☑	☐	☐	

Surrogates	Control Limits	Lab Limits?
1,2-Dichloroethane-d4	water 80-120%, soil 80-120%	
Dibromofluoromethane	water 86-118%, soil 80-120%	
Toluene-d8	water 88-110%, soil 81-117%	
4-Bromofluorobenzene	water 86-115%, soil 74-121%	

Notes:

* SPCC: chloromethane (0.1); 1,1-dichloroethane (0.1); bromoform (0.1); chlorobenzene (0.3); and 1,1,2,2-tetrachloroethane (0.3).

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

HT: The following VOCs samples were prepared (frozen) outside the 48 hour holding time required by the method: SJRP-SB09-9-10-03282017 (600-145929-1), SJRP-SB09-12-13-03282017 (600-145929-2), SJRP-SB10-1-2-03282017 (600-145929-3), SJRP-MW13-10-11-03282017 (600-145929-4), SJRP-MW13-10-11-03282017 DUP (600-145929-5), and SJRP-MW13-19-20-03282017 (600-145929-6). Analyzed same day as HT expired but slightly over 48 hours so flagged all results J/UJ-HT

SS: 1,2-Dichloroethane-d4 recovered low in sample SJRP-MW13-10-11-03282017 DUP (600-145929-5). Results were already flagged for HT so no additional data qualification was necessary.

IS: Internal standards Fluorobenzene and Chlorobenzene-d8 were recovered high in sample SJRP-MW13-10-11-03282017 DUP (600-145929-5). The sample(s) was re-extracted and re-analyzed with similar results. The original results were reported and were already flagged for holding time (and surrogate recovery) so no additional data qualification was necessary.

EB: Equipment blank SJRP-EB-03282017 was all ND

Data Usability Review: Metals, SW-846 6010, 7470/7471, 7000 Series			
Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-145929-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met? (< MDL)	☐	☑	☐	
LCS / QC check sample data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (AA/ICP 75-125%, Hg 85-115%)	☐	☑	☐	
MSD or sample duplicate data included in lab package?	☑	☐	☐	
RPD criteria met? (water RPD < 20%; soil RPD < 30%)	☐	☑	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
Proper number of standards used in calibration curve? (ICP blank+1 std; AA blank+3 stds; Hg blank+5 stds)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Interference check sample data included? (ICP only)	☑	☐	☐	
%R criteria met? (80-120%)	☑	☐	☐	
Dilution test (1:5) data included?	☑	☐	☐	
Results within 10% original?	☑	☐	☐	
Post digestion spike included?	☑	☐	☐	
%R criteria met? (75-125% ICP), (85-115% Hg/AA)	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

FD: SJRP-MW13-10-11-03282017 and SJRP-MW13-10-11-03282017 DUP = RPDs for Arsenic, Barium, Calcium, and Lead were outside criteria - flagged results in both samples J-FD

MB: Barium, Calcium, Manganese, and Sodium were detected in method blank MB 600-210240/1-A >MDL<RL. Aluminum 27.14, Barium 0.065, Calcium 1.975, Manganese 0.055, Manganese 0.04675, and Sodium 76.85 mg/L
One sodium result was <5x MB concentration and was flagged U-MB. All other results >5x MB so not flagged.

MS: Boron and molybdenum recoveries were below criteria in the MS SJRP-MW13-34-35-03282017MS (600-145929-8). Results in the parent sample were qualified J-MS. Other metals were recovered outside criteria but background concentration exceeded 4x the spike concentrations so associated results were not qualified.

EB: Equipment blank SJRP-EB-03282017 reported detections of Aluminum, Barium, Calcium, Iron, Magnesium, Manganese, Potassium, and Sodium. All associated detections in samples were >>5x EB concentrations so no flags were applied

MB: Aluminum was detected in method blank MB 600-210240/1-A. Associated sample results were >> 5x the value found in the method blank so no data were qualified.

LD: Arsenic, Boron and Molybdenum exceeded the RPD limit for the lab duplicate of sample SJRP-MW13-34-35-03282017DU (600-145929-8). But results were within MQL so no flags applied

Data Usability Review: TPH (GC), DRO/GRO, 8015M

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-145929-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits) Reject <10%	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
RPD criteria met? (< 30% water, <50% soil)	☐	☑	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
%RSD/correlation criteria met?	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%D criteria met?	☑	☐	☐	

Surrogates	**Control Limits**
TCMX & DCBP	Soil (50-150%)

Notes:

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

EB: Equipment blank SJRP-EB-03282017 all ND

MD: Gasoline Range Organics (GRO)-C6-C10 RPD in SJRP-SB09-12-13-03282017MS/MSD (600-145929-2) in batch 490-421012 slightly outside criteria at 22% but both recoveries in control and sample was non-detect so no flags applied.

Data Usability Review: Data Package

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-145933-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Laboratory Data Package Signature Page included?	☑	☐	☐	
Date of sample collection included?	☑	☐	☐	
Sample receipt temperature ≤ 6^{o} C?	☑	☐	☐	
Signed COCs included?	☑	☐	☐	
Field ID included?	☑	☐	☐	
Laboratory ID included?	☑	☐	☐	
Date of analysis included?	☑	☐	☐	
Date of sample preparation included?	☑	☐	☐	
Detection levels included?	☑	☐	☐	
Method reference included?	☑	☐	☐	
Sample matrix included?	☑	☐	☐	
Sample results included?	☑	☐	☐	
Case narrative included, where required?	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative Percent Difference; RRT - Relative Retention Time; RSD - Relative Standard Deviation.

COMMENTS
VOCs: J-HT, UJ-HT
Metals: U-MB
TPH GRO/DRO: No DV flags applied

Data Usability Review: VOCs (GC/MS), SW-846 8260B

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-145933-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☐	☑	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (use limits listed below or specify lab limits). Reject %R <10%.	☑	☐	☐	
R5 Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (laboratory specified limits)	☑	☐	☐	
RPD criteria met? (< 20% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%RSD criteria met for CCC? (<30% RSD for CCC, >15% RSD must have fit)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%D criteria met for CCC? (20% Max, Qualify >25%D)	☑	☐	☐	
Instrument Tune documentation included in lab package?	☑	☐	☐	
Instrument Tune Criteria met?	☑	☐	☐	
Internal standard data included in lab package?	☑	☐	☐	
Area within limits? (within -50% to +100% of last calibration check?	☐	☑	☐	
RRT within limits? (<30 sec. Difference from last calibration check?	☑	☐	☐	

Surrogates	Control Limits	Lab Limits?
1,2-Dichloroethane-d4	water 80-120%, soil 80-120%	
Dibromofluoromethane	water 86-118%, soil 80-120%	
Toluene-d8	water 88-110%, soil 81-117%	
4-Bromofluorobenzene	water 86-115%, soil 74-121%	

Notes:

* SPCC: chloromethane (0.1); 1,1-dichloroethane (0.1); bromoform (0.1); chlorobenzene (0.3); and 1,1,2,2-tetrachloroethane (0.3).

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

HT: All VOCs samples were received too late to freeze within 48-hours but was performed within 2x the holding times so results weren't rejected - detections were flagged J-HT and non-detects were flagged UJ-HT.

IS: Internal standard 1,4-Dichlorobenzene-d4 was recovered low in sample SJRP-SB10-31-32-03272017 (600-145933-5). The sample(s) was re-extracted and/or re-analyzed with concurring results. Results were already flagged for HT so no additional data qualification was necessary.

OT, TB: TRIP BLANK (600-145933-7) contained a bubble greater than 6 mm in diameter. No analytes were detected.

Data Usability Review: Metals, SW-846 6010, 7470/7471, 7000 Series			
Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-145933-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met? (< MDL)	☐	☑	☐	
LCS / QC check sample data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (AA/ICP 75-125%, Hg 85-115%)	☑	☐	☐	
MSD or sample duplicate data included in lab package?	☑	☐	☐	
RPD criteria met? (water RPD < 20%; soil RPD < 30%)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
Proper number of standards used in calibration curve? (ICP blank+1 std; AA blank+3 stds; Hg blank+5 stds)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Interference check sample data included? (ICP only)	☑	☐	☐	
%R criteria met? (80-120%)	☑	☐	☐	
Dilution test (1:5) data included?	☑	☐	☐	
Results within 10% original?	☑	☐	☐	
Post digestion spike included?	☑	☐	☐	
%R criteria met? (75-125% ICP), (85-115% Hg/AA)	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

MB: Several metals were detected in method blank MB 600-210290/1-A > MDL < RL: Aluminum 1.725 mg/Kg, Barium 0.645 mg/Kg, Calcium 10.6 mg/Kg, Chromium 0.115 mg/Kg, Iron 77.75 mg/Kg, Magnesium 17.59 mg/Kg, Manganese 0.535 mg/Kg, Molybdenum 0.195 mg/Kg, Nickel 0.145 mg/Kg, Sodium 29.62 mg/Kg. One molybdenum result in associated samples was <5x MB the blank result so it was flagged U-MB. The rest of he metals detections were >>5x the blank values and so were not flagged.

EB: The following metals were detecte din the equipment blank SJRP-EB-03272017: Barium 0.00611, Calcium 0.152, Iron 0.0558, Manganese 0.00226, Nickel 0.00111, and Sodium 0.483 mg/L. All associated metalls detections are >5x EB concentrations so no data were qualified.

MB: Iron was detected in method blank MB 600-210290/1-A > RL. Associated detections in sample results were >> 5x the blank concentration so no data were qualified.

Data Usability Review: TPH (GC), DRO/GRO, 8015M

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-145933-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits) Reject <10%	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
RPD criteria met? (< 30% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
%RSD/correlation criteria met?	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%D criteria met?	☑	☐	☐	

Surrogates	Control Limits
TCMX & DCBP	Soil (50-150%)

Notes:

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

No DV flags applied

Data Usability Review: Data Package			
Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146022-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Laboratory Data Package Signature Page included?	☑	☐	☐	
Date of sample collection included?	☑	☐	☐	
Sample receipt temperature ≤ 6^{o} C?	☑	☐	☐	
Signed COCs included?	☑	☐	☐	
Field ID included?	☑	☐	☐	
Laboratory ID included?	☑	☐	☐	
Date of analysis included?	☑	☐	☐	
Date of sample preparation included?	☑	☐	☐	
Detection levels included?	☑	☐	☐	
Method reference included?	☑	☐	☐	
Sample matrix included?	☑	☐	☐	
Sample results included?	☑	☐	☐	
Case narrative included, where required?	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative Percent Difference; RRT - Relative Retention Time; RSD - Relative Standard Deviation.

COMMENTS
VOCs: No DV flags applied
Metals: U-MB, J-MS, J-MD, J-PDS, J-SD
TPH GRO/DRO: No DV flags applied

Data Usability Review: VOCs (GC/MS), SW-846 8260B

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146022-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (use limits listed below or specify lab limits). Reject %R <10%.	☐	☑	☐	
R5 Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (laboratory specified limits)	☑	☐	☐	
RPD criteria met? (< 20% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%RSD criteria met for CCC? (<30% RSD for CCC, >15% RSD must have fit)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%D criteria met for CCC? (20% Max, Qualify >25%D)	☑	☐	☐	
Instrument Tune documentation included in lab package?	☑	☐	☐	
Instrument Tune Criteria met?	☑	☐	☐	
Internal standard data included in lab package?	☑	☐	☐	
Area within limits? (within -50% to +100% of last calibration check?	☑	☐	☐	
RRT within limits? (<30 sec. Difference from last calibration check?	☑	☐	☐	

Surrogates	Control Limits	Lab Limits?
1,2-Dichloroethane-d4	water 80-120%, soil 80-120%	
Dibromofluoromethane	water 86-118%, soil 80-120%	
Toluene-d8	water 88-110%, soil 81-117%	
4-Bromofluorobenzene	water 86-115%, soil 74-121%	

Notes:

* SPCC: chloromethane (0.1); 1,1-dichloroethane (0.1); bromoform (0.1); chlorobenzene (0.3); and 1,1,2,2-tetrachloroethane (0.3).

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

SS: 1,2-Dichloroethane-d4 (Surr) and 4-Bromofluorobenzene recovered high in TRIP BLANK (600-146022-4). No analytes were detected, no flags were applied.

TB: TRIP BLANK all ND.

FD: Precision between SJRP-MW12-16-17-03302017 and its field duplicate SJRP-MW12-16-17-03302017 DUP was within criteria.

Data Usability Review: Metals, SW-846 6010, 7470/7471, 7000 Series			
Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146022-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met? (< MDL)	☐	☑	☐	
LCS / QC check sample data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (AA/ICP 75-125%, Hg 85-115%)	☐	☑	☐	
MSD or sample duplicate data included in lab package?	☑	☐	☐	
RPD criteria met? (water RPD < 20%; soil RPD < 30%)	☐	☑	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
Proper number of standards used in calibration curve? (ICP blank+1 std; AA blank+3 stds; Hg blank+5 stds)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Interference check sample data included? (ICP only)	☑	☐	☐	
%R criteria met? (80-120%)	☑	☐	☐	
Dilution test (1:5) data included?	☑	☐	☐	
Results within 10% original?	☐	☑	☐	
Post digestion spike included?	☑	☐	☐	
%R criteria met? (75-125% ICP), (85-115% Hg/AA)	☐	☑	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

MB: Metals detected in method blank MB 600-210290/1-A: Aluminum 1.725, Barium 0.645, Calcium 10.6, Chromium 0.115, Iron 77.75, Magnesium 17.59, Manganese 0.535, Nickel 0.145, Sodium 29.62, and Molybdenum 0.195 mg/kg. Associated detections <5x MB were flagged U-MB.

MS: Manganese recovered high and boron recovered low in 600-146022-3MS. Results in parent sample flagged J-MS.

MD: Boron and Cobalt exceeded the RPD limit for the duplicate of sample SJRP-MW12-16-17-03302017 DUPDU (600-146022-3). Results in the sample were flagged J-MD.

PDS: The post digestion spike recovery in sample 600-146022-C-3-B PDS associated with batch 210401 was outside of control limits for Manganese (73%). Spiked result in parent J-PDS

SD: The serial dilution performed on 600-146022-C-3-B SD exhibited %D outside criteria for barium at 13%. Flagged result J-SD

FD: Precision between SJRP-MW12-16-17-03302017 and its field duplicate SJRP-MW12-16-17-03302017 DUP was within criteria.

MS: Aluminum, calcium, iron, magnesium and sodium recovered outside criteria in SJRP-MW12-16-17-03302017 DUPMS (600-146022-3MS) but background concentration >4x spike concentration so no flags applied. The associated LCS was within criteria.

Data Usability Review: TPH (GC), DRO/GRO, 8015M

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146022-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits) Reject <10%	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
RPD criteria met? (< 30% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
%RSD/correlation criteria met?	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%D criteria met?	☑	☐	☐	

Surrogates	Control Limits
TCMX & DCBP	Soil (50-150%)

Notes:

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

FD: Precision between SJRP-MW12-16-17-03302017 and its field duplicate SJRP-MW12-16-17-03302017 DUP was within criteria.

Data Usability Review: Data Package

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146026-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Laboratory Data Package Signature Page included?	☑	☐	☐	
Date of sample collection included?	☑	☐	☐	
Sample receipt temperature ≤ 6° C?	☑	☐	☐	
Signed COCs included?	☑	☐	☐	
Field ID included?	☑	☐	☐	
Laboratory ID included?	☑	☐	☐	
Date of analysis included?	☑	☐	☐	
Date of sample preparation included?	☑	☐	☐	
Detection levels included?	☑	☐	☐	
Method reference included?	☑	☐	☐	
Sample matrix included?	☑	☐	☐	
Sample results included?	☑	☐	☐	
Case narrative included, where required?	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative Percent Difference; RRT - Relative Retention Time; RSD - Relative Standard Deviation.

COMMENTS

OT: Samples SJRP-EB-03302017 (600-146026-11), TRIP BLANK (600-146026-12) and SJRP-SB14-18-19-03312017 (600 146026-13). were submitted but weren't listed on the chain of custody. The samples were logged in based on the containers received and historical information.

VOCs: No DV flags

Metals: J-MS,MD,PDS,SD; J-LD

TPH GRO/DRO: UJ-MD

Data Usability Review: VOCs (GC/MS), SW-846 8260B

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146026-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (use limits listed below or specify lab limits). Reject %R <10%.	☑	☐	☐	
R5 Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (laboratory specified limits)	☑	☐	☐	
RPD criteria met? (< 20% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%RSD criteria met for CCC? (<30% RSD for CCC, >15% RSD must have fit)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%D criteria met for CCC? (20% Max, Qualify >25%D)	☑	☐	☐	
Instrument Tune documentation included in lab package?	☑	☐	☐	
Instrument Tune Criteria met?	☑	☐	☐	
Internal standard data included in lab package?	☑	☐	☐	
Area within limits? (within -50% to +100% of last calibration check?	☑	☐	☐	
RRT within limits? (<30 sec. Difference from last calibration check?	☑	☐	☐	

Surrogates	Control Limits	Lab Limits?
1,2-Dichloroethane-d4	water 80-120%, soil 80-120%	
Dibromofluoromethane	water 86-118%, soil 80-120%	
Toluene-d8	water 88-110%, soil 81-117%	
4-Bromofluorobenzene	water 86-115%, soil 74-121%	

Notes:

* SPCC: chloromethane (0.1); 1,1-dichloroethane (0.1); bromoform (0.1); chlorobenzene (0.3); and 1,1,2,2-tetrachloroethane (0.3).

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

TB: TRIP BLANK was all ND.

Data Usability Review: Metals, SW-846 6010, 7470/7471, 7000 Series			
Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146026-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met? (< MDL)	☐	☑	☐	
LCS / QC check sample data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Matrix spike data included in lab package?	☐	☑	☐	
%R criteria met? (AA/ICP 75-125%, Hg 85-115%)	☑	☐	☐	
MSD or sample duplicate data included in lab package?	☑	☐	☐	
RPD criteria met? (water RPD < 20%; soil RPD < 30%)	☐	☑	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
Proper number of standards used in calibration curve? (ICP blank+1 std; AA blank+3 stds; Hg blank+5 stds)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Interference check sample data included? (ICP only)	☑	☐	☐	
%R criteria met? (80-120%)	☑	☐	☐	
Dilution test (1:5) data included?	☑	☐	☐	
Results within 10% original?	☐	☑	☐	
Post digestion spike included?	☑	☐	☐	
%R criteria met? (75-125% ICP), (85-115% Hg/AA)	☐	☑	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

MS,MD,LD: Mercury recovered high in MS/MSD spiked on sample -1. The RPD was also outside criteria for the MS/MSD and lab duplicate. Result was flagged J-MS,MD.

PDS,SD: Mercury was recovered low in the post digestion spike % recovery associated with batch 210015 (SAMPLE -01 spiked) and the serial dilution %D was outside criteria but the associater result was already flagged due to MS/MSD and lab duplicate precision as noted above so no additional data qualification was necessary.

LD: Mercury in soil exceeded the RPD limit for the duplicate of sample SJRP-SB14-18-19-03312017DU (600-146026-13). Flagged result in sample J-LD

MS: Multiple metals recovered outside criteria in the soil MS/MSD for preparation batch 600-210629 and analytical batch 600-210632 but the background concentrations were >4x the spike conc so no flags were applied. The associated laboratory control sample (LCS) met acceptance criteria.

EB: Multiple metals were detected in equipment blank SJRP-EB-03302017: Barium 0.00589 mg/L, Calcium 0.102 mg/L, and Sodium 0.391 mg/L. All associated detections in samples >>5x blank concs so no flags applied

EB: Multiple metals were detected in equipment blank SJRP-EB-03312017: Barium 0.00571, Calcium 0.128, Iron 0.084, Manganese 0.00186 and Sodium 0.507 mg/L. All detections in samples >>5x blank concs so no flags applied

MB: Multiple metals detected in soil method blank MB 600-210629/1-A: Barium 0.04 mg/kg, Calcium 4.1 mg/kg, Magnesium 3.17 mg/kg, Manganese 0.05 mg/kg, and Sodium 15.25 mg/kg. All detections in samples >>5x blank concs so no flags applied

DL Metals Samples SJRP-SB11-17-18-03312017 (600-146026-3)[5X] and SJRP-SB14-18-19-03312017 (600-146026-13)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

MB: Sodium was detected in water method blank MB 600-210368/1-A > MDL < RL. The only associated sample was the EB so no data were qualified.

Data Usability Review: TPH (GC), DRO/GRO, 8015M

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146026-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits) Reject <10%	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
RPD criteria met? (< 30% water, <50% soil)	☐	☑	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
%RSD/correlation criteria met?	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%D criteria met?	☑	☐	☐	

Surrogates	Control Limits
TCMX & DCBP	Soil (50-150%)

Notes:

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

MD: Gasoline Range Organics (GRO)-C6-C10 exceeded the RPD limit for the MSD of sample SJRP-SB19-1-2-03302017MSD (600-146026-1) in batch 490-421820. Flagged result UJ-MD.

DL: DRO Sample SJRP-SB11-17-18-03312017 (600-146026-3)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly

Data Usability Review: Data Package			
Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146197-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Laboratory Data Package Signature Page included?	☑	☐	☐	
Date of sample collection included?	☑	☐	☐	
Sample receipt temperature ≤ 6° C?	☑	☐	☐	
Signed COCs included?	☑	☐	☐	
Field ID included?	☑	☐	☐	
Laboratory ID included?	☑	☐	☐	
Date of analysis included?	☑	☐	☐	
Date of sample preparation included?	☑	☐	☐	
Detection levels included?	☑	☐	☐	
Method reference included?	☑	☐	☐	
Sample matrix included?	☑	☐	☐	
Sample results included?	☑	☐	☐	
Case narrative included, where required?	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative Percent Difference; RRT - Relative Retention Time; RSD - Relative Standard Deviation.

COMMENTS
OT: The Trip blank was not marked on the COC for analysis and the matrix was listed as solid instead of water. Analyzed by 8260B per containers received.
VOCs: No DV flags
Metals: U-MB
TPH GRO/DRO: No DV flags

Data Usability Review: VOCs (GC/MS), SW-846 8260B

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146197-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (use limits listed below or specify lab limits). Reject %R <10%.	☑	☐	☐	
R5 Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (laboratory specified limits)	☑	☐	☐	
RPD criteria met? (< 20% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%RSD criteria met for CCC? (<30% RSD for CCC, >15% RSD must have fit)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%D criteria met for CCC? (20% Max, Qualify >25%D)	☑	☐	☐	
Instrument Tune documentation included in lab package?	☑	☐	☐	
Instrument Tune Criteria met?	☑	☐	☐	
Internal standard data included in lab package?	☑	☐	☐	
Area within limits? (within -50% to +100% of last calibration check?	☑	☐	☐	
RRT within limits? (<30 sec. Difference from last calibration check?	☑	☐	☐	

Surrogates	Control Limits	Lab Limits?
1,2-Dichloroethane-d4	water 80-120%, soil 80-120%	
Dibromofluoromethane	water 86-118%, soil 80-120%	
Toluene-d8	water 88-110%, soil 81-117%	
4-Bromofluorobenzene	water 86-115%, soil 74-121%	

Notes:

* SPCC: chloromethane (0.1); 1,1-dichloroethane (0.1); bromoform (0.1); chlorobenzene (0.3); and 1,1,2,2-tetrachloroethane (0.3).

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

TB: Trip blank SJRP-TB-04042017 was all ND.

Data Usability Review: Metals, SW-846 6010, 7470/7471, 7000 Series			
Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146197-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met? (< MDL)	☐	☑	☐	
LCS / QC check sample data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (AA/ICP 75-125%, Hg 85-115%)	☑	☐	☐	
MSD or sample duplicate data included in lab package?	☑	☐	☐	
RPD criteria met? (water RPD < 20%; soil RPD < 30%)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
Proper number of standards used in calibration curve? (ICP blank+1 std; AA blank+3 stds; Hg blank+5 stds)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Interference check sample data included? (ICP only)	☑	☐	☐	
%R criteria met? (80-120%)	☑	☐	☐	
Dilution test (1:5) data included?	☑	☐	☐	
Results within 10% original?	☑	☐	☐	
Post digestion spike included?	☑	☐	☐	
%R criteria met? (75-125% ICP), (85-115% Hg/AA)	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

MB: Selenium (0.47 mg/kg) and Sodium (3.815 mg/kg) were detected in method blank MB 600-210755/1-A. Selenium detection <5x MB so flagged U-MB. Sodium detections >>5x MB conc so no flags applied.

EB: Arsenic (0.00372 mg/L) and Sodium (0.319 mg/L) were detected in equipment blank SJRP-EB-04042017. Arsenic and sodium detections >>5x MB conc so no flags applied.

Data Usability Review: TPH (GC), DRO/GRO, 8015M

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146197-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits) Reject <10%	☐	☑	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
RPD criteria met? (< 30% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
%RSD/correlation criteria met?	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%D criteria met?	☑	☐	☐	

Surrogates	Control Limits
TCMX & DCBP	Soil (50-150%)

Notes:

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

SS: o-Terphenyl (Surr) failed the surrogate recovery criteria low for MB 490-421488/1-A. All associated sample and QC surrogate recoveries were within control limits. No data were qualified.

Data Usability Review: Data Package			
Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146305-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Laboratory Data Package Signature Page included?	☑	☐	☐	
Date of sample collection included?	☑	☐	☐	
Sample receipt temperature ≤ 6^{o} C?	☑	☐	☐	
Signed COCs included?	☑	☐	☐	
Field ID included?	☑	☐	☐	
Laboratory ID included?	☑	☐	☐	
Date of analysis included?	☑	☐	☐	
Date of sample preparation included?	☑	☐	☐	
Detection levels included?	☑	☐	☐	
Method reference included?	☑	☐	☐	
Sample matrix included?	☑	☐	☐	
Sample results included?	☑	☐	☐	
Case narrative included, where required?	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative Percent Difference; RRT - Relative Retention Time; RSD - Relative Standard Deviation.

COMMENTS
OT: The trip blank was marked for all analyses on the chain-of-Custody. The laboratory only analyzed this sample for BTEX.
VOCs: No DV flags
Metals: J-FD, J-MS, J-LD
TPH GRO/DRO: UJ-MD

Data Usability Review: VOCs (GC/MS), SW-846 8260B

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146305-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (use limits listed below or specify lab limits). Reject %R <10%.	☑	☐	☐	
R5 Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (laboratory specified limits)	☑	☐	☐	
RPD criteria met? (< 20% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%RSD criteria met for CCC? (<30% RSD for CCC, >15% RSD must have fit)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%D criteria met for CCC? (20% Max, Qualify >25%D)	☑	☐	☐	
Instrument Tune documentation included in lab package?	☑	☐	☐	
Instrument Tune Criteria met?	☑	☐	☐	
Internal standard data included in lab package?	☑	☐	☐	
Area within limits? (within -50% to +100% of last calibration check?	☑	☐	☐	
RRT within limits? (<30 sec. Difference from last calibration check?	☑	☐	☐	

Surrogates	Control Limits	Lab Limits?
1,2-Dichloroethane-d4	water 80-120%, soil 80-120%	
Dibromofluoromethane	water 86-118%, soil 80-120%	
Toluene-d8	water 88-110%, soil 81-117%	
4-Bromofluorobenzene	water 86-115%, soil 74-121%	

Notes:

* SPCC: chloromethane (0.1); 1,1-dichloroethane (0.1); bromoform (0.1); chlorobenzene (0.3); and 1,1,2,2-tetrachloroethane (0.3).

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

OT: One vial for SJRP-EB-04052017 (600-146305-9) was received broked but remaining vials provided sufficient volume for analysis.

TB: Trip blank SJRP-TB-04052017 was all ND.

FD: RPD between SJRP-SB17-21-22-04052017DUP and SJRP-SB17-21-22-04052017 within criteria.

Data Usability Review: Metals, SW-846 6010, 7470/7471, 7000 Series			
Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146305-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met? (< MDL)	☐	☑	☐	
LCS / QC check sample data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (AA/ICP 75-125%, Hg 85-115%)	☐	☑	☐	
MSD or sample duplicate data included in lab package?	☑	☐	☐	
RPD criteria met? (water RPD < 20%; soil RPD < 30%)	☐	☑	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
Proper number of standards used in calibration curve? (ICP blank+1 std; AA blank+3 stds; Hg blank+5 stds)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Interference check sample data included? (ICP only)	☑	☐	☐	
%R criteria met? (80-120%)	☑	☐	☐	
Dilution test (1:5) data included?	☑	☐	☐	
Results within 10% original?	☐	☑	☐	
Post digestion spike included?	☑	☐	☐	
%R criteria met? (75-125% ICP), (85-115% Hg/AA)	☐	☑	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS
FD: RPD between sample SJRP-SB17-26-27-04052017 and its field duplicate SJRP-SB17-26-27-04052017DUP outside criteria for Cobalt and magnanese - results flagged J-FD.
MS: Barium. boron and manganese recovered low in MS on sample -1. Results in parent sample were flagged J-MS
MS: Potassium and sodium recovered high in MS on sample -1. Results in parent sample were flagged J-MS
LD: Barium, Cadmium, Potassium and Sodium eRPDs exceeded the acceptance criteria in the lab duplicate of sample SJRP-SB17-26-27-04052017DU (600-146305-1). Results in the sample were flagged J-LD.
PDS: The post digestion spike recoveries for Potassium (162%) and Sodium (270%) associated with batch 211005 were outside control limits. Results in spiked sample -1 were already qualified due to MS recovery so no additional data qualification was necessary.
SD: The serial dilution %Ds were outside criteria for Calcium at 16%, Cobalt at 12%, Iron at 24%, Sodium at 46%, and Nickel at 12% in 600-146305-C-1-B SD.
EB: Metals detected in equipment blank SJRP-EB-04052017: Arsenic 0.00325 mg/L, Boron 0.0275 mg/L, Calcium 0.0916 mg/L, Iron 0.0746 mg/L, Manganese 0.00183 mg/L, Molybdenum 0.000989 mg/L, Potassium 0.13 mg/L, and Sodium 1.17 mg/L. All detections >>5x EB so no flags applied
MB: Sodium was detected in soil method blank MB 600-210973/1-A at 7.519 mg/kg. Detections >5x MB so no flags applied.
FD: RPD between sample SJRP-SB17-21-22-04052017 and SJRP-SB17-21-22-04052017DUP was within criteria.
MS: Mutliple metals recovered outside criteria in the soil MS/MSD on sample SJRP-SB17-26-27-04052017 MS (600-146305-1) but background concentrations were >4x the spike concentration so no flags were applied.

Data Usability Review: TPH (GC), DRO/GRO, 8015M

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146305-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits) Reject <10%	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☐	☑	☐	
RPD criteria met? (< 30% water, <50% soil)	☐	☑	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
%RSD/correlation criteria met?	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%D criteria met?	☑	☐	☐	

Surrogates	Control Limits
TCMX & DCBP	Soil (50-150%)

Notes:

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

MS,MD: Gasoline Range Organics (GRO)-C6-C10 recovered low in the MSD of sample SJRP-SB17-26-27-04052017MSD (600-146305-1) in batch 490-421820 but passed in the MS. RPD outside criteria so flagged result UJ-MD

FD: RPD between SJRP-SB17-21-22-04052017DUP and SJRP-SB17-21-22-04052017 within criteria.

Data Usability Review: TPH (GC), DRO/GRO, 8015M

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146488-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits) Reject <10%	☐	☑	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
RPD criteria met? (< 30% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
%RSD/correlation criteria met?	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%D criteria met?	☑	☐	☐	

Surrogates	Control Limits
TCMX & DCBP	Soil (50-150%)

Notes:

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

SS: Surrogate o-Terphenyl was recovered low in the DRO analysis of SJRP-EB-04102017 (600-146488-8). Re-extraction and/or re-analysis was performed with concurring results. The original analysis has been reported. Only EB data affected so no flags applied

Data Usability Review: Data Package			
Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146590-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Laboratory Data Package Signature Page included?	☑	☐	☐	
Date of sample collection included?	☑	☐	☐	
Sample receipt temperature ≤ 6° C?	☑	☐	☐	
Signed COCs included?	☑	☐	☐	
Field ID included?	☑	☐	☐	
Laboratory ID included?	☑	☐	☐	
Date of analysis included?	☑	☐	☐	
Date of sample preparation included?	☑	☐	☐	
Detection levels included?	☑	☐	☐	
Method reference included?	☑	☐	☐	
Sample matrix included?	☑	☐	☐	
Sample results included?	☑	☐	☐	
Case narrative included, where required?	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative Percent Difference; RRT - Relative Retention Time; RSD - Relative Standard Deviation.

COMMENTS
VOCs: J-HT, UJ-HT
Metals: J-FD, J-MS, J-LD
TPH GRO/DRO: J-FD, UJ-MD

Data Usability Review: VOCs (GC/MS), SW-846 8260B

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146590-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☐	☑	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (use limits listed below or specify lab limits). Reject %R <10%.	☑	☐	☐	
R5 Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (laboratory specified limits)	☑	☐	☐	
RPD criteria met? (< 20% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%RSD criteria met for CCC? (<30% RSD for CCC, >15% RSD must have fit)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%D criteria met for CCC? (20% Max, Qualify >25%D)	☑	☐	☐	
Instrument Tune documentation included in lab package?	☑	☐	☐	
Instrument Tune Criteria met?	☑	☐	☐	
Internal standard data included in lab package?	☑	☐	☐	
Area within limits? (within -50% to +100% of last calibration check?	☐	☑	☐	
RRT within limits? (<30 sec. Difference from last calibration check?	☑	☐	☐	

Surrogates	Control Limits	Lab Limits?
1,2-Dichloroethane-d4	water 80-120%, soil 80-120%	
Dibromofluoromethane	water 86-118%, soil 80-120%	
Toluene-d8	water 88-110%, soil 81-117%	
4-Bromofluorobenzene	water 86-115%, soil 74-121%	

Notes:

* SPCC: chloromethane (0.1); 1,1-dichloroethane (0.1); bromoform (0.1); chlorobenzene (0.3); and 1,1,2,2-tetrachloroethane (0.3).

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

FD: RPDs for sample SJRP-SB07-14-15-04112017 and its field duplicate SJRP-SB07-14-15-04112017 were within criteria.

HT: The following soil samples were not frozen within the 48-hour holding time due to laboratory oversight of the fact that some of the samples were collected on 4/10/17: SJRP-MW14-15-16-04102017 (600-146590-4), SJRP-MW14-20-21-04102017 (600-146590-5), SJRP-MW14-25-26-04102017 (600-146590-6) and SJRP-SB12-19-20-04102017 (600-146590-7). Flagged detections J-HT and non-detect results UJ-HT.

OT: Trip blank SJRP-TB-04112017 (600-146590-11) contained a bubble greater than 6 mm in diameter. No flags were applied.

TB: Trip blank SJRP-TB-04112017 all ND.

IS: Internal standard (1,4-Dichlorobenzene-d4) recovery was outside acceptance criteria in sample SJRP-SB08-29-30-04112017 (600-146590-13). This ISTD does not correspond to any of the requested target compounds; therefore, no flags applied

Data Usability Review: Metals, SW-846 6010, 7470/7471, 7000 Series			
Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146590-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met? (< MDL)	☐	☑	☐	
LCS / QC check sample data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (AA/ICP 75-125%, Hg 85-115%)	☐	☑	☐	
MSD or sample duplicate data included in lab package?	☑	☐	☐	
RPD criteria met? (water RPD < 20%; soil RPD < 30%)	☐	☑	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
Proper number of standards used in calibration curve? (ICP blank+1 std; AA blank+3 stds; Hg blank+5 stds)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Interference check sample data included? (ICP only)	☑	☐	☐	
%R criteria met? (80-120%)	☑	☐	☐	
Dilution test (1:5) data included?	☑	☐	☐	
Results within 10% original?	☑	☐	☐	
Post digestion spike included?	☑	☐	☐	
%R criteria met? (75-125% ICP), (85-115% Hg/AA)	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS
FD: Arsenic RPD outside criteria for sample SJRP-SB07-14-15-04112017 and its field duplicate SJRP-SB07-14-15-04112017 - results flagged J-FD.
MS: Boron recovered low in MS spiked into sample -15. Result in parent sample flagged J-MS
LD: Arsenic and Calcium exceeded the RPD limit for the duplicate of sample SJRP-SB03-13-14-04112017DU (600-146590-15). Results flagged J-LD
LD: Mercury exceeded the RPD limit for the duplicate of sample SJRP-SB03-13-14-04112017DU (600-146590-15). Result flagged J-LD
MB: Manganese (0.105 mg/kg) and Sodium (2.975 mg/kg) were detected in method blank MB 600-211265/1-A. All detections were >5x MB values so no flags applied
MS: Multiple metals recovered outside criteria in MS/MSD on sample SJRP-SB03-13-14-04112017MS (600-146590-15) in batch 600-211319 but background concentrations >4x spike so no flags were applied.

Data Usability Review: TPH (GC), DRO/GRO, 8015M

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146590-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits) Reject <10%	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
RPD criteria met? (< 30% water, <50% soil)	☐	☑	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
%RSD/correlation criteria met?	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%D criteria met?	☑	☐	☐	

Surrogates	Control Limits
TCMX & DCBP	Soil (50-150%)

Notes:

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

FD: DRO RPD outside criteria in sample SJRP-SB07-14-15-04112017 and its field duplicate SJRP-SB07-14-15-04112017 - results flagged J-FD.

MD: Gasoline Range Organics (GRO)-C6-C10 exceeded the RPD limit at 37% for the MSD of sample SJRP-SB07-14-15-04112017MSD (600 -146590-1) in batch 490-424225. GRP result in parent sample was flagged UJ-MD

Data Usability Review: Data Package

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146619-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Laboratory Data Package Signature Page included?	☑	☐	☐	
Date of sample collection included?	☑	☐	☐	
Sample receipt temperature ≤ 6^{o} C?	☑	☐	☐	
Signed COCs included?	☑	☐	☐	
Field ID included?	☑	☐	☐	
Laboratory ID included?	☑	☐	☐	
Date of analysis included?	☑	☐	☐	
Date of sample preparation included?	☑	☐	☐	
Detection levels included?	☑	☐	☐	
Method reference included?	☑	☐	☐	
Sample matrix included?	☑	☐	☐	
Sample results included?	☑	☐	☐	
Case narrative included, where required?	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative Percent Difference; RRT - Relative Retention Time; RSD - Relative Standard Deviation.

COMMENTS
VOCs: J-IS
Metals: U-MB, UJ-MS, J-MS, J-LD
TPH GRO/DRO: No DV flags applied

Data Usability Review: VOCs (GC/MS), SW-846 8260B

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146619-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (use limits listed below or specify lab limits). Reject %R <10%.	☑	☐	☐	
R5 Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (laboratory specified limits)	☑	☐	☐	
RPD criteria met? (< 20% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%RSD criteria met for CCC? (<30% RSD for CCC, >15% RSD must have fit)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%D criteria met for CCC? (20% Max, Qualify >25%D)	☑	☐	☐	
Instrument Tune documentation included in lab package?	☑	☐	☐	
Instrument Tune Criteria met?	☑	☐	☐	
Internal standard data included in lab package?	☑	☐	☐	
Area within limits? (within -50% to +100% of last calibration check?	☐	☑	☐	
RRT within limits? (<30 sec. Difference from last calibration check?	☑	☐	☐	

Surrogates	Control Limits	Lab Limits?
1,2-Dichloroethane-d4	water 80-120%, soil 80-120%	
Dibromofluoromethane	water 86-118%, soil 80-120%	
Toluene-d8	water 88-110%, soil 81-117%	
4-Bromofluorobenzene	water 86-115%, soil 74-121%	

Notes:

* SPCC: chloromethane (0.1); 1,1-dichloroethane (0.1); bromoform (0.1); chlorobenzene (0.3); and 1,1,2,2-tetrachloroethane (0.3).

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

IS: Sample SJRP-SB05-29-30-04122017 (600-146619-10) was analyzed overnight which resulted in analysis being performed outside of the tune time window so the sample was reanalyzed and the reanalysis recovered internal standard responses below acceptance limits. No additional volume was available for further reanalysis. The reanalyzed results were qualified as J-IS.

TB: Trip blank SJRP-TB-04122017 was all ND.

Data Usability Review: Metals, SW-846 6010, 7470/7471, 7000 Series

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146619-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met? (< MDL)	☐	☑	☐	
LCS / QC check sample data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (AA/ICP 75-125%, Hg 85-115%)	☐	☑	☐	
MSD or sample duplicate data included in lab package?	☑	☐	☐	
RPD criteria met? (water RPD < 20%; soil RPD < 30%)	☐	☑	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
Proper number of standards used in calibration curve? (ICP blank+1 std; AA blank+3 stds; Hg blank+5 stds)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☐	☑	☐	
Interference check sample data included? (ICP only)	☑	☐	☐	
%R criteria met? (80-120%)	☑	☐	☐	
Dilution test (1:5) data included?	☑	☐	☐	
Results within 10% original?	☑	☐	☐	
Post digestion spike included?	☑	☐	☐	
%R criteria met? (75-125% ICP), (85-115% Hg/AA)	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

MB: Sodium, molybdenum and lead were detected in soil method blank MB 600-211317/1-A: Lead 1.005, Molybdenum 0.17, and sodium 9.15 mg/kg. Molybdenum results <5x blank value were flagged U-MB. Sodium and lead results were >5x MB so were not flagged.

MS: Manganese, boron and molybdenum recovered low in MS spiked to sample -10. Flagged detections in parent sample J-MS and non-detects UJ-MS.

LD: Barium, boron, calcium and manganese RPDs exceeded criteria in the duplicate soil sample SJRP-SB05-29-30-04122017DU (600-146619-10). Flagged results J-LD

MS: Several metals were recovered outside criteria in the MS SJRP-SB05-29-30-04122017MS (600-146619-10 MS) but background concentrations >4x spike values so no flags were applied.

MB: Sodium was detected in method blank MB 600-211063/1-A but only EB was associated so no flags applied.

EB: The following metals were detected in equipment blank SJRP-EB-05112017: Arsenic 0.0038, Barium 0.0008, Cadmium 0.0003, Calcium 0.0904, Iron 0.204, Manganese 0.0034, Potassium 0.0807, Sodium 0.285, Detections in normal samples were >>5x EB concs so no flags applied

MB: Lead was detected in soil method blank MB 600-211726/1-A at 0.1055 mg/kg. Detections >5x MB so no flags applied

CC: The continuing calibration verification (CCV) associated with batch 600-211424 recovered slightly > 110% for barium, calcium and sodium but only the MB and LCS were bracketed by this CCV and they met the acceptance criteria so no data were qualified.

Data Usability Review: TPH (GC), DRO/GRO, 8015M

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146619-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits) Reject <10%	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☐	☑	☐	
RPD criteria met? (< 30% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
%RSD/correlation criteria met?	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%D criteria met?	☑	☐	☐	

Surrogates	Control Limits
TCMX & DCBP	Soil (50-150%)

Notes:

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

MS: DRO recovered outside criteria in the MS/MSD on sample SJRP-MW15-9-10-04122017 (600-146619-1) but background >4x spike so no flags were applied. The associated laboratory control sample (LCS) met acceptance criteria.

Data Usability Review: Data Package

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146714-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Laboratory Data Package Signature Page included?	☑	☐	☐	
Date of sample collection included?	☑	☐	☐	
Sample receipt temperature ≤ 6° C?	☑	☐	☐	
Signed COCs included?	☑	☐	☐	
Field ID included?	☑	☐	☐	
Laboratory ID included?	☑	☐	☐	
Date of analysis included?	☑	☐	☐	
Date of sample preparation included?	☑	☐	☐	
Detection levels included?	☑	☐	☐	
Method reference included?	☑	☐	☐	
Sample matrix included?	☑	☐	☐	
Sample results included?	☑	☐	☐	
Case narrative included, where required?	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative Percent Difference; RRT - Relative Retention Time; RSD - Relative Standard Deviation.

COMMENTS
VOCs: J-SS
Metals: J-SD
TPH GRO/DRO: No DV flags applied

Data Usability Review: VOCs (GC/MS), SW-846 8260B

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146714-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (use limits listed below or specify lab limits). Reject %R <10%.	☐	☑	☐	
R5 Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (laboratory specified limits)	☑	☐	☐	
RPD criteria met? (< 20% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%RSD criteria met for CCC? (<30% RSD for CCC, >15% RSD must have fit)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%D criteria met for CCC? (20% Max, Qualify >25%D)	☑	☐	☐	
Instrument Tune documentation included in lab package?	☑	☐	☐	
Instrument Tune Criteria met?	☑	☐	☐	
Internal standard data included in lab package?	☑	☐	☐	
Area within limits? (within -50% to +100% of last calibration check?	☑	☐	☐	
RRT within limits? (<30 sec. Difference from last calibration check?	☑	☐	☐	

Surrogates	Control Limits	Lab Limits?
1,2-Dichloroethane-d4	water 80-120%, soil 80-120%	
Dibromofluoromethane	water 86-118%, soil 80-120%	
Toluene-d8	water 88-110%, soil 81-117%	
4-Bromofluorobenzene	water 86-115%, soil 74-121%	

Notes:

* SPCC: chloromethane (0.1); 1,1-dichloroethane (0.1); bromoform (0.1); chlorobenzene (0.3); and 1,1,2,2-tetrachloroethane (0.3).

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

SS: Surrogate 1,2-Dichloroethane-d4 was recovered high in sample SJRP-MW16-14-15-04122017 (600-146714-2). Detections were qualified J-SS

SS: Surrogate 1,2-Dichloroethane-d4 was recovered high in samples SJRP-SB02-13-14-04122017 (600-146714-3) and SJRP-SB02-18-19-04122017 (600-146714-4) but no target analytes were detected so no data were qualified.

OT: The VOA vials for sample SJRP-TB-04122017 (600-146714-5) contained a bubble >6mm in diameter but since only trip blank was affected no flags applied.

TB: SJRP-TB-04122017 all ND so no flags

EB Toluene was detected in equipment blank SJRP-EB-04122017 at 0.00024 mg/L but associated detections were >5x EB concentration so no data were qualified.

Data Usability Review: Metals, SW-846 6010, 7470/7471, 7000 Series

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146714-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met? (< MDL)	☐	☑	☐	
LCS / QC check sample data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (AA/ICP 75-125%, Hg 85-115%)	☑	☐	☐	
MSD or sample duplicate data included in lab package?	☑	☐	☐	
RPD criteria met? (water RPD < 20%; soil RPD < 30%)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
Proper number of standards used in calibration curve? (ICP blank+1 std; AA blank+3 stds; Hg blank+5 stds)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Interference check sample data included? (ICP only)	☑	☐	☐	
%R criteria met? (80-120%)	☑	☐	☐	
Dilution test (1:5) data included?	☑	☐	☐	
Results within 10% original?	☐	☑	☐	
Post digestion spike included?	☑	☐	☐	
%R criteria met? (75-125% ICP), (85-115% Hg/AA)	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

SD: The serial dilution performed for the following sample associated with batch 211796 was outside control limits for Iron (19%) and Nickel (13%): (600-146714-A-1-C SD). Flagged results in the parent sample -1 J-SD

MB: Sodium was detected in water method blank MB 600-211063/1-A, only EB associated with this MB so no flags applied

MB: Metals were detected in soil method blank MB 600-211612/1-A (mg/kg) at the following concentrations: Aluminum 1.935, Barium 0.055, Chromium 0.105, Manganese 0.04, Nickel 0.7, but all detections >>5x MB concs so no data were qualified.

MB: Sodium was detected in soil method blank MB 600-211759/1-A at 21.36 mg/kg detections >>5x MB so no data were qualified.

EB: Metals were detected in equipment blank SJRP-EB-04122017 at the following concentrations (mg/L): Calcium 0.0374, Iron 0.035 Manganese 0.0011, Potassium 0.0437, Sodium 0.172, but all detections >>5x EB so no data were qualified.

LD: Mercury exceeded the RPD limit for the duplicate of sample SJRP-SB02-18-19-04122017DU (600-146714-4) but results were within MQL/RL so no flags were applied

PDS: The post digestion spike recovery for Calcium (69%) associated with batch 211796 was outside of control limits. But sample background conc >>4x spike so no flags were applied.

CB: The continuing calibration blank (CCB 600-211796/175) contained Molybdenum above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, no data were qualified.

Data Usability Review: TPH (GC), DRO/GRO, 8015M

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146714-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits) Reject <10%	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
RPD criteria met? (< 30% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
%RSD/correlation criteria met?	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%D criteria met?	☑	☐	☐	

Surrogates	Control Limits
TCMX & DCBP	Soil (50-150%)

Notes:

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

No flags applied

Data Usability Review: Data Package			
Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146872-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Laboratory Data Package Signature Page included?	☑	☐	☐	
Date of sample collection included?	☑	☐	☐	
Sample receipt temperature ≤ 6^{o} C?	☑	☐	☐	
Signed COCs included?	☑	☐	☐	
Field ID included?	☑	☐	☐	
Laboratory ID included?	☑	☐	☐	
Date of analysis included?	☑	☐	☐	
Date of sample preparation included?	☑	☐	☐	
Detection levels included?	☑	☐	☐	
Method reference included?	☑	☐	☐	
Sample matrix included?	☑	☐	☐	
Sample results included?	☑	☐	☐	
Case narrative included, where required?	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative Percent Difference; RRT - Relative Retention Time; RSD - Relative Standard Deviation.

COMMENTS
VOCs: No DV flags applied
Metals: J-MS; J-MS,MD;
TPH GRO/DRO: UJ-MS, J-MD

Data Usability Review: VOCs (GC/MS), SW-846 8260B

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146872-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (use limits listed below or specify lab limits). Reject %R <10%.	☑	☐	☐	
R5 Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (laboratory specified limits)	☑	☐	☐	
RPD criteria met? (< 20% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%RSD criteria met for CCC? (<30% RSD for CCC, >15% RSD must have fit)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%D criteria met for CCC? (20% Max, Qualify >25%D)	☑	☐	☐	
Instrument Tune documentation included in lab package?	☑	☐	☐	
Instrument Tune Criteria met?	☑	☐	☐	
Internal standard data included in lab package?	☑	☐	☐	
Area within limits? (within -50% to +100% of last calibration check?	☑	☐	☐	
RRT within limits? (<30 sec. Difference from last calibration check?	☑	☐	☐	

Surrogates	Control Limits	Lab Limits?
1,2-Dichloroethane-d4	water 80-120%, soil 80-120%	
Dibromofluoromethane	water 86-118%, soil 80-120%	
Toluene-d8	water 88-110%, soil 81-117%	
4-Bromofluorobenzene	water 86-115%, soil 74-121%	

Notes:

* SPCC: chloromethane (0.1); 1,1-dichloroethane (0.1); bromoform (0.1); chlorobenzene (0.3); and 1,1,2,2-tetrachloroethane (0.3).

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

OT: Trip blank SJRP-TB-04172017 (600-146872-7) vial contained a bubble greater than 6 mm in diameter. No flags were applied.

SS: Surrogate o-Terphenyl was recovered low in the LCS 490-424318/2-A. All LCS spike analytes and sample surrogate recoveries were within control limits; therefore, no data were qualified.

TB: SJRP-TB-04172017 all ND so no flags

Data Usability Review: Metals, SW-846 6010, 7470/7471, 7000 Series			
Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146872-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met? (< MDL)	☐	☑	☐	
LCS / QC check sample data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (AA/ICP 75-125%, Hg 85-115%)	☐	☑	☐	
MSD or sample duplicate data included in lab package?	☑	☐	☐	
RPD criteria met? (water RPD < 20%; soil RPD < 30%)	☐	☑	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
Proper number of standards used in calibration curve? (ICP blank+1 std; AA blank+3 stds; Hg blank+5 stds)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Interference check sample data included? (ICP only)	☑	☐	☐	
%R criteria met? (80-120%)	☑	☐	☐	
Dilution test (1:5) data included?	☑	☐	☐	
Results within 10% original?	☑	☐	☐	
Post digestion spike included?	☑	☐	☐	
%R criteria met? (75-125% ICP), (85-115% Hg/AA)	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

MS, MD: Ba, Bo, Ca recovered low in MS on sample SJRP-SB08-1-2-04182017MS (600-146872-4) in batch 600-211709 - flagged results in parent J-MS. Other metals recovered outside criteria but bkg >4x spike so no flags applied to those. Calcium RPD also outside criteria.

CB: The continuing calibration blank (CCB) in analytical batch 211796 contained Molybdenum above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, no data were qualified.

MB: Molybdenum and Sodium were detected in water method blank MB 600-211225/1-A. Only the EB was associated with this MB so no data were qualified.

MB: Sodium was detected in soil method blank MB 600-211759/1-A Sodium 21.36 Detections >>5x MB so no flags applied

MB: Metals were detected in soil method blank MB 600-211612/1-A at the following concentrations (mg/kg): Aluminum 1.935, Barium 0.055, Chromium 0.105, Manganese 0.04, Nickel 0.7, Detections >5x MB concs so no flags applied

EB: Metals were detected in the equipment blank SJRP-EB-04172017 at the following concentrations (mg/L): Boron 0.0827, Calcium 0.117, Manganese 0.000363, Sodium 0.106, Associated detections >>5x EB so no flags applied

Data Usability Review: TPH (GC), DRO/GRO, 8015M

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146872-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☐	☑	☐	
%R criteria met? (specified limits) Reject <10%	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☐	☑	☐	
RPD criteria met? (< 30% water, <50% soil)	☐	☑	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
%RSD/correlation criteria met?	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%D criteria met?	☑	☐	☐	

Surrogates	Control Limits
TCMX & DCBP	Soil (50-150%)

Notes:

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

MS: GRO was recovered low in the soil MS/MSD of sample SJRP-SB08-1-2-04182017 (600-146872-4) in batch 490-425527. The associated LCS/LCSD were within acceptance limits. Result in the parent sample was flagged UJ-MS

MD: DRO [C10-C28] RPD in the soil MS/MSD of sample SJRP-SB08-1-2-04182017MSD (600-146872-4) in batch 490-424776 was outside criteria at 70% RPD. Result in parent sample was flagged J-MD.

BD: DRO [C10-C28] exceeded the RPD limit for the LCS/LCSD 490-424318/3-A. Only the EB was associated so no flags applied.

OT: Method(s) 3510C: Equipment blank SJRP-EB-04172017 (600-146872-8) formed emulsions during the extraction procedure. The emulsions were broken up using centrifugation. No flags applied

SS: The DRO o-Terphenyl was recovered low in th MS SJRP-SB08-1-2-04182017MS (600-146872-4MS). The parent sample's surrogate recovery was within limits. No flags were applied

Data Usability Review: Data Package

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146941-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Laboratory Data Package Signature Page included?	☑	☐	☐	
Date of sample collection included?	☑	☐	☐	
Sample receipt temperature ≤ 6^{o} C?	☑	☐	☐	
Signed COCs included?	☑	☐	☐	
Field ID included?	☑	☐	☐	
Laboratory ID included?	☑	☐	☐	
Date of analysis included?	☑	☐	☐	
Date of sample preparation included?	☑	☐	☐	
Detection levels included?	☑	☐	☐	
Method reference included?	☑	☐	☐	
Sample matrix included?	☑	☐	☐	
Sample results included?	☑	☐	☐	
Case narrative included, where required?	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative Percent Difference; RRT - Relative Retention Time; RSD - Relative Standard Deviation.

COMMENTS
VOCs: No DV flags
Metals: U-MB, J-MS. J-MD
TPH GRO/DRO: U-MB

Data Usability Review: VOCs (GC/MS), SW-846 8260B

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146941-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (use limits listed below or specify lab limits). Reject %R <10%.	☑	☐	☐	
R5 Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (laboratory specified limits)	☑	☐	☐	
RPD criteria met? (< 20% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%RSD criteria met for CCC? (<30% RSD for CCC, >15% RSD must have fit)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%D criteria met for CCC? (20% Max, Qualify >25%D)	☑	☐	☐	
Instrument Tune documentation included in lab package?	☑	☐	☐	
Instrument Tune Criteria met?	☑	☐	☐	
Internal standard data included in lab package?	☑	☐	☐	
Area within limits? (within -50% to +100% of last calibration check?	☑	☐	☐	
RRT within limits? (<30 sec. Difference from last calibration check?	☑	☐	☐	

Surrogates	Control Limits	Lab Limits?
1,2-Dichloroethane-d4	water 80-120%, soil 80-120%	
Dibromofluoromethane	water 86-118%, soil 80-120%	
Toluene-d8	water 88-110%, soil 81-117%	
4-Bromofluorobenzene	water 86-115%, soil 74-121%	

Notes:

* SPCC: chloromethane (0.1); 1,1-dichloroethane (0.1); bromoform (0.1); chlorobenzene (0.3); and 1,1,2,2-tetrachloroethane (0.3).

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

TB: SJRP-TB-04192017-2 all ND so no flags

Data Usability Review: Metals, SW-846 6010, 7470/7471, 7000 Series			
Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146941-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met? (< MDL)	☐	☑	☐	
LCS / QC check sample data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (AA/ICP 75-125%, Hg 85-115%)	☐	☑	☐	
MSD or sample duplicate data included in lab package?	☑	☐	☐	
RPD criteria met? (water RPD < 20%; soil RPD < 30%)	☐	☑	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
Proper number of standards used in calibration curve? (ICP blank+1 std; AA blank+3 stds; Hg blank+5 stds)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Interference check sample data included? (ICP only)	☑	☐	☐	
%R criteria met? (80-120%)	☑	☐	☐	
Dilution test (1:5) data included?	☑	☐	☐	
Results within 10% original?	☑	☐	☐	
Post digestion spike included?	☑	☐	☐	
%R criteria met? (75-125% ICP), (85-115% Hg/AA)	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

MB: Aluminum was detected in soil method blank MB 600-212036/1-A at the 0.705 mg/kg - all detections were >>5x MB so no flags were applied.

MB: Molybdenum was detected in soil method blank MB 600-212036/1-A at 0.22 mg/kg - detections <5x were flagged U-MB

MS: Boron, barium, molybdenum and potassium recovered low in MS/MSD on SJRP-MW15-1-2-04192017 (600-146941-3) in batch 600-212257 - result in parent sample was flagged J-MS. Multiple other metals recovered outside criteria but bkg >4x spike conc so they were not flagged

MD: Calcium RPD outside criteria in MS/MSD on SJRP-MW15-1-2-04192017 (600-146941-3) in batch 600-212257 - result in parent sample was flagged J-MD.

MB: Iron, Manganese, Nickel and Molybdenum were detected in water method blank MB 600-211781/1-A. Only the EB was associated so no data were qualified.

EB: Metals were detected in the equipment blank SJRP-EB-04192017-2 at the following concentrations (mg/L): Barium 0.0009, Boron 0.0142, Calcium 0.0553, Manganese 0.0007, Molybdenum 0.00232, Sodium 0.0909. All detections >5x EB so no flags applied

Data Usability Review: TPH (GC), DRO/GRO, 8015M

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-146941-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits) Reject <10%	☐	☑	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☐	☑	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
RPD criteria met? (< 30% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
%RSD/correlation criteria met?	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%D criteria met?	☑	☐	☐	

Surrogates	Control Limits
TCMX & DCBP	Soil (50-150%)

Notes:

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

MB: ORO C24-C40 was detected in soil method blank MB 490-424863/1-A at 2.668 mg/kg - all detections were <5x so flagged U-MB

SS: Surrogate o-Terphenyl was recovered low in water LCS 490-424318/2-A. All LCS spike analytes and sample surrogate recoveries were within control limits so no data were qualified.

BD: Diesel Range Organics [C10-C28] exceeded the RPD limit for water LCS/LCSD 490-424318/3-A. Only assciated result is EB so no data were qualified.

OT: Method(s) 3510C: The following sample formed emulsions during the extraction procedure: SJRP-EB-04192017-2 (600-146941-7). The emulsions were broken up using centrifugation No data were qualified.

SS: Surrogate a,a,a-Trifluorotoluene recoveted high in soil MS SJRP-MW15-1-2-04192017MS/MSD (600-146941-3MS). Surrogate recoveries were within criteria on the other column and analyte recoveries in the MS/MSD were within criteria - no data were qualified.

Data Usability Review: Data Package

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-147045-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Laboratory Data Package Signature Page included?	☑	☐	☐	
Date of sample collection included?	☑	☐	☐	
Sample receipt temperature ≤ 6° C?	☑	☐	☐	
Signed COCs included?	☑	☐	☐	
Field ID included?	☑	☐	☐	
Laboratory ID included?	☑	☐	☐	
Date of analysis included?	☑	☐	☐	
Date of sample preparation included?	☑	☐	☐	
Detection levels included?	☑	☐	☐	
Method reference included?	☑	☐	☐	
Sample matrix included?	☑	☐	☐	
Sample results included?	☑	☐	☐	
Case narrative included, where required?	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative Percent Difference; RRT - Relative Retention Time; RSD - Relative Standard Deviation.

COMMENTS

OT: 1 of the coolers shipped for arrival of 4-20-17 was misplaced by FedEx and only the 3- 4oz jars for each sample were received at the lab (samples 1-7). Terracores (samples 8-14) were resampled and shipped for arrival 4-21-17. The missing cooler arrived on 4-21-17 but were not used as they were out of hold

VOCs: No DV flags

Metals: U-MB; J-MS; J-MD; J-LD

TPH GRO/DRO: U-MB; UJ-MD

Data Usability Review: VOCs (GC/MS), SW-846 8260B

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-147045-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☐	☑	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (use limits listed below or specify lab limits). Reject %R <10%.	☑	☐	☐	
R5 Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (laboratory specified limits)	☑	☐	☐	
RPD criteria met? (< 20% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%RSD criteria met for CCC? (<30% RSD for CCC, >15% RSD must have fit)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%D criteria met for CCC? (20% Max, Qualify >25%D)	☑	☐	☐	
Instrument Tune documentation included in lab package?	☑	☐	☐	
Instrument Tune Criteria met?	☑	☐	☐	
Internal standard data included in lab package?	☑	☐	☐	
Area within limits? (within -50% to +100% of last calibration check?	☑	☐	☐	
RRT within limits? (<30 sec. Difference from last calibration check?	☑	☐	☐	

Surrogates	Control Limits	Lab Limits?
1,2-Dichloroethane-d4	water 80-120%, soil 80-120%	
Dibromofluoromethane	water 86-118%, soil 80-120%	
Toluene-d8	water 88-110%, soil 81-117%	
4-Bromofluorobenzene	water 86-115%, soil 74-121%	

Notes:

* SPCC: chloromethane (0.1); 1,1-dichloroethane (0.1); bromoform (0.1); chlorobenzene (0.3); and 1,1,2,2-tetrachloroethane (0.3).

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

OT: Trip blank SJRP-TB-04182017 (600-147045-15) vial contained bubble greater than 6 mm in diameter. Since only the trip blank was affected no data were qualified.

TB: SJRP-TB-04182017 all ND so no flags

HT: The following sample was received outside of holding time: SJRP-EB-04182017 (600-147045-16). Since only the equipment blank was impacted no data were qualified.

Data Usability Review: Metals, SW-846 6010, 7470/7471, 7000 Series			
Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-147045-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met? (< MDL)	☐	☑	☐	
LCS / QC check sample data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (AA/ICP 75-125%, Hg 85-115%)	☐	☑	☐	
MSD or sample duplicate data included in lab package?	☑	☐	☐	
RPD criteria met? (water RPD < 20%; soil RPD < 30%)	☐	☑	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
Proper number of standards used in calibration curve? (ICP blank+1 std; AA blank+3 stds; Hg blank+5 stds)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Interference check sample data included? (ICP only)	☑	☐	☐	
%R criteria met? (80-120%)	☑	☐	☐	
Dilution test (1:5) data included?	☑	☐	☐	
Results within 10% original?	☑	☐	☐	
Post digestion spike included?	☑	☐	☐	
%R criteria met? (75-125% ICP), (85-115% Hg/AA)	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

MB: Aluminum (0.705 mg/kg) and Molybdenum (0.22 mg/kg x5 = 1.1 mg/kg) were detected in soil method blank MB 600-212036/1-A. Al detections were >5x MB so no data were qalified. Mo detections <5x MB were flagged U-MB.

MS: Boron and barium recovered low in MS/MSD on sample -3 - results in the parent sample were flagged J-MS. Multiple other metals recovered outside criteria but background concentrations were >4x spike so they weren't flagged.

MD: Ca and Mn RPD outside criteria in MS/MSD on sample -3 - results in parent sample were flagged J-MD

LD: Mercury exceeded the RPD limit for the duplicate of sample SJRP-SB12-1-2-04182017DU (600-147045-1). Flagged result in parent sample J-LD

MB: Several metals were detected in water method blank MB 600-211785/1-A - only EB was associated so no flags applied

EB: The following metals were detected in the equipment blank SJRP-EB-04182017: Boron 0.0597, Calcium 0.0266, Potassium 0.068, Sodium 0.337. All detections >>5x EB concs so no flags applied

Data Usability Review: TPH (GC), DRO/GRO, 8015M

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-147045-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits) Reject <10%	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☐	☑	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
RPD criteria met? (< 30% water, <50% soil)	☐	☑	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
%RSD/correlation criteria met?	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%D criteria met?	☑	☐	☐	

Surrogates	Control Limits
TCMX & DCBP	Soil (50-150%)

Notes:

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

MB: ORO C24-C40 was detected in soil method blank MB 490-425250/1-A at 2.656 mg/kg x5 = 13.28. Detections <5x MB were flagged U-MB

MD: GRO C6-C10 RPD exceeded in soil MS/MSD of sample SJRP-SB07-1-2-04182017MSD (600-147045-3) in batch 490-425527 exceeded criteria. Result in parent sample flagged UJ-MD

Data Usability Review: Data Package			
Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-147046-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Laboratory Data Package Signature Page included?	☑	☐	☐	
Date of sample collection included?	☑	☐	☐	
Sample receipt temperature ≤ 6° C?	☑	☐	☐	
Signed COCs included?	☑	☐	☐	
Field ID included?	☑	☐	☐	
Laboratory ID included?	☑	☐	☐	
Date of analysis included?	☑	☐	☐	
Date of sample preparation included?	☑	☐	☐	
Detection levels included?	☑	☐	☐	
Method reference included?	☑	☐	☐	
Sample matrix included?	☑	☐	☐	
Sample results included?	☑	☐	☐	
Case narrative included, where required?	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative Percent Difference; RRT - Relative Retention Time; RSD - Relative Standard Deviation.

COMMENTS
VOCs: UJ-MS.MD
Metals: UJ-MS; J-MD; J-LD
TPH GRO/DRO: U-MB

Data Usability Review: VOCs (GC/MS), SW-846 8260B

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-147046-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (use limits listed below or specify lab limits). Reject %R <10%.	☑	☐	☐	
R5 Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (laboratory specified limits)	☐	☑	☐	
RPD criteria met? (< 20% water, <50% soil)	☐	☑	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%RSD criteria met for CCC? (<30% RSD for CCC, >15% RSD must have fit)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%D criteria met for CCC? (20% Max, Qualify >25%D)	☑	☐	☐	
Instrument Tune documentation included in lab package?	☑	☐	☐	
Instrument Tune Criteria met?	☑	☐	☐	
Internal standard data included in lab package?	☑	☐	☐	
Area within limits? (within -50% to +100% of last calibration check?	☑	☐	☐	
RRT within limits? (<30 sec. Difference from last calibration check?	☑	☐	☐	

Surrogates	Control Limits	Lab Limits?
1,2-Dichloroethane-d4	water 80-120%, soil 80-120%	
Dibromofluoromethane	water 86-118%, soil 80-120%	
Toluene-d8	water 88-110%, soil 81-117%	
4-Bromofluorobenzene	water 86-115%, soil 74-121%	

Notes:

* SPCC: chloromethane (0.1); 1,1-dichloroethane (0.1); bromoform (0.1); chlorobenzene (0.3); and 1,1,2,2-tetrachloroethane (0.3).

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

MS,MD: Benzene, Ethylbenzene, Toluene and Xylenes were recovered low in the MS on soil sample SJRP-SB11-1-2-04202017MS (600-147046-4) in batch 600-211370. The RPD for Benzene, Ethylbenzene, Toluene and Xylenes also exceeded the RPD limit for the MS/MSD. Flagged results UJ-MS,MD

TB: SJRP-TB-04192017 all ND so no flags

Data Usability Review: Metals, SW-846 6010, 7470/7471, 7000 Series					
Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**		
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**		
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-147046-1**		
Reviewer:	**John Ynfante/HOU**				
Level of Review / Validation:	**Level 3**				
ITEM		**YES**	**NO**	**N/A**	**COMMENTS**
Preparatory/analytical holding time met?		☑	☐	☐	
Method blank data included in Lab Package?		☑	☐	☐	
Criteria met? (< MDL)		☐	☑	☐	
LCS / QC check sample data included in lab package?		☑	☐	☐	
%R criteria met? (90-110%)		☑	☐	☐	
Matrix spike data included in lab package?		☑	☐	☐	
%R criteria met? (AA/ICP 75-125%, Hg 85-115%)		☐	☑	☐	
MSD or sample duplicate data included in lab package?		☑	☐	☐	
RPD criteria met? (water RPD < 20%; soil RPD < 30%)		☐	☑	☐	
Initial calibration documentation included in lab package?		☑	☐	☐	
Proper number of standards used in calibration curve? (ICP blank+1 std; AA blank+3 stds; Hg blank+5 stds)		☑	☐	☐	
Calibration verification data included in lab package?		☑	☐	☐	
%R criteria met? (90-110%)		☑	☐	☐	
Interference check sample data included? (ICP only)		☑	☐	☐	
%R criteria met? (80-120%)		☑	☐	☐	
Dilution test (1:5) data included?		☑	☐	☐	
Results within 10% original?		☑	☐	☐	
Post digestion spike included?		☑	☐	☐	
%R criteria met? (75-125% ICP), (85-115% Hg/AA)		☑	☐	☐	
Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P					
COMMENTS					
MS: Ba, Bo, Mo were recovered low in the MS/MSD on sample -4 - results in the parent samples were flagged J-MS. Multiple other metals recovered outside criteria but background concentrations were >4x spike so no flags applied to those					
MD: Calcium RPD in MS/MSD on sample -4 outside criteria - result in parent sample was flagged J-MD					
LD: Mercury exceeded the RPD limit for the duplicate of sample SJRP-SB11-1-2-04202017DU (600-147046-4). Result flagged J-LD					
MB: Manganese, Selenium and Molybdenum were detected in water method blank MB 600-211954/1-A. Only EB is associated so no flags were applied					
EB: Metals were detected in the equipment blank SJRP-EB-04202017 at the following concentrations (in mg/L): Calcium 0.0833, Manganese 0.0004, Molybdenum 0.033, Potassium 0.232, Sodium 0.0934. All detections >5x EB so no flags applied					
MB: Several metals were detected in soil method blank MB 600-212161/1-A at the following concentrations (mg/kg): Aluminum 2.015, Barium 0.235, Calcium 1.71,Iron 3.32, Lead 0.11, Manganese 0.06, Sodium 2.745. Associated detections > 5x MB so no flags applied.					

Data Usability Review: TPH (GC), DRO/GRO, 8015M

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-147046-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits) Reject <10%	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☐	☑	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
RPD criteria met? (< 30% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
%RSD/correlation criteria met?	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%D criteria met?	☑	☐	☐	

Surrogates	Control Limits
TCMX & DCBP	Soil (50-150%)

Notes:

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

MB: ORO C24-C40 was detected in method blank MB 490-425163/1-A at 2.687 mg/kg. Detections <5x MB so flagged U-MB

Data Usability Review: Data Package

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-150688-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Laboratory Data Package Signature Page included?	☑	☐	☐	
Date of sample collection included?	☑	☐	☐	
Sample receipt temperature ≤ 6° C?	☑	☐	☐	
Signed COCs included?	☑	☐	☐	
Field ID included?	☑	☐	☐	
Laboratory ID included?	☑	☐	☐	
Date of analysis included?	☑	☐	☐	
Date of sample preparation included?	☑	☐	☐	
Detection levels included?	☑	☐	☐	
Method reference included?	☑	☐	☐	
Sample matrix included?	☑	☐	☐	
Sample results included?	☑	☐	☐	
Case narrative included, where required?	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative Percent Difference; RRT - Relative Retention Time; RSD - Relative Standard Deviation.

COMMENTS
VOCs: No DV flags
Metals: U-CB, U-MB, UJ-MS
TPH GRO/DRO:
General Chemistry: JL-MS, UJ-MS

Data Usability Review: VOCs (GC/MS), SW-846 8260B

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-150688-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (use limits listed below or specify lab limits). Reject %R <10%.	☐	☑	☐	
R5 Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (laboratory specified limits)	☑	☐	☐	
RPD criteria met? (< 20% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%RSD criteria met for CCC? (<30% RSD for CCC, >15% RSD must have fit)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%D criteria met for CCC? (20% Max, Qualify >25%D)	☑	☐	☐	
Instrument Tune documentation included in lab package?	☑	☐	☐	
Instrument Tune Criteria met?	☑	☐	☐	
Internal standard data included in lab package?	☑	☐	☐	
Area within limits? (within -50% to +100% of last calibration check?	☑	☐	☐	
RRT within limits? (<30 sec. Difference from last calibration check?	☑	☐	☐	

Surrogates	Control Limits	Lab Limits?
1,2-Dichloroethane-d4	water 80-120%, soil 80-120%	
Dibromofluoromethane	water 86-118%, soil 80-120%	
Toluene-d8	water 88-110%, soil 81-117%	
4-Bromofluorobenzene	water 86-115%, soil 74-121%	

Notes:

* SPCC: chloromethane (0.1); 1,1-dichloroethane (0.1); bromoform (0.1); chlorobenzene (0.3); and 1,1,2,2-tetrachloroethane (0.3).

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

IS: The case narrative initially stated that internal standards failed in sample SJRP-MW16-07062017 (600-150688-13) but the data showed IS recoveries within control. This was pointed out to the laboratory and the laboratory agreed that the case narrative was mistaken so a revised report was issued.

SS: Bromofluorobenzene surrogate recovery for SJRP-MW16-07062017 (600-150688-13) was outside criteria. The sample was reanalyzed at a dilution and the only analyte reported from the initial run was not associated with the failing surrogate so no data were qualified.

TB: Trip blanks SJRP-TB01-07062017 and SJRP-TB02-07062017 were all ND.

FD: Precision between SJRP-MW9-07062017 and its field duplicate SJRP-MW9-07062017-2 were within acceptance criteria.

DL: Method(s) 8260B: The following sample was diluted due to the nature of the sample matrix: SJRP-MW13-07062017 (600-150688-11). Elevated reporting limits (RLs) are provided.

DL: Method(s) 8260B: The following samples was diluted to bring the concentration of target analytes within the calibration range: SJRP-MW9-07062017 (600-150688-7), SJRP-MW9-07062017-2 (600-150688-8), SJRP-MW13-07062017 (600-150688-11) and SJRP-MW16-07062017 (600-150688-13). Elevated reporting limits (RLs) are provided.

Data Usability Review: Metals, SW-846 6010, 7470/7471, 7000 Series			
Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-150688-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met? (< MDL)	☐	☑	☐	
LCS / QC check sample data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (AA/ICP 75-125%, Hg 85-115%)	☐	☑	☐	
MSD or sample duplicate data included in lab package?	☑	☐	☐	
RPD criteria met? (water RPD < 20%; soil RPD < 30%)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
Proper number of standards used in calibration curve? (ICP blank+1 std; AA blank+3 stds; Hg blank+5 stds)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Interference check sample data included? (ICP only)	☑	☐	☐	
%R criteria met? (80-120%)	☑	☐	☐	
Dilution test (1:5) data included?	☑	☐	☐	
Results within 10% original?	☑	☐	☐	
Post digestion spike included?	☑	☐	☐	
%R criteria met? (75-125% ICP), (85-115% Hg/AA)	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

CB: Arsenic and cadmium were detected in calibration blanks. Associated detections <5x blank concentrations were flagged U-CB.

MB: The 6010 method blank for Prep Batch 216811 contained Dissolved Molybdenum (0.001396 mg/L) and Dissolved Nickel (0.000971 mg/L) > MDL < RL. Associated detections <5x blank concentrations were flagged U-MB. Dissolved sodium was also detected in the method blank but all associated detections were >5x blank concentration so no sodium data were qualified.

MS: MS recovery for mercury for analytical batch 600-217076 (600-150688-7 MS) was low at 70% (75-125). The associated LCS recovery was within acceptance limits. The associated mercury result was qualified UJ-MS.

MS: Dissolved Calcium and Dissolved Sodium recoveries were outside criteria in the MS/MSD for preparation batch 600-216811 and analytical batch 600-217361. The bakcground concentration was >4x the spike so no data were qualified.

FD: Precision between SJRP-MW9-07062017 and its field duplicate SJRP-MW9-07062017-2 were within acceptance criteria.

DL: Method(s) 6010B: The following samples were diluted to bring the concentration of target analytes within the calibration range: SJRP-MW2-07062017 (600-150688-1), SJRP-MW4-07062017 (600-150688-2), SJRP-MW6-07062017 (600-150688-3), SJRP-MW6-07062017-MS (600-150688-3[MS]), SJRP-MW6-07062017-MSD (600-150688-3[MSD]), SJRP-MW8-07062017 (600-150688-6), SJRP-MW9-07062017 (600-150688-7), SJRP-MW9-07062017-2 (600-150688-8), SJRP-MW11-07062017 (600-150688-9), SJRP-MW12-07062017 (600-150688-10), SJRP-MW13-07062017 (600-150688-11), SJRP-MW14-07062017 (600-150688-12), SJRP-MW16-07062017 (600-150688-13), (600-150688-B-1-C DU), (600-150688-B-1-D MS) and (600-150688-B-1-E MSD). Elevated reporting limits (RLs) are provided.

Data Usability Review: TPH (GC), DRO/GRO, 8015M

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-150688-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits) Reject <10%	☐	☑	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
RPD criteria met? (< 30% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
%RSD/correlation criteria met?	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%D criteria met?	☑	☐	☐	

Surrogates	Control Limits
TCMX & DCBP	Soil (50-150%)

Notes:

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

SS: o-terphenyl was recovered low in the DRO/ORO analysis for sample SJRP-MW8-07062017 (600-150688-6) at 19% (50-150). The DRO and ORO ND results in the sample were flagged UJ-SS.

FD: Precision between SJRP-MW9-07062017 and its field duplicate SJRP-MW9-07062017-2 were within acceptance criteria.

Data Usability Review: General Chemistry

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-150688-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met? (<MQL)	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met?	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (AA/ICP 75-125%, Hg 85-115%)	☐	☑	☐	
Sample duplicate data included in lab package?	☑	☐	☐	
RPD criteria met? (RPD < 20%)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%R criteria met? (Initial 90-110%)	☑	☐	☐	

Notes:

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

MS: Nitrate was recovered low in the MS/MSD (600-150688-3 MS/MSD) for analytical batch 600-216665 at 75%/76% (80-120). The nitrate result in the parent sample was flagged JL-MS.

MS: Alkalinity was recovered low in the SM 2320B MS/MSD (600-150688-3 MS/MSD) for analytical batch 600-216902 at 71%/68% (75-125). The ND result in the parent sample was flagged UJ-MS

MS: Chloride and sulfate recovered outside criteria in 600-150688-3 MS/MSD but background concentrations were >4x spike concentration so no data were qualified. Recoveries passed in the associated LCS and in another MS/MSD.

FD: Precision between SJRP-MW9-07062017 and its field duplicate SJRP-MW9-07062017-2 were within acceptance criteria.

DL: Method(s) 300.0: The following samples were diluted due to the nature of the sample matrix: SJRP-MW4-07062017 (600-150688-2), SJRP-MW8-07062017 (600-150688-6), SJRP-MW9-07062017 (600-150688-7), SJRP-MW9-07062017-2 (600-150688-8), SJRP-MW12-07062017 (600-150688-10), SJRP-MW13-07062017 (600-150688-11) and SJRP-MW16-07062017 (600-150688-13). Samples high in Sulfate. Elevated reporting limits (RLs) are provided.

Data Usability Review: Data Package

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-150702-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Laboratory Data Package Signature Page included?	☑	☐	☐	
Date of sample collection included?	☑	☐	☐	
Sample receipt temperature ≤ 6° C?	☑	☐	☐	
Signed COCs included?	☑	☐	☐	
Field ID included?	☑	☐	☐	
Laboratory ID included?	☑	☐	☐	
Date of analysis included?	☑	☐	☐	
Date of sample preparation included?	☑	☐	☐	
Detection levels included?	☑	☐	☐	
Method reference included?	☑	☐	☐	
Sample matrix included?	☑	☐	☐	
Sample results included?	☑	☐	☐	
Case narrative included, where required?	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative Percent Difference; RRT - Relative Retention Time; RSD - Relative Standard Deviation.

COMMENTS
VOCs: No DV flags applied
Metals: U-CB, U-MB, JL-MS, UJ-MS, J-SD
TPH GRO/DRO: J-FD
General Chemistry: No DV flags applied

Data Usability Review: VOCs (GC/MS), SW-846 8260B

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-150702-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (use limits listed below or specify lab limits). Reject %R <10%.	☑	☐	☐	
R5 Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (laboratory specified limits)	☑	☐	☐	
RPD criteria met? (< 20% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%RSD criteria met for CCC? (<30% RSD for CCC, >15% RSD must have fit)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%D criteria met for CCC? (20% Max, Qualify >25%D)	☑	☐	☐	
Instrument Tune documentation included in lab package?	☑	☐	☐	
Instrument Tune Criteria met?	☑	☐	☐	
Internal standard data included in lab package?	☑	☐	☐	
Area within limits? (within -50% to +100% of last calibration check?	☑	☐	☐	
RRT within limits? (<30 sec. Difference from last calibration check?	☑	☐	☐	

Surrogates	Control Limits	Lab Limits?
1,2-Dichloroethane-d4	water 80-120%, soil 80-120%	
Dibromofluoromethane	water 86-118%, soil 80-120%	
Toluene-d8	water 88-110%, soil 81-117%	
4-Bromofluorobenzene	water 86-115%, soil 74-121%	

Notes:

* SPCC: chloromethane (0.1); 1,1-dichloroethane (0.1); bromoform (0.1); chlorobenzene (0.3); and 1,1,2,2-tetrachloroethane (0.3).

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

TB: Trip blanks SJRP-TB03-07072017 and SJRP-TB04-07072017 were all ND.

OT: One vial for sample SJRP-MW15-07072017-2 (600-150702-4).600-150702-I-4 was received broken but the remaining two vials provided sufficient volume for analysis.

DL: Method(s) 8260B: The following samples was diluted to bring the concentration of target analytes within the calibration range: SJRP-MW15-07072017 (600-150702-3), SJRP-MW15-07072017-2 (600-150702-4) and SJRP-PMW2-07072017 (600-150702-6). Elevated reporting limits (RLs) are provided.

Data Usability Review: Metals, SW-846 6010, 7470/7471, 7000 Series			
Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-150702-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Method blank data included in Lab Package?	☐	☑	☐	
Criteria met? (< MDL)	☑	☐	☐	
LCS / QC check sample data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (AA/ICP 75-125%, Hg 85-115%)	☐	☑	☐	
MSD or sample duplicate data included in lab package?	☑	☐	☐	
RPD criteria met? (water RPD < 20%; soil RPD < 30%)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
Proper number of standards used in calibration curve? (ICP blank+1 std; AA blank+3 stds; Hg blank+5 stds)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Interference check sample data included? (ICP only)	☑	☐	☐	
%R criteria met? (80-120%)	☑	☐	☐	
Dilution test (1:5) data included?	☑	☐	☐	
Results within 10% original?	☐	☑	☐	
Post digestion spike included?	☑	☐	☐	
%R criteria met? (75-125% ICP), (85-115% Hg/AA)	☐	☑	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

CB: Cobalt, molybdenum, and cadmium were detected in multiple calibration blanks. Associated detections <5x blank levels were flagged U-CB.

MB: The 6010 method blank for Prep Batch 217264 contained Dissolved Barium, Dissolved Calcium, Dissolved Iron, Dissolved Potassium, Dissolved Manganese and Dissolved Lead at concentrations > MDL < RL. The method blank for Prep Batch 217264 in analytical batch 217549 contained Dissolved Sodium > MDL < RL.
Barium, Dissolved at 0.0011 mg/L - detections >5x MB so no flags applied
Calcium, Dissolved at 0.1438 x5 mg/L - detections >5x MB so no flags applied
Iron, Dissolved at 0.1097 mg/L - detections <5x MB flagged U-MB
Lead, Dissolved at 0.004 mg/L - associated results ND so no flags applied
Manganese, Dissolved at 0.001 mg/L - detections >5x MB so no flags applied
Potassium, Dissolved at 0.1009 mg/L - detections >5x MB so no flags applied
Sodium, Dissolved at 0.1054 mg/L - detection >5x MB so no flags applied

MS: Mn recovered low and Se recovered high in 600-150702-3 MS/MSD. Se was ND so no flags applied. Mn result in parent sample -3 flagged JL-MS.

MS: Mercury MS recovery for analytical batch 600-217076 (600-150702-5 MS) was low at 73% (75-125). Mercury result in parent sample was flagged UJ-MS

SD: The 6010 serial dilution performed on sample 600-150702-3 was outside method control limits for Boron at 24%, but the MS/MSD performed on the same sample passed boron almost perfectly at 99%/102%. Flagged boron result in parent sample J-SD.

PDS: The post digestion spike recovery for Manganese (72%) associated with batch 217363 was below control limits. Manganese was already flagged JL based on a similarly marginal low recovery in the MS/MSD in the same sample so no additional flags were applied.

MS: Calcium and manganese recovered outside criteria in the MS/MSD but background concentrations were >4x spike concentrations so no data were qualified.

DL: Method(s) 6010B: The following samples was diluted to bring the concentration of target analytes within the calibration range: SJRP-PMW1-07072017 (600-150702-5), SJRP-PMW2-07072017 (600-150702-6) and SJRP-PMW4-07072017 (600-150702-7). Elevated reporting limits (RLs) are provided.

Data Usability Review: TPH (GC), DRO/GRO, 8015M

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-150702-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits) Reject <10%	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
RPD criteria met? (< 30% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
%RSD/correlation criteria met?	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%D criteria met?	☑	☐	☐	

Surrogates	Control Limits
TCMX & DCBP	Soil (50-150%)

Notes:

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

FD: Precision between GRO results for sample SJRP-MW15-07072017 and its field duplicate SJRP-MW15-07072017-2 was outside critreria - GRO results in the samples were flagged J-FD

OT: Method(s) 8015C: The following sample(s) were collected in properly preserved vials for analysis of volatile organic compounds (VOCs): SJRP-PMW2-07072017 (600-150702-6). However, the pH was outside the required criteria when verified by the laboratory and corrective action was not possible. Samples were analyzed in 5-6 days so still within accepted 7-day holding time for unpreserved VOAs so no flags applied

Data Usability Review: General Chemistry

Client Name:	**Kinder Morgan**	Project Number:	**698772.01.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-150702-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

	ITEM	YES	NO	N/A	COMMENTS
	Preparatory/analytical holding time met?	☑	☐	☐	
	Method blank data included in Lab Package?	☑	☐	☐	
	Criteria met? (<MQL)	☑	☐	☐	
	QC check samples/LCS data included in lab package?	☑	☐	☐	
	%R criteria met?	☑	☐	☐	
	Matrix spike data included in lab package?	☑	☐	☐	
	%R criteria met? (AA/ICP 75-125%, Hg 85-115%)	☑	☐	☐	
	Sample duplicate data included in lab package?	☑	☐	☐	
	RPD criteria met? (RPD < 20%)	☑	☐	☐	
	Initial calibration documentation included in lab package?	☑	☐	☐	
	Calibration verification data included in lab package?	☑	☐	☐	
	%R criteria met? (Initial 90-110%)	☑	☐	☐	

Notes:

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

DL: Method(s) 300.0: The following samples was diluted due to the nature of the sample matrix: SJRP-MW15-07072017 (600-150702-3), SJRP-MW15-07072017-2 (600-150702-4), SJRP-PMW1-07072017 (600-150702-5), SJRP-PMW2-07072017 (600-150702-6) and SJRP-PMW4-07072017 (600-150702-7). High Sulfate in sample. Elevated reporting limits (RLs) are provided.

Data Usability Review: Data Package					
Client Name:	**Kinder Morgan**		Project Number:		**707473CH.01.05**
Project / Affected Property:	**San Juan, Bloomfield NM**		Project Manager:		**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**		Lab SDG # / Job #:		**600-179817-1**
Reviewer:	**John Ynfante/HOU**				
Level of Review / Validation:	**Level 3**				
ITEM		**YES**	**NO**	**N/A**	**COMMENTS**
Laboratory Data Package Signature Page included?		☑	☐	☐	
Date of sample collection included?		☑	☐	☐	
Sample receipt temperature ≤ 6° C?		☑	☐	☐	0.1 deg C
Signed COCs included?		☑	☐	☐	
Field ID included?		☑	☐	☐	
Laboratory ID included?		☑	☐	☐	
Date of analysis included?		☑	☐	☐	
Date of sample preparation included?		☑	☐	☐	
Detection levels included?		☑	☐	☐	
Method reference included?		☑	☐	☐	
Sample matrix included?		☑	☐	☐	
Sample results included?		☑	☐	☐	
Case narrative included, where required?		☑	☐	☐	
Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative Percent Difference; RRT - Relative Retention Time; RSD - Relative Standard Deviation.					
COMMENTS					
VOCs: No DV flags					
TPH: J (SS,MS)					
Metals: UJ (MB,MS)					

Data Usability Review: VOCs (GC/MS), SW-846 8260B

Client Name:	**Kinder Morgan**	Project Number:	**707473CH.01.05**
Project / Affected Property:	**San Juan, Bloomfield NM**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-179817-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (use limits listed below or specify lab limits). Reject %R <10%.	☑	☐	☐	
R5 Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (laboratory specified limits)	☑	☐	☐	
RPD criteria met? (< 20% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%RSD criteria met for CCC? (<30% RSD for CCC, >15% RSD must have fit)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%D criteria met for CCC? (20% Max, Qualify >25%D)	☑	☐	☐	
Instrument Tune documentation included in lab package?	☑	☐	☐	
Instrument Tune Criteria met?	☑	☐	☐	
Internal standard data included in lab package?	☑	☐	☐	
Area within limits? (within -50% to +100% of last calibration check?	☑	☐	☐	
RRT within limits? (<30 sec. Difference from last calibration check?	☑	☐	☐	

Surrogates	Control Limits	Lab Limits?
1,2-Dichloroethane-d4	water 80-120%, soil 80-120%	
Dibromofluoromethane	water 86-118%, soil 80-120%	
Toluene-d8	water 88-110%, soil 81-117%	
4-Bromofluorobenzene	water 86-115%, soil 74-121%	

Notes:

* SPCC: chloromethane (0.1); 1,1-dichloroethane (0.1); bromoform (0.1); chlorobenzene (0.3); and 1,1,2,2-tetrachloroethane (0.3).

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

TB: SJRP-TB01-01282019 all ND

Data Usability Review: TPH (GC), SW-846 8015M

Client Name:	**Kinder Morgan**	Project Number:	**707473CH.01.05**
Project / Affected Property:	**San Juan, Bloomfield NM**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-179817-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☐	☑	☐	
%R criteria met? (specified limits) Reject <10%	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☐	☑	☐	
RPD criteria met? (< 30% water, <50% soil)	☐	☑	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
%RSD/correlation criteria met?	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%D criteria met?	☑	☐	☐	

Surrogates	Control Limits
TCMX & DCBP	Soil (50-150%)

Notes:

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

MD: GRO Method(s) 8015C: MS/MSD RPD in 600-179817-4 MS/MSD for preparation batch 490-573005 and analytical batch 490-573402 was outside control limits Non-detect result in parent sample flagged UJ.

MS: DRO Method(s) 8015C: DRO recovered low in 600-179817-4 MS/MSD. Flagged DRO results in parent sample J.

SS: DRO Method(s) 8015C: Surrogate recovery was high for SJRP-MW17-00-01-01282019 (600-179817-4). Flagged detections J.

Data Usability Review: Metals, SW-846 6010, 7470/7471, 7000 Series			
Client Name:	**Kinder Morgan**	Project Number:	**707473CH.01.05**
Project / Affected Property:	**San Juan, Bloomfield NM**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-179817-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met? (< MDL)	☐	☑	☐	
LCS / QC check sample data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (AA/ICP 75-125%, Hg 85-115%)	☐	☑	☐	
MSD or sample duplicate data included in lab package?	☑	☐	☐	
RPD criteria met? (water RPD < 20%; soil RPD < 30%)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
Proper number of standards used in calibration curve? (ICP blank+1 std; AA blank+3 stds; Hg blank+5 stds)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Interference check sample data included? (ICP only)	☑	☐	☐	
%R criteria met? (80-120%)	☑	☐	☐	
Dilution test (1:5) data included?	☑	☐	☐	
Results within 10% original?	☑	☐	☐	
Post digestion spike included?	☑	☐	☐	
%R criteria met? (75-125% ICP), (85-115% Hg/AA)	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

MB: Method(s) 6010B: The method blank for Prep Batch 257875 contained Boron (0.56 mg/kg) and Barium (0.225 mg/kg) above the method detection limit. Boron detections >5x MB flagged U.

SD: Method(s) 6010B: The serial dilution performed for the following sample associated with batch 257988 was outside control limits for Chromium at 12% recovery: (600-179401-A-42-A SD ^5). Non-project sample so no flags applied

DL: Method(s) 6010B: The following sample was diluted to bring the concentration of target analytes within the calibration range: SJRP-MW22-00-01-01282019 (600-179817-5). Elevated reporting limits (RLs) are provided.

MS: Barium recovered low in 600-179817-4 MS but recovered within criteria in the MSD and RPD passed so no flags applied. Boron recovered low in 600-179817-4 MS/MSD and already flagged U due to blank contamination so flagged UJ.

Data Usability Review: Data Package			
Client Name:	**Kinder Morgan**	Project Number:	**707473CH.01.05**
Project / Affected Property:	**San Juan, Bloomfield NM**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-179897-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Laboratory Data Package Signature Page included?	☑	☐	☐	
Date of sample collection included?	☑	☐	☐	
Sample receipt temperature ≤ 6° C?	☑	☐	☐	5.7 deg C
Signed COCs included?	☑	☐	☐	
Field ID included?	☑	☐	☐	
Laboratory ID included?	☑	☐	☐	
Date of analysis included?	☑	☐	☐	
Date of sample preparation included?	☑	☐	☐	
Detection levels included?	☑	☐	☐	
Method reference included?	☑	☐	☐	
Sample matrix included?	☑	☐	☐	
Sample results included?	☑	☐	☐	
Case narrative included, where required?	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative Percent Difference; RRT - Relative Retention Time; RSD - Relative Standard Deviation.

COMMENTS
VOCs: No DV flags applied
TPH: No DV flags applied
Metals: J (LD), J+ (MS), J- (MS), J (FD), J (SD)
OT: Sample EB01 requested moisture on the chain of custody, but this was not actually required/possible so it was not analyzed.

Data Usability Review: VOCs (GC/MS), SW-846 8260B

Client Name:	**Kinder Morgan**	Project Number:	**707473CH.01.05**
Project / Affected Property:	**San Juan, Bloomfield NM**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-179897-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (use limits listed below or specify lab limits). Reject %R <10%.	☑	☐	☐	
R5 Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	LCS/LCSD
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☐	☑	☐	
%R criteria met? (laboratory specified limits)	☐	☐	☑	
RPD criteria met? (< 20% water, <50% soil)	☑	☐	☐	LCS/LCSD
Initial calibration documentation included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%RSD criteria met for CCC? (<30% RSD for CCC, >15% RSD must have fit)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%D criteria met for CCC? (20% Max, Qualify >25%D)	☑	☐	☐	
Instrument Tune documentation included in lab package?	☑	☐	☐	
Instrument Tune Criteria met?	☑	☐	☐	
Internal standard data included in lab package?	☑	☐	☐	
Area within limits? (within -50% to +100% of last calibration check?	☑	☐	☐	
RRT within limits? (<30 sec. Difference from last calibration check?	☑	☐	☐	

Surrogates	Control Limits	Lab Limits?
1,2-Dichloroethane-d4	water 80-120%, soil 80-120%	
Dibromofluoromethane	water 86-118%, soil 80-120%	
Toluene-d8	water 88-110%, soil 81-117%	
4-Bromofluorobenzene	water 86-115%, soil 74-121%	

Notes:

* SPCC: chloromethane (0.1); 1,1-dichloroethane (0.1); bromoform (0.1); chlorobenzene (0.3); and 1,1,2,2-tetrachloroethane (0.3).

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

TB: Sample TB02 (Trip Blank) requested for multiple analyses on the chain of custody, however only VOCs was required and analyzed. No analytes were detected.

EB: No analytes detected in equipment blank SJRP-EB01-01292019.

FD: SJRP-MW19-00-01-01292019-2 = SJRP-MW19-00-01-01292019. Precision within criteria.

Data Usability Review: TPH (GC), SW-846 8015M

Client Name:	**Kinder Morgan**	Project Number:	**707473CH.01.05**
Project / Affected Property:	**San Juan, Bloomfield NM**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-179897-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits) Reject <10%	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	LCS/LCSD
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	600-179897-1MS/MSD
%R criteria met? (specified limits)	☑	☐	☐	
RPD criteria met? (< 30% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
%RSD/correlation criteria met?	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%D criteria met?	☑	☐	☐	

Surrogates	Control Limits
TCMX & DCBP	Soil (50-150%)

Notes:

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

EB: No analytes detected in equipment blank SJRP-EB01-01292019.

FD: SJRP-MW19-00-01-01292019-2 = SJRP-MW19-00-01-01292019. Precision within criteria.

Data Usability Review: Metals, SW-846 6010, 7470/7471, 7000 Series			
Client Name:	**Kinder Morgan**	Project Number:	**707473CH.01.05**
Project / Affected Property:	**San Juan, Bloomfield NM**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-179897-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met? (< MDL)	☐	☑	☐	
LCS / QC check sample data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	600-179897-1 MS
%R criteria met? (AA/ICP 75-125%, Hg 85-115%)	☐	☑	☐	
MSD or sample duplicate data included in lab package?	☑	☐	☐	600-179897-1 DUP
RPD criteria met? (water RPD < 20%; soil RPD < 30%)	☐	☑	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
Proper number of standards used in calibration curve? (ICP blank+1 std; AA blank+3 stds; Hg blank+5 stds)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Interference check sample data included? (ICP only)	☑	☐	☐	
%R criteria met? (80-120%)	☑	☐	☐	
Dilution test (1:5) data included?	☑	☐	☐	
Results within 10% original?	☑	☐	☐	
Post digestion spike included?	☑	☐	☐	
%R criteria met? (75-125% ICP), (85-115% Hg/AA)	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

CC: Method(s) 6010B: The continuing calibration verification (CCV) associated for batch 257874 recovered boron and iron above the upper control limit but they were not detected in any sample so no data were qualified.

MB: Method 6010B: The method blank for Prep Batch 257994 contained Barium (0.090 mg/kg) and Lead (0.12 mg/kg) above the method detection limit. Associated detections were > 5 times the MB concentrations so no data were qualified.

SD: Method 6010B: The serial dilution performed on 600-179897-1 with batch 258058 was outside control limits for Chromium at 15% recovery and Manganese at 12% recovery. Flagged result J-SD.

DL: Method 6010B: Sample SJRP-MW23-00-01-01292019 (600-179897-7) was diluted to bring the concentration of target analytes within the calibration range. Elevated reporting limits are provided.

EB: Barium detected at 0.0008 J mg/L in equipment blank SJRP-EB01-01292019. Associated detections in normal samples were > 5 times the EB concentration so no data were qualified.

MS, LD: Aluminum and iron were recovered outside criteria in the MS 600-179897-1MS but the background concentrations in the parent sample were > 4 times the spike concentrations so no flags were applied. Boron was recovered low and manganese was recovered high. The RPDs for cobalt, manganese and nickel in the duplicate 600-179897-1 DUP were outside criteria. Flagged Boron result in parent sample J-. Flagged Manganese result in parent sample J+. Flagged cobalt and nickel results in parent sample J. RPD for mercury in the lab duplicate outside criteria but acceptable due to low concentrations detected..

FD: SJRP-MW19-00-01-01292019-2 = SJRP-MW19-00-01-01292019. RPD in field duplicate was outside criteria for manganese. Flagged manganese result in samples J.

Data Usability Review: Data Package			
Client Name:	**Kinder Morgan**	Project Number:	**707473CH.01.05**
Project / Affected Property:	**San Juan, Bloomfield NM**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-179991-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Laboratory Data Package Signature Page included?	☑	☐	☐	
Date of sample collection included?	☑	☐	☐	
Sample receipt temperature ≤ 6° C?	☑	☐	☐	6 deg C
Signed COCs included?	☑	☐	☐	
Field ID included?	☑	☐	☐	
Laboratory ID included?	☑	☐	☐	
Date of analysis included?	☑	☐	☐	
Date of sample preparation included?	☑	☐	☐	
Detection levels included?	☑	☐	☐	
Method reference included?	☑	☐	☐	
Sample matrix included?	☑	☐	☐	
Sample results included?	☑	☐	☐	
Case narrative included, where required?	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative Percent Difference; RRT - Relative Retention Time; RSD - Relative Standard Deviation.

COMMENTS
VOCs: J (FD). U (EB)
TPH: J (FD)
Metals: J (FD), J- (MS), J+ (MS), J (LD)
OT: The Chain-of-Custody (COC) requested multiple analyses for the trip blank but the lab was instructed to analyze the trip blank for 8260 VOCs only.

Data Usability Review: VOCs (GC/MS), SW-846 8260B

Client Name:	**Kinder Morgan**	Project Number:	**707473CH.01.05**
Project / Affected Property:	**San Juan, Bloomfield NM**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-179991-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (use limits listed below or specify lab limits). Reject %R <10%.	☑	☐	☐	
R5 Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	LCS/LCSD
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☐	☑	☐	
%R criteria met? (laboratory specified limits)	☐	☐	☑	
RPD criteria met? (< 20% water, <50% soil)	☑	☐	☐	LCS/LCSD
Initial calibration documentation included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%RSD criteria met for CCC? (<30% RSD for CCC, >15% RSD must have fit)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%D criteria met for CCC? (20% Max, Qualify >25%D)	☑	☐	☐	
Instrument Tune documentation included in lab package?	☑	☐	☐	
Instrument Tune Criteria met?	☑	☐	☐	
Internal standard data included in lab package?	☑	☐	☐	
Area within limits? (within -50% to +100% of last calibration check?	☑	☐	☐	
RRT within limits? (<30 sec. Difference from last calibration check?	☑	☐	☐	

Surrogates	Control Limits	Lab Limits?
1,2-Dichloroethane-d4	water 80-120%, soil 80-120%	
Dibromofluoromethane	water 86-118%, soil 80-120%	
Toluene-d8	water 88-110%, soil 81-117%	
4-Bromofluorobenzene	water 86-115%, soil 74-121%	

Notes:

* SPCC: chloromethane (0.1); 1,1-dichloroethane (0.1); bromoform (0.1); chlorobenzene (0.3); and 1,1,2,2-tetrachloroethane (0.3).

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

DL: Samples SJRP-MW17-09-10-01302019 (600-179991-5) and SJRP-MW17-09-10-01302019-2 (600-179991-6).were diluted to bring the concentration of target analytes within the calibration range. Elevated reporting limits are provided.

FD: SJRP-MW17-09-10-01302019-2 = SJRP-MW17-09-10-01302019. RPD outside criteria for all BTEX analytes so results in both samples flagged J

TB: all nd

EB: SJRP-EB02-01302019 benzene (0.000477 J mg/L), toluene (0.00192 mg/L), ethybenzene (0.001 mg/L), and xylenes (0.0118 mg/L) were detected in the equipment blank. Benzene detection >5x EB concentrations were flagged U.

Data Usability Review: TPH (GC), SW-846 8015M

Client Name:	**Kinder Morgan**	Project Number:	**707473CH.01.05**
Project / Affected Property:	**San Juan, Bloomfield NM**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-179991-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits) Reject <10%	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	LCS/LCSD
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☐	☑	☐	
%R criteria met? (specified limits)	☐	☐	☑	
RPD criteria met? (< 30% water, <50% soil)	☑	☐	☐	LCS/LCSD
Initial calibration documentation included in lab package?	☑	☐	☐	
%RSD/correlation criteria met?	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%D criteria met?	☑	☐	☐	

Surrogates	Control Limits
TCMX & DCBP	Soil (50-150%)

Notes:

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

DL: DRO sample SJRP-MW17-09-10-01302019-2 (600-179991-6) was diluted to bring the concentration of target analytes within the calibration range. Elevated reporting limits are provided.

FD: SJRP-MW17-09-10-01302019-2 = SJRP-MW17-09-10-01302019. RPD outside criteria for DRO so results in both samples flagged J.

EB: No DRO or GRO concentrations were detected in the equipment blank SJRP-EB02-01302019.

Data Usability Review: Metals, SW-846 6010, 7470/7471, 7000 Series			
Client Name:	**Kinder Morgan**	Project Number:	**707473CH.01.05**
Project / Affected Property:	**San Juan, Bloomfield NM**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-179991-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met? (< MDL)	☐	☑	☐	
LCS / QC check sample data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (AA/ICP 75-125%, Hg 85-115%)	☑	☐	☐	
MSD or sample duplicate data included in lab package?	☑	☐	☐	
RPD criteria met? (water RPD < 20%; soil RPD < 30%)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
Proper number of standards used in calibration curve? (ICP blank+1 std; AA blank+3 stds; Hg blank+5 stds)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Interference check sample data included? (ICP only)	☑	☐	☐	
%R criteria met? (80-120%)	☑	☐	☐	
Dilution test (1:5) data included?	☑	☐	☐	
Results within 10% original?	☑	☐	☐	
Post digestion spike included?	☑	☐	☐	
%R criteria met? (75-125% ICP), (85-115% Hg/AA)	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

MB: Method 6010B: The method blank for preparation batch 600-258073 and analytical batch 600-258232 contained Lead above the method detection limit but less than the reporting limit at 0.14 mg/kg. Detections in samples were > 5 times the MB concentration so no flags were applied.

DL: Method 6010B: Samples SJRP-MW17-09-10-01302019 (600-179991-5) and SJRP-MW17-09-10-01302019-2 (600-179991-6) were diluted to bring the concentration of target analytes within the calibration range: Elevated reporting limits are provided.

FD: SJRP-MW17-09-10-01302019-2 = SJRP-MW17-09-10-01302019. RPD outside criteria for manganese so results in both samples flagged J

EB: Aluminum (0.234 mg/L), barium (0.0036 mg/L), iron (0.184 mg/L), manganese (0.0124 mg/L) detected in the equipment blank SJRP EB02-01302019. All detections were > 5 times the EB concentrations so no flags were applied.

MS,LD: Barium recovered high and boron recovered low in the MS 600-179991-1MS. Arsenic and barium expressed RPDs outside criteria in the lab duplicate on the same sample. Barium results in parent sample flagged J+, boron flagged J-, and Arsenic flagged J. Aluminum and iron recovered outside criteria but background concentration in the parent sample was > 4x the spike concentrations so the data were not qualified.

Data Usability Review: Data Package

Client Name:	**Kinder Morgan**	Project Number:	**707473CH.01.05**
Project / Affected Property:	**San Juan, Bloomfield NM**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-179997-1**
Reviewer:	**John Ynfante/HOU**	Date Reviewed:	**3/7/2019**
Level of Review / Validation:	**L3**		

ITEM	YES	NO	N/A	COMMENTS
Laboratory Data Package Signature Page included?	☑	☐	☐	
Date of sample collection included?	☑	☐	☐	
Sample receipt temperature ≤ 6° C?	☑	☐	☐	6 deg C
Signed COCs included?	☑	☐	☐	
Field ID included?	☑	☐	☐	
Laboratory ID included?	☑	☐	☐	
Date of analysis included?	☑	☐	☐	
Date of sample preparation included?	☑	☐	☐	
Detection levels included?	☑	☐	☐	
Method reference included?	☑	☐	☐	
Sample matrix included?	☑	☐	☐	
Sample results included?	☑	☐	☐	
Case narrative included, where required?	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative Percent Difference; RRT - Relative Retention Time; RSD - Relative Standard Deviation.

COMMENTS

Anions: No DV flags applied

OT: Samples SJRP-MW17-04-05-01302019 and SJRP-MW17-09-10-01302019 were not marked for analysis on the chain of custody. The lab was instructed to analyze the samples for chloride, sulfate, and moisture.

Data Usability Review: Anions (Chloride, Sulfate) by SW-846 9056

Client Name:	**Kinder Morgan**	Project Number:	**707473CH.01.05**
Project / Affected Property:	**San Juan, Bloomfield NM**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-179997-1**
Reviewer:	**John Ynfante/HOU**	Date Reviewed:	**3/7/2019**
Level of Review / Validation:	**L3**		

	ITEM	YES	NO	N/A	COMMENTS
	Preparatory/analytical holding time met?	☑	☐	☐	
	Method blank data included in Lab Package?	☑	☐	☐	
	Criteria met? (<MQL)	☐	☑	☐	
	QC check samples/LCS data included in lab package?	☑	☐	☐	
	%R criteria met?	☑	☐	☐	
	Matrix spike data included in lab package?	☐	☑	☐	
	%R criteria met? (AA/ICP 75-125%, Hg 85-115%)	☐	☐	☑	
	Sample duplicate data included in lab package?	☐	☑	☐	
	RPD criteria met? (RPD < 20%)	☐	☐	☑	
	Initial calibration documentation included in lab package?	☑	☐	☐	
	Calibration verification data included in lab package?	☑	☐	☐	
	%R criteria met? (Initial 90-110%)	☑	☐	☐	

Notes:

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

MB: Method 9056: The method blank for preparation batch 600-258059 and analytical batch 600-258115 contained Chloride above the method detection limit but below the reporting limit at 0.9457 J mg/L. Associated detections were > 5x MB concentration so no flags were applied.

Data Usability Review: Data Package

Client Name:	**Kinder Morgan**	Project Number:	**707473CH.01.05**
Project / Affected Property:	**San Juan, Bloomfield NM**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-180009-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Laboratory Data Package Signature Page included?	☑	☐	☐	
Date of sample collection included?	☑	☐	☐	
Sample receipt temperature ≤ 6° C?	☑	☐	☐	5 deg C
Signed COCs included?	☑	☐	☐	
Field ID included?	☑	☐	☐	
Laboratory ID included?	☑	☐	☐	
Date of analysis included?	☑	☐	☐	
Date of sample preparation included?	☑	☐	☐	
Detection levels included?	☑	☐	☐	
Method reference included?	☑	☐	☐	
Sample matrix included?	☑	☐	☐	
Sample results included?	☑	☐	☐	
Case narrative included, where required?	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative Percent Difference; RRT - Relative Retention Time; RSD - Relative Standard Deviation.

COMMENTS
VOCs: J (FD)
TPH: J (FD)
Metals: J (FD), U (MB), J (MB), J (LD), J- (MS)
OT: Trip Blank Sample SJRP-TB-04-01312019 (600-180009-1) marked for multiple analyses on COC, but was correctly analyzed for Method 8260B only.

Data Usability Review: VOCs (GC/MS), SW-846 8260B

Client Name:	**Kinder Morgan**	Project Number:	**707473CH.01.05**
Project / Affected Property:	**San Juan, Bloomfield NM**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-180009-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (use limits listed below or specify lab limits). Reject %R <10%.	☑	☐	☐	
R5 Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	LCS/LCSD
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (laboratory specified limits)	☑	☐	☐	
RPD criteria met? (< 20% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%RSD criteria met for CCC? (<30% RSD for CCC, >15% RSD must have fit)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%D criteria met for CCC? (20% Max, Qualify >25%D)	☑	☐	☐	
Instrument Tune documentation included in lab package?	☑	☐	☐	
Instrument Tune Criteria met?	☑	☐	☐	
Internal standard data included in lab package?	☑	☐	☐	
Area within limits? (within -50% to +100% of last calibration check?	☑	☐	☐	
RRT within limits? (<30 sec. Difference from last calibration check?	☑	☐	☐	

Surrogates	Control Limits	Lab Limits?
1,2-Dichloroethane-d4	water 80-120%, soil 80-120%	
Dibromofluoromethane	water 86-118%, soil 80-120%	
Toluene-d8	water 88-110%, soil 81-117%	
4-Bromofluorobenzene	water 86-115%, soil 74-121%	

Notes:

* SPCC: chloromethane (0.1); 1,1-dichloroethane (0.1); bromoform (0.1); chlorobenzene (0.3); and 1,1,2,2-tetrachloroethane (0.3).

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

DL: Samples SJRP-MW21-19-20-01312019 (600-180009-3) and SJRP-MW22-10-11-01312019 (600-180009-5) were diluted due to the nature of the sample matrix: Elevated reporting limits (RLs) are provided.

DL: The following samples were diluted to bring the concentration of target analytes within the calibration range: SJRP-MW21-10-11-01312019 (600-180009-2), SJRP-MW21-19-20-01312019 (600-180009-3), SJRP-MW22-10-11-01312019 (600-180009-5), SJRP-MW22-18-19-01312019 (600-180009-6), and SJRP-MW22-18-19-01312019-2 (600-180009-7). Elevated RLs are provided.

TB: No analytes were detected in trip blank SJRP-TB04-01312019.

FD: SJRP-MW22-18-19-01312019-2 = SJRP-MW22-18-19-01312019. RPDs for BTEX outside criteria so flagged results J.

EB: No VOCs were deteected in equipment blank SJRP-EB03-01312019

Data Usability Review: TPH (GC), SW-846 8015M

Client Name:	**Kinder Morgan**	Project Number:	**707473CH.01.05**
Project / Affected Property:	**San Juan, Bloomfield NM**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-180009-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits) Reject <10%	☐	☑	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	LCS/LCSD
%R criteria met? (specified limits)	☐	☑	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
RPD criteria met? (< 30% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
%RSD/correlation criteria met?	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%D criteria met?	☑	☐	☐	

Surrogates	Control Limits
TCMX & DCBP	Soil (50-150%)

Notes:

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

DL: Method 8015C-DRO: The following samples were diluted to bring the concentration of target analytes within the calibration range: SJRP-MW21-19-20-01312019 (600-180009-3), SJRP-MW22-18-19-01312019 (600-180009-6), and SJRP-MW22-18-19-01312019-2 (600-180009-7). Elevated RLs are provided.

SS: Method 8015C-DRO: Surrogate recovery for o-Terphenyl failed low for the following sample and extraction batch QC: SJRP-EB03-01312019 (600-180009-4), (LCS 490-574009/2-A), (MB 490-574009/1-A) and (600-180009-A-4-A DU). There was insufficient sample to perform a re-extraction due to the sample being used for batch DUP QC; therefore, the data have been reported. Only EB was affected so no flags were applied.

BS: Method 8015C-DRO: The LCS for batch 490-574009 failed the recovery criteria low for DRO C10-C28. There was insufficient sample to perform a re-extraction or re-analysis; therefore, the data have been reported. Only EB was affected so no flags were applied.

FD: SJRP-MW22-18-19-01312019-2 = SJRP-MW22-18-19-01312019. DRO RPD outside criteria so flagged J.

EB: No DRO or GRO were deteected in equipment blank SJRP-EB03-01312019

Data Usability Review: Metals, SW-846 6010, 7470/7471, 7000 Series			
Client Name:	**Kinder Morgan**	Project Number:	**707473CH.01.05**
Project / Affected Property:	**San Juan, Bloomfield NM**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-180009-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met? (< MDL)	☐	☑	☐	
LCS / QC check sample data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (AA/ICP 75-125%, Hg 85-115%)	☐	☑	☐	
MSD or sample duplicate data included in lab package?	☑	☐	☐	
RPD criteria met? (water RPD < 20%; soil RPD < 30%)	☐	☑	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
Proper number of standards used in calibration curve? (ICP blank+1 std; AA blank+3 stds; Hg blank+5 stds)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Interference check sample data included? (ICP only)	☑	☐	☐	
%R criteria met? (80-120%)	☑	☐	☐	
Dilution test (1:5) data included?	☑	☐	☐	
Results within 10% original?	☑	☐	☐	
Post digestion spike included?	☑	☐	☐	
%R criteria met? (75-125% ICP), (85-115% Hg/AA)	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS
MB: 6010B: The method blank for preparation batch 600-258174 and analytical batch 600-258351 contained Barium, Cobalt, Manganese and Molybdenum above the method detection limit but below the reporting limit. Water blank associated only with QC rinsate samples - no flags applied.
MB: Method 6010B: The method blank for preparation batch 600-258153 and analytical batch 600-258351 contained Barium, Chromium and Molybdenum above the method detection limit but below the reporting limit. Associated detections < 5x MB and < RL were flagged U. Associated detections < 5x MB but > RL were qualified as estimated (J).
MS: Method 6010B: Aluminium and iron recovered outside criteria in the matrix spike of sample SJRP-MW22-18-19-01312019-2MS (600-180009-7) for preparation batch 600-258153 and analytical batch 600-258351, but the background concentrations in the parent sample were > 4x the spike concentrations so no flags were applied. Boron was recovered low - flagged boron result J-.
LD: Method 6010B: The RPD of the duplicate of sample SJRP-MW22-18-19-01312019-2DU (600-180009-7) for preparation batch 600-258153 and analytical batch 600-258232 recovered outside control limits for Boron and Molybdenum
FD: SJRP-MW22-18-19-01312019-2 = SJRP-MW22-18-19-01312019. RPD for cobalt outside criteria so flagged results J
EB: Barium (0.00180 J mg/L), iron (0.207 J mg/L), and manganese (0.00910 J mg/L) were deteected in equipment blank SJRP-EB03-01312019. All associated detections were >5x EB concentrations so no flags were applied.

Data Usability Review: Data Package			
Client Name:	**Kinder Morgan**	Project Number:	**707473CH.01.05**
Project / Affected Property:	**San Juan, Bloomfield NM**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-180048-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Laboratory Data Package Signature Page included?	☑	☐	☐	
Date of sample collection included?	☑	☐	☐	
Sample receipt temperature ≤ 6° C?	☑	☐	☐	1.5 deg C
Signed COCs included?	☑	☐	☐	
Field ID included?	☑	☐	☐	
Laboratory ID included?	☑	☐	☐	
Date of analysis included?	☑	☐	☐	
Date of sample preparation included?	☑	☐	☐	
Detection levels included?	☑	☐	☐	
Method reference included?	☑	☐	☐	
Sample matrix included?	☑	☐	☐	
Sample results included?	☑	☐	☐	
Case narrative included, where required?	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative Percent Difference; RRT - Relative Retention Time; RSD - Relative Standard Deviation.

COMMENTS
VOCs: No DV flags applied
TPH: No DV flags applied
Metals: U (MB), J (MD), UJ (MD)

Data Usability Review: VOCs (GC/MS), SW-846 8260B

Client Name:	**Kinder Morgan**	Project Number:	**707473CH.01.05**
Project / Affected Property:	**San Juan, Bloomfield NM**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-180048-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (use limits listed below or specify lab limits). Reject %R <10%.	☑	☐	☐	
R5 Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	LCS/LCSD
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	600-180048-4MS/MSD
%R criteria met? (laboratory specified limits)	☑	☐	☐	
RPD criteria met? (< 20% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%RSD criteria met for CCC? (<30% RSD for CCC, >15% RSD must have fit)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%D criteria met for CCC? (20% Max, Qualify >25%D)	☑	☐	☐	
Instrument Tune documentation included in lab package?	☑	☐	☐	
Instrument Tune Criteria met?	☑	☐	☐	
Internal standard data included in lab package?	☑	☐	☐	
Area within limits? (within -50% to +100% of last calibration check?	☑	☐	☐	
RRT within limits? (<30 sec. Difference from last calibration check?	☑	☐	☐	

Surrogates	Control Limits	Lab Limits?
1,2-Dichloroethane-d4	water 80-120%, soil 80-120%	
Dibromofluoromethane	water 86-118%, soil 80-120%	
Toluene-d8	water 88-110%, soil 81-117%	
4-Bromofluorobenzene	water 86-115%, soil 74-121%	

Notes:

* SPCC: chloromethane (0.1); 1,1-dichloroethane (0.1); bromoform (0.1); chlorobenzene (0.3); and 1,1,2,2-tetrachloroethane (0.3).

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

TB: No VOCs detected in trip blank SJRP-TB05-02012019

No DV flags applied

Data Usability Review: TPH (GC), SW-846 8015M

Client Name:	**Kinder Morgan**	Project Number:	**707473CH.01.05**
Project / Affected Property:	**San Juan, Bloomfield NM**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-180048-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits) Reject <10%	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	600-180048-4 MS/MSD
%R criteria met? (specified limits)	☑	☐	☐	
RPD criteria met? (< 30% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
%RSD/correlation criteria met?	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%D criteria met?	☑	☐	☐	

Surrogates	Control Limits
TCMX & DCBP	Soil (50-150%)

Notes:

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

No DV flags

Data Usability Review: Metals, SW-846 6010, 7470/7471, 7000 Series			
Client Name:	**Kinder Morgan**	Project Number:	**707473CH.01.05**
Project / Affected Property:	**San Juan, Bloomfield NM**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-180048-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met? (< MDL)	☑	☐	☐	
LCS / QC check sample data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	600-180048-4 MS/MSD
%R criteria met? (AA/ICP 75-125%, Hg 85-115%)	☐	☑	☐	
MSD or sample duplicate data included in lab package?	☑	☐	☐	
RPD criteria met? (water RPD < 20%; soil RPD < 30%)	☐	☑	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
Proper number of standards used in calibration curve? (ICP blank+1 std; AA blank+3 stds; Hg blank+5 stds)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Interference check sample data included? (ICP only)	☑	☐	☐	
%R criteria met? (80-120%)	☑	☐	☐	
Dilution test (1:5) data included?	☑	☐	☐	
Results within 10% original?	☑	☐	☐	
Post digestion spike included?	☑	☐	☐	
%R criteria met? (75-125% ICP), (85-115% Hg/AA)	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

MB: Boron (0.4050 J mg/kg) was detected in method blank MB 600-258222/1-A. Detections were less than 5x MB concentration so were flagged U

MS,MD: Aluminum and iron were recovered outside criteria in the 600-180048-4 MS but background concentrations in the parent sample were greater than 4x the spike concentrations so no data were qualified. Some metals were recovered outside criteria in the MSD but passed in the MS so no flags were applied based on recovery but RPDs were outside criteria for arsenic, boron, cadmium, chromium, manganese, molybdenum, and selenium so detections in the parent sample for these metals were qualified as estimated J and non-detects as UJ..

Data Usability Review: Data Package

Client Name:	**Kinder Morgan**	Project Number:	**707473CH.01.05**
Project / Affected Property:	**San Juan, Bloomfield NM**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-180049-1**
Reviewer:	**John Ynfante/HOU**	Date Reviewed:	**3/7/2019**
Level of Review / Validation:	**L3**		

ITEM	YES	NO	N/A	COMMENTS
Laboratory Data Package Signature Page included?	☑	☐	☐	
Date of sample collection included?	☑	☐	☐	
Sample receipt temperature ≤ 6° C?	☑	☐	☐	1.5 deg C
Signed COCs included?	☑	☐	☐	
Field ID included?	☑	☐	☐	
Laboratory ID included?	☑	☐	☐	
Date of analysis included?	☑	☐	☐	
Date of sample preparation included?	☑	☐	☐	
Detection levels included?	☑	☐	☐	
Method reference included?	☑	☐	☐	
Sample matrix included?	☑	☐	☐	
Sample results included?	☑	☐	☐	
Case narrative included, where required?	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative Percent Difference; RRT - Relative Retention Time; RSD - Relative Standard Deviation.

COMMENTS

Anions: No DV flags applied

OT: Samples SJRP-MW17-04-05-01302019 and SJRP-MW17-09-10-01302019 were not marked for analysis on the chain of custody. The lab was instructed to analyze the samples for chloride, sulfate, and moisture.

Data Usability Review: Anions (Chloride, Sulfate) by SW-846 9056

Client Name:	**Kinder Morgan**	Project Number:	**707473CH.01.05**
Project / Affected Property:	**San Juan, Bloomfield NM**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-180049-1**
Reviewer:	**John Ynfante/HOU**	Date Reviewed:	**3/7/2019**
Level of Review / Validation:	**L3**		

	ITEM	YES	NO	N/A	COMMENTS
	Preparatory/analytical holding time met?	☑	☐	☐	
	Method blank data included in Lab Package?	☑	☐	☐	
	Criteria met? (<MQL)	☐	☑	☐	
	QC check samples/LCS data included in lab package?	☑	☐	☐	
	%R criteria met?	☑	☐	☐	
	Matrix spike data included in lab package?	☐	☑	☐	
	%R criteria met? (AA/ICP 75-125%, Hg 85-115%)	☐	☑	☐	per case narrative - see comment
	Sample duplicate data included in lab package?	☐	☑	☐	
	RPD criteria met? (RPD < 20%)	☐	☑	☐	per case narrative - see comment
	Initial calibration documentation included in lab package?	☑	☐	☐	
	Calibration verification data included in lab package?	☑	☐	☐	
	%R criteria met? (Initial 90-110%)	☑	☐	☐	

Notes:

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

MS: Chloride was detected in the method blank for preparation batch 600-258059 and analytical batch 600-258115 at a concentrations above the MDL but below the RL.

MS: Case narrative stated that the MS/MSD recoveries for preparation batch 600-258059 and analytical batch 600-258048 were outside control limits, but this was performed on a non-project sample so no data were qualiified.

Data Usability Review: Data Package

Client Name:	**Kinder Morgan**	Project Number:	**707473CH.01.05**
Project / Affected Property:	**San Juan, Bloomfield NM**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-180113-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Laboratory Data Package Signature Page included?	☑	☐	☐	
Date of sample collection included?	☑	☐	☐	
Sample receipt temperature ≤ 6° C?	☑	☐	☐	4.9 and -2.6 deg C
Signed COCs included?	☑	☐	☐	
Field ID included?	☑	☐	☐	
Laboratory ID included?	☑	☐	☐	
Date of analysis included?	☑	☐	☐	
Date of sample preparation included?	☑	☐	☐	
Detection levels included?	☑	☐	☐	
Method reference included?	☑	☐	☐	
Sample matrix included?	☑	☐	☐	
Sample results included?	☑	☐	☐	
Case narrative included, where required?	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative Percent Difference; RRT - Relative Retention Time; RSD - Relative Standard Deviation.

COMMENTS
VOCs: No DV flags applied
TPH: UJ (MD)
Metals: U (MB), J+ (MS), J- (MS)
OT: Soil samples for Volatile Organics analyses were received frozen at the laboratory and on dry ice.

Data Usability Review: VOCs (GC/MS), SW-846 8260B

Client Name:	**Kinder Morgan**	Project Number:	**707473CH.01.05**
Project / Affected Property:	**San Juan, Bloomfield NM**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-180113-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (use limits listed below or specify lab limits). Reject %R <10%.	☑	☐	☐	
R5 Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	LCS/LCSD
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	600-180113-3 MS/MSD
%R criteria met? (laboratory specified limits)	☑	☐	☐	
RPD criteria met? (< 20% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%RSD criteria met for CCC? (<30% RSD for CCC, >15% RSD must have fit)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%D criteria met for CCC? (20% Max, Qualify >25%D)	☑	☐	☐	
Instrument Tune documentation included in lab package?	☑	☐	☐	
Instrument Tune Criteria met?	☑	☐	☐	
Internal standard data included in lab package?	☑	☐	☐	
Area within limits? (within -50% to +100% of last calibration check?	☑	☐	☐	
RRT within limits? (<30 sec. Difference from last calibration check?	☑	☐	☐	

Surrogates	Control Limits	Lab Limits?
1,2-Dichloroethane-d4	water 80-120%, soil 80-120%	
Dibromofluoromethane	water 86-118%, soil 80-120%	
Toluene-d8	water 88-110%, soil 81-117%	
4-Bromofluorobenzene	water 86-115%, soil 74-121%	

Notes:

* SPCC: chloromethane (0.1); 1,1-dichloroethane (0.1); bromoform (0.1); chlorobenzene (0.3); and 1,1,2,2-tetrachloroethane (0.3).

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

TB: No VOCs were detected in the trip blanks SJRP-TB06-02022019 and SJRP-TB07-02032019.

EB: No VOCs were detected in the equipment blank SJRP-EB04-02022019.

No DV flags applied

Data Usability Review: TPH (GC), SW-846 8015M

Client Name:	**Kinder Morgan**	Project Number:	**707473CH.01.05**
Project / Affected Property:	**San Juan, Bloomfield NM**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-180113-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits) Reject <10%	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	LCS/LCSD
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	600-180113-3 MS/MSD
%R criteria met? (specified limits)	☑	☐	☐	
RPD criteria met? (< 30% water, <50% soil)	☐	☑	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
%RSD/correlation criteria met?	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%D criteria met?	☑	☐	☐	

Surrogates	Control Limits
TCMX & DCBP	Soil (50-150%)

Notes:

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

EB: No GRO or DRO analytes were detected in the equipment blank SJRP-EB04-02022019.

MD: RPD for GRO in 180113-3 MS/MSD was outside criteria at 26% (<21%). Both recoveries were within control limits and GRO was not detected in the parent sample. Result flagged UJ.

Data Usability Review: Metals, SW-846 6010, 7470/7471, 7000 Series			
Client Name:	**Kinder Morgan**	Project Number:	**707473CH.01.05**
Project / Affected Property:	**San Juan, Bloomfield NM**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-180113-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met? (< MDL)	☐	☑	☐	
LCS / QC check sample data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	600-180113-3 MS/MSD
%R criteria met? (AA/ICP 75-125%, Hg 85-115%)	☐	☑	☐	
MSD or sample duplicate data included in lab package?	☑	☐	☐	
RPD criteria met? (water RPD < 20%; soil RPD < 30%)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
Proper number of standards used in calibration curve? (ICP blank+1 std; AA blank+3 stds; Hg blank+5 stds)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Interference check sample data included? (ICP only)	☑	☐	☐	
%R criteria met? (80-120%)	☑	☐	☐	
Dilution test (1:5) data included?	☑	☐	☐	
Results within 10% original?	☑	☐	☐	
Post digestion spike included?	☑	☐	☐	
%R criteria met? (75-125% ICP), (85-115% Hg/AA)	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS
MB: Method 6010B: The method blank for preparation batch 600-258222 and analytical batch 600-258351 contained Boron at > MDL and < RL. Associated detection >5x MB flagged U.
MB: Method 6010B: The method blank for preparation batch 600-258222 and analytical batch 600-258242 contained Cadmium at > MDL and < RL. Associated detection >5x MB flagged U.
MB: Method 6010B: The method blank for preparation batch 600-258174 and analytical batch 600-258351 contained Barium, Cobalt, and Manganese at > MDL and < RL. The equipment blank was the only associated sample and these metals were not detected so no data were qualified.
EB: Manganese was detected in the equipment blank SJRP-EB04-02022019 at 0.00140 J B mg/L. Associated detections were > 5x EB concentration so no data were qualified..
MS: Barium was recovered high and boron was recovered low in 600-180113-3 MS/MSD - associated results for these metals in the parent sample were qualified J+ and J-, respectively. Aluminum and iron were recovered outside criteria in 600-180113-3 MS/MSD but background concentration in the parent sample were > 4x spike concentrations so the results were not qualified.

Data Usability Review: Data Package

Client Name:	**Kinder Morgan**	Project Number:	**707473CH.01.05**
Project / Affected Property:	**San Juan, Bloomfield NM**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-180114-1**
Reviewer:	**John Ynfante/HOU**	Date Reviewed:	**3/7/2019**
Level of Review / Validation:	**L3**		

ITEM	YES	NO	N/A	COMMENTS
Laboratory Data Package Signature Page included?	☑	☐	☐	
Date of sample collection included?	☑	☐	☐	
Sample receipt temperature ≤ 6° C?	☑	☐	☐	4.9 deg C
Signed COCs included?	☑	☐	☐	
Field ID included?	☑	☐	☐	
Laboratory ID included?	☑	☐	☐	
Date of analysis included?	☑	☐	☐	
Date of sample preparation included?	☑	☐	☐	
Detection levels included?	☑	☐	☐	
Method reference included?	☑	☐	☐	
Sample matrix included?	☑	☐	☐	
Sample results included?	☑	☐	☐	
Case narrative included, where required?	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative Percent Difference; RRT - Relative Retention Time; RSD - Relative Standard Deviation.

COMMENTS
Anions: No DV flags applied

Data Usability Review: Anions (Chloride, Sulfate) by SW-846 9056

Client Name:	**Kinder Morgan**	Project Number:	**707473CH.01.05**
Project / Affected Property:	**San Juan, Bloomfield NM**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-180114-1**
Reviewer:	**John Ynfante/HOU**	Date Reviewed:	**3/7/2019**
Level of Review / Validation:	**L3**		

	ITEM	YES	NO	N/A	COMMENTS
	Preparatory/analytical holding time met?	☑	☐	☐	
	Method blank data included in Lab Package?	☑	☐	☐	
	Criteria met? (<MQL)	☑	☐	☐	See comment
	QC check samples/LCS data included in lab package?	☑	☐	☐	
	%R criteria met?	☑	☐	☐	
	Matrix spike data included in lab package?	☑	☐	☐	600-180114-1MS/MSD
	%R criteria met? (AA/ICP 75-125%, Hg 85-115%)	☐	☑	☐	
	Sample duplicate data included in lab package?	☑	☐	☐	
	RPD criteria met? (RPD < 20%)	☑	☐	☐	
	Initial calibration documentation included in lab package?	☑	☐	☐	
	Calibration verification data included in lab package?	☑	☐	☐	
	%R criteria met? (Initial 90-110%)	☑	☐	☐	

Notes:

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

MB: Chloride was detected in the method blank for preparation batch 600-258059 and analytical batch 600-258115 at > MDL and < RL at 0.9457 J mg/kg but was not detected in any associated sample so no data were qualified.

MS: Chloride was recovered low in the MS 600-180114-1MS at 70% but passed in the MSD at 100% and LCS at 102% and the MS/MSD RPD was within criteria so no data were qualified.

Data Usability Review: Data Package			
Client Name:	**Kinder Morgan**	Project Number:	**D3302100 A.PN.EV.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-193737-2**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Laboratory Data Package Signature Page included?	☑	☐	☐	
Date of sample collection included?	☑	☐	☐	
Sample receipt temperature ≤ 6° C?	☑	☐	☐	1.9 deg C and 5.6 deg C
Signed COCs included?	☑	☐	☐	
Field ID included?	☑	☐	☐	
Laboratory ID included?	☑	☐	☐	
Date of analysis included?	☑	☐	☐	
Date of sample preparation included?	☑	☐	☐	
Detection levels included?	☑	☐	☐	
Method reference included?	☑	☐	☐	
Sample matrix included?	☑	☐	☐	
Sample results included?	☑	☐	☐	
Case narrative included, where required?	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative Percent Difference; RRT - Relative Retention Time; RSD - Relative Standard Deviation.

COMMENTS
VOCs: No DV flags applied.
Metals: U (MB), J (MD), U (CB)
General Chemistry: J (FD), J+ (MS), J- (MS), J (MB), UJ (MS,MD)
OT: Sample SJRP-MW8-10142019 (600-193737-13) was received at the lab but was not listed on the chain of custody. Jacobs instructed the laboratory to proceed with the analyses.

Data Usability Review: VOCs (GC/MS), SW-846 8260B

Client Name:	**Kinder Morgan**	Project Number:	**D3302100 A.PN.EV.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-193737-2**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (use limits listed below or specify lab limits). Reject %R <10%.	☑	☐	☐	
R5 Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (laboratory specified limits)	☑	☐	☐	
RPD criteria met? (< 20% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%RSD criteria met for CCC? (<30% RSD for CCC, >15% RSD must have fit)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%D criteria met for CCC? (20% Max, Qualify >25%D)	☑	☐	☐	
Instrument Tune documentation included in lab package?	☑	☐	☐	
Instrument Tune Criteria met?	☑	☐	☐	
Internal standard data included in lab package?	☑	☐	☐	
Area within limits? (within -50% to +100% of last calibration check?	☑	☐	☐	
RRT within limits? (<30 sec. Difference from last calibration check?	☑	☐	☐	

Surrogates	Control Limits	Lab Limits?
1,2-Dichloroethane-d4	water 80-120%, soil 80-120%	
Dibromofluoromethane	water 86-118%, soil 80-120%	
Toluene-d8	water 88-110%, soil 81-117%	
4-Bromofluorobenzene	water 86-115%, soil 74-121%	

Notes:

* SPCC: chloromethane (0.1); 1,1-dichloroethane (0.1); bromoform (0.1); chlorobenzene (0.3); and 1,1,2,2-tetrachloroethane (0.3).

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

DL: Samples SJRP-MW16-10142019 (600-193737-5) and SJRP-MD16-10142019 (600-193737-6) were diluted due to the nature of the sample matrix: Elevated reporting limits (RLs) are provided.

DL: The following samples were diluted to bring the concentration of target analytes within the calibration range: SJRP-MW9-10142019 (600-193737-3), SJRP-MW16-10142019 (600-193737-5), SJRP-MD16-10142019 (600-193737-6), SJRP-MW13-10142019 (600-193737-7), SJRP-MD13-10142019 (600-193737-8), SJRP-MW15-10142019 (600-193737-9), SJRP-MW21-10142019 (600-193737-10) and SJRP-MD21-10142019 (600-193737-11). Elevated reporting limits (RLs) are provided.

TB: No target analytes detected in trip blank SJRP-TB01-10142019.

FD: RPDs for SJRP-MW16-10142019 and its field duplicate SJRP-MD16-10142019 were within acceptance criteria.

FD: RPDs for SJRP-MW13-10142019 and its field duplicate SJRP-MD13-10142019 were within acceptance criteria.

FD: RPDs for SJRP-MW21-10142019 and its field duplicate SJRP-MD21-10142019 were within acceptance criteria.

Data Usability Review: Metals, SW-846 6010, 7470 Series			
Client Name:	**Kinder Morgan**	Project Number:	**D3302100 A.PN.EV.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-193737-2**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met? (< MDL)	☐	☑	☐	
LCS / QC check sample data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (AA/ICP 75-125%, Hg 85-115%)	☐	☑	☐	
MSD or sample duplicate data included in lab package?	☑	☐	☐	
RPD criteria met? (water RPD < 20%; soil RPD < 30%)	☐	☑	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
Proper number of standards used in calibration curve? (ICP blank+1 std; AA blank+3 stds; Hg blank+5 stds)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Interference check sample data included? (ICP only)	☑	☐	☐	
%R criteria met? (80-120%)	☑	☐	☐	
Dilution test (1:5) data included?	☑	☐	☐	
Results within 10% original?	☑	☐	☐	
Post digestion spike included?	☑	☐	☐	
%R criteria met? (75-125% ICP), (85-115% Hg/AA)	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS
DL: Method 6010B: The following samples were diluted to bring the concentration of target analytes within the calibration range: SJRP-MW19-10142019 (600-193737-4), SJRP-MW19-10142019 (600-193737-4[MS]) and SJRP-MW19-10142019 (600-193737-4[MSD]). Elevated reporting limits (RLs) are provided.
OT: Method 3010A: The following samples were received with insufficient preservation: SJRP-MW16-10142019 (600-193737-5), SJRP-MD16-10142019 (600-193737-6), SJRP-MW13-10142019 (600-193737-7), SJRP-MD13-10142019 (600-193737-8), SJRP-MW15-10142019 (600-193737-9) and SJRP-MW8-10142019 (600-193737-13). 1mL of Nitric acid preservative was added by the laboratory, and the samples pH was adjusted to <2 pH SU.
MB: Method 6010B: The method blank for preparation batch 600-278469 and analytical batch 600-278713 contained Barium above the method detection limit 0.0018 mg/L. Associated detections < 5x MB concentration were flagged U.
MB: Method 6010B: The method blank for preparation batch 600-278503 and analytical batch 600-279181 contained Manganese above the method detection limit. Associated detections were > 5x MB concentration so no flags were applied.
MS,MD: Method 6010B: Recoveries and RPDs for Manganese and Chromium in 600-193737-4MS/MSD for preparation batch 600-278469 were outside control limits. Manganese background concentration was > 4x spike concentration and chromium failed in the MS but passed in the MSD. Flagged both results in the parent sample as J based on the RPD being outside criteria.
FD: RPDs for SJRP-MW16-10142019 and its field duplicate SJRP-MD16-10142019 were within acceptance criteria.
FD: RPDs for SJRP-MW13-10142019 and its field duplicate SJRP-MD13-10142019 were within acceptance criteria.
FD: RPDs for SJRP-MW21-10142019 and its field duplicate SJRP-MD21-10142019 were within acceptance criteria.
CB: Molybdenum was detected in the initial calibration blank (run 10/28/2019 09:39) at 0.0009000 mg/L but it was not detected in the calibration blanks bracketing associated detections in normal samples so no flags were applied. Boron was detected in another calibration blank at 0.01480 mg/L but associated detections were >5x CB so no flags were applied.
CB: Mercury was detected in calibration blanks at 0.09290 ug/L and 0.1033 ug/L. Associated detections of mercury were <5x CB concentration so were flagged U.

Data Usability Review: Anions, Alkalinity, TDS

Client Name:	**Kinder Morgan**	Project Number:	**D3302100 A.PN.EV.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-193737-2**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met? (<MQL)	☐	☑	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met?	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (AA/ICP 75-125%, Hg 85-115%)	☐	☑	☐	
Sample duplicate data included in lab package?	☑	☐	☐	
RPD criteria met? (RPD < 20%)	☐	☑	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%R criteria met? (Initial 90-110%)	☑	☐	☐	

Notes:

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

DL: Method 300.0: The following samples and associated QC were diluted for Nitrate as N and Nitrite as N due to the abundance of chloride and /or sulfate: SJRP-MW14-10142019 (600-193737-2), SJRP-MW9-10142019 (600-193737-3), SJRP-MW19-10142019 (600-193737-4), SJRP-MW19-10142019 (600-193737-4[MS]), SJRP-MW19-10142019 (600-193737-4[MSD]), SJRP-MW16-10142019 (600-193737-5), SJRP-MD16-10142019 (600-193737-6), SJRP-MW13-10142019 (600-193737-7), SJRP-MD13-10142019 (600-193737-8), SJRP-MW15-10142019 (600-193737-9), SJRP-MW21-10142019 (600-193737-10), and SJRP-MD21-10142019 (600-193737-11). Elevated reporting limits (RLs) are provided.

MB: Method 300.0: The method blank for analytical batch 600-277490 contained chloride (0.2900 J mg/L) and sulfate (0.3870 J mg/L) above the method detection limit but all associated detections were > 5 x MB x dilution factor so no flags applied.

MS: Method 300.0: Chloride was recovered high in 600-193737-8MS/MSD for analytical batch 600-277490. LCS passed. Flagged result in parent sample J+.

MS: Method 300.0: Nitrate as N was recovered low in 600-193737-4MS/MSD. LCS passed. Result in parent sample already flagged J for blank contamination (and possible positive bias) so combined with low MS/MSD recovery and possible low bias the final DV flag applied is J.

MS,MD: Method 300.0: Nitrate recovered low in 600-193737-8MS/MSD for analytical batch 600-277491 and RPD outside criteria. Flagged result in parent sample UJ.

MS: Method 300.0: Chloride recovered high in the 600-193737-13MS/MSD for analytical batch 600-277581. LCS passed. Flagged result in parent sample J+

MB: Method 300.0: The method blank for analytical batch 600-277714 contained sulfate above the method detection limit but associated detections were > 5x MB x dilution so no flags were applied.

MS: Method 300.0: Sulfate recovered high in the 600-193737-4MSMSD for analytical batch 600-277714. LCS passed. Flagged result in parent sample J+.

MS: Method 300.0: Sulfate recovered low in 600-193737-8MS/MSD for analytical batch 600-277714. Result in parent sample flagged J-.

MB: Method 300.0: The method blank for analytical batch 600-277715 contained nitrate and nitrite above the method detection limit at 0.1508 mg/L. Associated detections were > 5x MB but < 5 x MB x dilution factor so flagged J.

MS: Method 300.0: Nitrate as N was recovered low in 600-193737-8MS/MSD for analytical batch 600-277715. LCS passed. Flagged result in parent sample UJ (MS).

MS: Method 300.0: Sulfate recovered low in 600-193737-10MS but passed in MSD and RPD passed so no flags were applied Chloride was recovered low in both the MS and MSD. Chloride result in parent sample was flagged J-.

MS: Method 300.0: Nitrate and nitrite recovered low in 600-193737-10MS/MSD. MS/MSD and its background result were from a 500x dilution while sample result itself was from a 20x dilution per the lab so the applicability of the recoveries is lessened, but still applicable so results in the parent sample were flagged UJ.

FD: RPDs for SJRP-MW16-10142019 and its field duplicate SJRP-MD16-10142019 were within acceptance criteria.

Data Usability Review: Data Package			
Client Name:	**Kinder Morgan**	Project Number:	**D3302100 A.PN.EV.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-193834-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Laboratory Data Package Signature Page included?	☑	☐	☐	
Date of sample collection included?	☑	☐	☐	
Sample receipt temperature ≤ 6° C?	☑	☐	☐	0.6° C and 0.9° C.
Signed COCs included?	☑	☐	☐	
Field ID included?	☑	☐	☐	
Laboratory ID included?	☑	☐	☐	
Date of analysis included?	☑	☐	☐	
Date of sample preparation included?	☑	☐	☐	
Detection levels included?	☑	☐	☐	
Method reference included?	☑	☐	☐	
Sample matrix included?	☑	☐	☐	
Sample results included?	☑	☐	☐	
Case narrative included, where required?	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative Percent Difference; RRT - Relative Retention Time; RSD - Relative Standard Deviation.

COMMENTS
VOCs: No DV flags
Metals: No DV flags
General Chemistry: J (MB), UJ (HT), J (HT), J+ (MS), J (MD), J- (MS)

Data Usability Review: VOCs (GC/MS), SW-846 8260B

Client Name:	**Kinder Morgan**	Project Number:	**D3302100 A.PN.EV.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-193834-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Surrogate data included in lab package?	☑	☐	☐	
%R criteria met? (use limits listed below or specify lab limits). Reject %R <10%.	☑	☐	☐	
R5 Method blank data included in Lab Package?	☑	☐	☐	
Criteria met?	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met? (specified limits)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (laboratory specified limits)	☑	☐	☐	
RPD criteria met? (< 20% water, <50% soil)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%RSD criteria met for CCC? (<30% RSD for CCC, >15% RSD must have fit)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
RF criteria met for SPCC? RRF <0.05 rejected.	☑	☐	☐	
%D criteria met for CCC? (20% Max, Qualify >25%D)	☑	☐	☐	
Instrument Tune documentation included in lab package?	☑	☐	☐	
Instrument Tune Criteria met?	☑	☐	☐	
Internal standard data included in lab package?	☑	☐	☐	
Area within limits? (within -50% to +100% of last calibration check?	☑	☐	☐	
RRT within limits? (<30 sec. Difference from last calibration check?	☑	☐	☐	

Surrogates	Control Limits	Lab Limits?
1,2-Dichloroethane-d4	water 80-120%, soil 80-120%	
Dibromofluoromethane	water 86-118%, soil 80-120%	
Toluene-d8	water 88-110%, soil 81-117%	
4-Bromofluorobenzene	water 86-115%, soil 74-121%	

Notes:

* SPCC: chloromethane (0.1); 1,1-dichloroethane (0.1); bromoform (0.1); chlorobenzene (0.3); and 1,1,2,2-tetrachloroethane (0.3).

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

DL: The following samples were diluted due to the nature of the sample matrix and to bring the concentration of target analytes within the calibration range: SJRP- PMW2-10152019 (600-193834-2) and SJRP-MW17-10152019 (600-193834-10). Elevated reporting limits (RLs) are provided.

TB: Trip blank SJRP-TB02-10152019 all ND

Data Usability Review: Metals, SW-846 6010, 7470 Series

Client Name:	**Kinder Morgan**	Project Number:	**D3302100 A.PN.EV.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-193834-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☑	☐	☐	
Method blank data included in Lab Package?	☑	☐	☐	
Criteria met? (< MDL)	☐	☑	☐	
LCS / QC check sample data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (AA/ICP 75-125%, Hg 85-115%)	☐	☑	☐	
MSD or sample duplicate data included in lab package?	☑	☐	☐	
RPD criteria met? (water RPD < 20%; soil RPD < 30%)	☑	☐	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
Proper number of standards used in calibration curve? (ICP blank+1 std; AA blank+3 stds; Hg blank+5 stds)	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%R criteria met? (90-110%)	☑	☐	☐	
Interference check sample data included? (ICP only)	☑	☐	☐	
%R criteria met? (80-120%)	☑	☐	☐	
Dilution test (1:5) data included?	☑	☐	☐	
Results within 10% original?	☑	☐	☐	
Post digestion spike included?	☑	☐	☐	
%R criteria met? (75-125% ICP), (85-115% Hg/AA)	☑	☐	☐	

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

OT: The following sample was received with insufficient preservation: SJRP- PMW2-10152019 (600-193834-2). 1mL of Nitric acid preservative was added by the laboratory, and the sample pH was adjusted to <2 pH SU.

MB: The method blank for preparation batch 600-278469 and analytical batch 600-278713 contained Barium at 0.0018 J mg/L - greater than the MDL but less than the RL. Associated detections were >5x MB so no flags were applied.

MB: The method blank for preparation batch 600-278503 and analytical batch 600-279181 contained Manganese at 0.001 J mg/L - greater than the MDL but less than the RL. Associated detections were >5x MB so no flags were applied.

MS: Manganese was recovered low in 600-193834-7 MS/MSD but background concentration in parent sample was > 4x spike concentration so no flags were applied.

CB: Molybdenum detected in the initial calibration blanks (analyzed 11/01/2019 11:55) at 0.0009 mg/L and (analyzed 10/28/2019 09:39) at 0.0009 mg/L but it was not detected in calibration blanks that bracketed associated detections so no flags were applied.

CB: Boron, selenium and arsenic were detected in calibration blanks but associated detections were eother ND or >5x CCB concentrations so no flags were applied.

Data Usability Review: Anions, Alkalinity, TDS

Client Name:	**Kinder Morgan**	Project Number:	**D3302100 A.PN.EV.01**
Project / Affected Property:	**San Juan**	Project Manager:	**Jeff Minchak/ABQ**
Laboratory:	**TestAmerica-Houston**	Lab SDG # / Job #:	**600-193834-1**
Reviewer:	**John Ynfante/HOU**		
Level of Review / Validation:	**Level 3**		

ITEM	YES	NO	N/A	COMMENTS
Preparatory/analytical holding time met?	☐	☑	☐	
Method blank data included in Lab Package?	☐	☑	☐	
Criteria met? (<MQL)	☑	☐	☐	
QC check samples/LCS data included in lab package?	☑	☐	☐	
%R criteria met?	☑	☐	☐	
Matrix spike data included in lab package?	☑	☐	☐	
%R criteria met? (AA/ICP 75-125%, Hg 85-115%)	☐	☑	☐	
Sample duplicate data included in lab package?	☑	☐	☐	
RPD criteria met? (RPD < 20%)	☐	☑	☐	
Initial calibration documentation included in lab package?	☑	☐	☐	
Calibration verification data included in lab package?	☑	☐	☐	
%R criteria met? (Initial 90-110%)	☑	☐	☐	

Notes:

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P

COMMENTS

HT: Reanalysis of the following samples were performed outside of the analytical holding time at a dilution for target analyte: MW11-10152019 (600-193834-3), SJRP- PMW1- 10152019 (600-193834-4), SJRP- MW12-10152019 (600-193834-5), SJRP- MW6 -10152019 (600-193834-7), SJRP- MW6 -10152019 (600-193834-7[MS]), SJRP- MW6 -10152019 (600-193834-7[MSD]) and SJRPMW2-10152019 (600-193834-8). Samples could not be reported at lower dilutions due to high concentration of target analytes. Flagged results analyzed past 2 days as J/UJ.

DL: The following samples were diluted to bring the concentration of target analytes within the calibration range: SJRPPMW2-10152019 (600-193834-2), SJRP- MW11-10152019 (600-193834-3), SJRP- PMW1- 10152019 (600-193834-4), SJRPMW12-10152019 (600-193834-5), SJRP- MW6 -10152019 (600-193834-7), SJRP- MW6 -10152019 (600-193834-7[MS]), SJRP- MW6 -10152019 (600-193834-7[MSD]), SJRP- MW2 -10152019 (600-193834-8), SJRP- MW4 - 10152019 (600-193834-9), SJRP-MW17-10152019 (600-193834-10), SJRP- MW18-10152019 (600-193834-11), (600-193834-A-10 MS) and (600-193834-A-10 MSD). The following sample was diluted due to the abundance of non-target analytes: SJRP- PMW4- 10152019 (600-193834-6). Elevated reporting limits (RLs) are provided

MB: The method blank for analytical batch 600-277840 contained nitrate at 0.1502 J mg/L which is > MDL but less than RL. Detections >5x so no U flags applied but detections < 5x MB x dilution factor were flagged J.

MS,MD: 600-193834-7MS/MSD recovered sulfate at greater than control limits and RPD outside criteria. Result in parent sample flagged J+. Chloride was recovered low in the MSD but passed in the MS and RPD was outside criteria - result in parent sample was flagged J. LCS recoveries were within control.

MS: MS/MSD recoveries in analytical batch 600-277715 for Nitrate as N and Nitrite as N for sample 600-193834-9 were outside control limits. Nitrite recovered 0% in both MS/MSD so the ND nitrite result in the parent sample was rejected (R). The nitrate result in the parent sample was flagged J-. The associated LCS recovery was within acceptance limits.

MS,MD:600-193834-7MS/MSD recovered nitrate low - result in parent sample were flagged J-. Nitrite was recovered slightly low in the MSD but passed in the MS and RPD so nitrite data was not qualified. The associated LCS recovery was within acceptance limits.

MS: MS/MSD recoveries in analytical batch 600-277899 for Nitrate as N for sample 600-193834-10 were recovered low. Associated LCS recovery was within acceptance limits. Result in parent sample flagged J-.

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ANALYTICAL REPORT

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-145929-1
Client Project/Site: San Juan Site Characterization
Revision: 1

For:
CH2M Hill Constructors, Inc.
14701 St. Mary's Lane
Suite 300
Houston, Texas 77079-2923

Attn: Mr. John Ynfante

Steve A Stepanski

Authorized for release by:
12/7/2020 4:05:12 PM
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LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-145929-1
Project/Site: San Juan Site Characterization

Job ID: 600-145929-1

Laboratory: TestAmerica Houston

Narrative

CASE NARRATIVE

Client: CH2M Hill Constructors, Inc.

Project: San Juan Site Characterization

Report Number: 600-145929-1

COMMENTS
This report was revised to a Level 2 deliverable per client's request.

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
Note: All samples that require thermal preservation are considered acceptable if the arrival temperature is within 2°C of the required temperature or method specified range. For samples with a specified temperature of 4°C, samples with a temperature ranging from just above freezing temperature of water to 6°C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

The samples were received on 03/30/2017; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.2º C and 2.4º C.

Receipt Exceptions

The following sample(s) was received with less than 2 days remaining on the holding time or less than one shift (8 hours) remaining on a test with a holding time of 48 hours or less. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: SJRP-SB09-9-10-03282017 (600-145929-1), SJRP-SB09-12-13-03282017 (600-145929-2), SJRP-SB10-1-2-03282017 (600-145929-3), SJRP-MW13-10-11-03282017 (600-145929-4), SJRP-MW13-10-11-03282017 DUP (600-145929-5), SJRP-MW13-19-20-03282017 (600-145929-6) and SJRP-MW13-29-30-03282017 (600-145929-7).

VOLATILE ORGANIC COMPOUNDS (GC-MS)-Soil
Samples SJRP-SB09-9-10-03282017 (600-145929-1), SJRP-SB09-12-13-03282017 (600-145929-2), SJRP-SB10-1-2-03282017 (600-145929-3), SJRP-MW13-10-11-03282017 (600-145929-4), SJRP-MW13-10-11-03282017 DUP (600-145929-5), SJRP-MW13-19-20-03282017 (600-145929-6), SJRP-MW13-29-30-03282017 (600-145929-7) and SJRP-MW13-34-35-03282017 (600-145929-8) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were prepared on 03/30/2017 and analyzed on 04/03/2017, 04/04/2017 and 04/05/2017.

The following sample(s) was prepared outside of preparation holding time. Samples were not frozen within the 48 hours required by the method: SJRP-SB09-9-10-03282017 (600-145929-1), SJRP-SB09-12-13-03282017 (600-145929-2), SJRP-SB10-1-2-03282017 (600-145929-3), SJRP-MW13-10-11-03282017 (600-145929-4), SJRP-MW13-10-11-03282017 DUP (600-145929-5), and SJRP-MW13-19-20-03282017 (600-145929-6).

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-145929-1
Project/Site: San Juan Site Characterization

Job ID: 600-145929-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

1,2-Dichloroethane-d4 (Surr) failed the surrogate recovery criteria low for SJRP-MW13-10-11-03282017 DUP (600-145929-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Refer to the QC report for details.

The Fluorobenzene and Chlorobenzene-d8 Internal standard (ISTD) responses for the following sample were above control limits: SJRP-MW13-10-11-03282017 DUP (600-145929-5). The sample(s) was re-extracted and/or re-analyzed with concurring results. The original set of data has been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GC-MS)-Water

Sample SJRP-EB-03282017 (600-145929-9) was analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/04/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GASOLINE RANGE ORGANICS (GRO)-Soil

Samples SJRP-SB09-9-10-03282017 (600-145929-1), SJRP-SB09-12-13-03282017 (600-145929-2), SJRP-SB10-1-2-03282017 (600-145929-3), SJRP-MW13-10-11-03282017 (600-145929-4), SJRP-MW13-10-11-03282017 DUP (600-145929-5), SJRP-MW13-19-20-03282017 (600-145929-6), SJRP-MW13-29-30-03282017 (600-145929-7) and SJRP-MW13-34-35-03282017 (600-145929-8) were analyzed for gasoline range organics (GRO) in accordance with EPA SW-846 Method 8015C - GRO. The samples were analyzed on 04/11/2017.

Gasoline Range Organics (GRO)-C6-C10 exceeded the RPD limit for the MSD of sample SJRP-SB09-12-13-03282017MSD (600-145929-2) in batch 490-421012.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GASOLINE RANGE ORGANICS (GRO)-Water

Sample SJRP-EB-03282017 (600-145929-9) was analyzed for gasoline range organics (GRO) in accordance with 8015C GRO. The samples were analyzed on 04/06/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DIESEL RANGE ORGANICS (DRO)-Soil

Samples SJRP-SB09-9-10-03282017 (600-145929-1), SJRP-SB09-12-13-03282017 (600-145929-2), SJRP-SB10-1-2-03282017 (600-145929-3), SJRP-MW13-10-11-03282017 (600-145929-4), SJRP-MW13-10-11-03282017 DUP (600-145929-5), SJRP-MW13-19-20-03282017 (600-145929-6), SJRP-MW13-29-30-03282017 (600-145929-7) and SJRP-MW13-34-35-03282017 (600-145929-8) were analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 04/04/2017 and analyzed on 04/05/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DIESEL RANGE ORGANICS (DRO)-Water

Sample SJRP-EB-03282017 (600-145929-9) was analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 04/03/2017 and analyzed on 04/04/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)-Soil

Samples SJRP-SB09-9-10-03282017 (600-145929-1), SJRP-SB09-12-13-03282017 (600-145929-2), SJRP-SB10-1-2-03282017

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-145929-1
Project/Site: San Juan Site Characterization

Job ID: 600-145929-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

(600-145929-3), SJRP-MW13-10-11-03282017 (600-145929-4), SJRP-MW13-10-11-03282017 DUP (600-145929-5), SJRP-MW13-19-20-03282017 (600-145929-6), SJRP-MW13-29-30-03282017 (600-145929-7) and SJRP-MW13-34-35-03282017 (600-145929-8) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 04/07/2017 and analyzed on 04/10/2017 and 04/11/2017.

Aluminum was detected in method blank MB 600-210240/1-A at a level exceeding the reporting limit. Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Barium, Calcium, Manganese, and Sodium were detected in method blank MB 600-210240/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

Due to the high concentration of target analytes, sample SJRP-MW13-34-35-03282017MS (600-145929-8) could not be evaluated for accuracy. The associated laboratory control sample (LC) met acceptance criteria.

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

Arsenic, Boron and Molybdenum exceeded the RPD limit for the duplicate of sample SJRP-MW13-34-35-03282017DU (600-145929-8).

Refer to the QC report for details.

Samples SJRP-SB10-1-2-03282017 (600-145929-3)[5X], SJRP-MW13-10-11-03282017 DUP (600-145929-5)[5X] and SJRP-MW13-19-20-03282017 (600-145929-6)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)-Water

Sample SJRP-EB-03282017 (600-145929-9) was analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 04/06/2017 and 04/11/2017 and analyzed on 04/10/2017 and 04/11/2017.

Manganese and Sodium were detected in method blank MB 600-210217/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY-Soil

Samples SJRP-SB09-9-10-03282017 (600-145929-1), SJRP-SB09-12-13-03282017 (600-145929-2), SJRP-SB10-1-2-03282017 (600-145929-3), SJRP-MW13-10-11-03282017 (600-145929-4), SJRP-MW13-10-11-03282017 DUP (600-145929-5), SJRP-MW13-19-20-03282017 (600-145929-6), SJRP-MW13-29-30-03282017 (600-145929-7) and SJRP-MW13-34-35-03282017 (600-145929-8) were analyzed for total mercury in accordance with EPA SW-846 Method 7471A. The samples were prepared and analyzed on 04/03/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY-Water

Sample SJRP-EB-03282017 (600-145929-9) was analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 04/03/2017.

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-145929-1
Project/Site: San Juan Site Characterization

Job ID: 600-145929-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

Mercury failed the recovery criteria low for the MS of sample SJRP-EB-03282017MS (600-145929-9) in batch 600-209866. The sample was re-prepped and re-analyzed outside of the holding time with concurrent results. Both sets of data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PERCENT SOLIDS

Samples SJRP-SB09-9-10-03282017 (600-145929-1), SJRP-SB09-12-13-03282017 (600-145929-2), SJRP-SB10-1-2-03282017 (600-145929-3), SJRP-MW13-10-11-03282017 (600-145929-4), SJRP-MW13-10-11-03282017 DUP (600-145929-5), SJRP-MW13-19-20-03282017 (600-145929-6), SJRP-MW13-29-30-03282017 (600-145929-7) and SJRP-MW13-34-35-03282017 (600-145929-8) were analyzed for percent solids in accordance with EPA SW846 Method 3550C. The samples were analyzed on 03/31/2017 and 04/01/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL NSH
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL NSH
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU

Protocol References:

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-145929-1	SJRP-SB09-9-10-03282017	Solid	03/28/17 09:15	03/30/17 09:43
600-145929-2	SJRP-SB09-12-13-03282017	Solid	03/28/17 10:10	03/30/17 09:43
600-145929-3	SJRP-SB10-1-2-03282017	Solid	03/28/17 10:45	03/30/17 09:43
600-145929-4	SJRP-MW13-10-11-03282017	Solid	03/28/17 12:00	03/30/17 09:43
600-145929-5	SJRP-MW13-10-11-03282017 DUP	Solid	03/28/17 12:00	03/30/17 09:43
600-145929-6	SJRP-MW13-19-20-03282017	Solid	03/28/17 12:15	03/30/17 09:43
600-145929-7	SJRP-MW13-29-30-03282017	Solid	03/28/17 12:30	03/30/17 09:43
600-145929-8	SJRP-MW13-34-35-03282017	Solid	03/28/17 13:30	03/30/17 09:43
600-145929-9	SJRP-EB-03282017	Water	03/28/17 14:30	03/30/17 09:43

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Client Sample ID: SJRP-SB09-9-10-03282017
Date Collected: 03/28/17 09:15
Date Received: 03/30/17 09:43

Lab Sample ID: 600-145929-1
Matrix: Solid
Percent Solids: 78.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000626	U H	0.00497	0.000626	mg/Kg	☼	03/30/17 13:20	04/05/17 19:33	1
Ethylbenzene	0.00101	U H	0.00497	0.00101	mg/Kg	☼	03/30/17 13:20	04/05/17 19:33	1
Toluene	0.00137	U H	0.00497	0.00137	mg/Kg	☼	03/30/17 13:20	04/05/17 19:33	1
Xylenes, Total	0.00112	U H	0.00497	0.00112	mg/Kg	☼	03/30/17 13:20	04/05/17 19:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*61 - 130*	*03/30/17 13:20*	*04/05/17 19:33*	*1*
Dibromofluoromethane	*86*		*68 - 140*	*03/30/17 13:20*	*04/05/17 19:33*	*1*
Toluene-d8 (Surr)	*92*		*50 - 130*	*03/30/17 13:20*	*04/05/17 19:33*	*1*
4-Bromofluorobenzene	*99*		*57 - 140*	*03/30/17 13:20*	*04/05/17 19:33*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.17	U	4.35	2.17	mg/Kg		04/07/17 08:58	04/11/17 19:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*72*		*50 - 150*	*04/07/17 08:58*	*04/11/17 19:56*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**3.37**	**J**	6.29	3.15	mg/Kg	☼	04/04/17 10:32	04/05/17 17:16	1
ORO C24-C40	3.15	U	6.29	3.15	mg/Kg	☼	04/04/17 10:32	04/05/17 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*67*		*50 - 150*	*04/04/17 10:32*	*04/05/17 17:16*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**12100**	**B**	30.4	0.365	mg/Kg	☼	04/07/17 08:40	04/11/17 15:39	1
Arsenic	**6.85**		1.22	0.265	mg/Kg	☼	04/07/17 08:40	04/10/17 13:37	1
Barium	**74.3**	**B**	1.22	0.0365	mg/Kg	☼	04/07/17 08:40	04/10/17 13:37	1
Boron	**2.28**	**J**	24.3	0.470	mg/Kg	☼	04/07/17 08:40	04/10/17 13:37	1
Cadmium	0.0312	U	0.304	0.0312	mg/Kg	☼	04/07/17 08:40	04/10/17 13:37	1
Calcium	**3250**	**B**	122	1.05	mg/Kg	☼	04/07/17 08:40	04/10/17 13:37	1
Chromium	**7.95**		0.609	0.0616	mg/Kg	☼	04/07/17 08:40	04/10/17 13:37	1
Cobalt	**6.94**		0.609	0.0823	mg/Kg	☼	04/07/17 08:40	04/10/17 13:37	1
Iron	**14900**		24.3	3.08	mg/Kg	☼	04/07/17 08:40	04/11/17 15:39	1
Lead	**17.1**		0.609	0.128	mg/Kg	☼	04/07/17 08:40	04/10/17 13:37	1
Magnesium	**3790**		122	2.34	mg/Kg	☼	04/07/17 08:40	04/10/17 13:37	1
Manganese	**101**	**B**	1.83	0.0464	mg/Kg	☼	04/07/17 08:40	04/10/17 13:37	1
Molybdenum	**1.41**		0.609	0.166	mg/Kg	☼	04/07/17 08:40	04/10/17 13:37	1
Nickel	**8.70**		1.22	0.142	mg/Kg	☼	04/07/17 08:40	04/10/17 13:37	1
Potassium	**1910**		122	13.4	mg/Kg	☼	04/07/17 08:40	04/10/17 13:37	1
Selenium	**0.870**	**J**	2.43	0.315	mg/Kg	☼	04/07/17 08:40	04/10/17 13:37	1
Sodium	**4280**	**B**	122	1.08	mg/Kg	☼	04/07/17 08:40	04/10/17 13:37	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0387**		0.0210	0.00443	mg/Kg	☼	04/03/17 08:32	04/03/17 11:19	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Client Sample ID: SJRP-SB09-9-10-03282017

Lab Sample ID: 600-145929-1
Date Collected: 03/28/17 09:15
Matrix: Solid
Date Received: 03/30/17 09:43
Percent Solids: 78.2

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**21.8**		1.0	1.0	%			03/31/17 15:04	1
Percent Solids	**78.2**		1.0	1.0	%			03/31/17 15:04	1

Client Sample ID: SJRP-SB09-12-13-03282017

Lab Sample ID: 600-145929-2
Date Collected: 03/28/17 10:10
Matrix: Solid
Date Received: 03/30/17 09:43
Percent Solids: 86.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000578	U H	0.00459	0.000578	mg/Kg	☼	03/30/17 13:20	04/05/17 17:08	1
Ethylbenzene	0.000936	U H	0.00459	0.000936	mg/Kg	☼	03/30/17 13:20	04/05/17 17:08	1
Toluene	0.00127	U H	0.00459	0.00127	mg/Kg	☼	03/30/17 13:20	04/05/17 17:08	1
Xylenes, Total	0.00104	U H	0.00459	0.00104	mg/Kg	☼	03/30/17 13:20	04/05/17 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*61 - 130*	*03/30/17 13:20*	*04/05/17 17:08*	*1*
Dibromofluoromethane	*91*		*68 - 140*	*03/30/17 13:20*	*04/05/17 17:08*	*1*
Toluene-d8 (Surr)	*92*		*50 - 130*	*03/30/17 13:20*	*04/05/17 17:08*	*1*
4-Bromofluorobenzene	*98*		*57 - 140*	*03/30/17 13:20*	*04/05/17 17:08*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.46	U F2	4.92	2.46	mg/Kg		04/07/17 08:58	04/11/17 11:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*71*		*50 - 150*	*04/07/17 08:58*	*04/11/17 11:46*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.81	U	5.61	2.81	mg/Kg	☼	04/04/17 10:32	04/05/17 17:34	1
ORO C24-C40	2.81	U	5.61	2.81	mg/Kg	☼	04/04/17 10:32	04/05/17 17:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*52*		*50 - 150*	*04/04/17 10:32*	*04/05/17 17:34*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**3780**	**B**	26.7	0.320	mg/Kg	☼	04/07/17 08:40	04/11/17 15:42	1
Arsenic	**1.51**		1.07	0.233	mg/Kg	☼	04/07/17 08:40	04/10/17 13:39	1
Barium	**240**	**B**	1.07	0.0320	mg/Kg	☼	04/07/17 08:40	04/11/17 15:42	1
Boron	**0.779**	**J**	21.3	0.412	mg/Kg	☼	04/07/17 08:40	04/10/17 13:39	1
Cadmium	0.0273	U	0.267	0.0273	mg/Kg	☼	04/07/17 08:40	04/10/17 13:39	1
Calcium	**5770**	**B**	107	0.922	mg/Kg	☼	04/07/17 08:40	04/10/17 13:39	1
Chromium	**3.13**		0.533	0.0540	mg/Kg	☼	04/07/17 08:40	04/10/17 13:39	1
Cobalt	**3.27**		0.533	0.0721	mg/Kg	☼	04/07/17 08:40	04/10/17 13:39	1
Iron	**7890**		21.3	2.70	mg/Kg	☼	04/07/17 08:40	04/11/17 15:42	1
Lead	**3.03**		0.533	0.112	mg/Kg	☼	04/07/17 08:40	04/10/17 13:39	1
Magnesium	**2270**		107	2.05	mg/Kg	☼	04/07/17 08:40	04/10/17 13:39	1
Manganese	**203**	**B**	1.60	0.0406	mg/Kg	☼	04/07/17 08:40	04/10/17 13:39	1
Molybdenum	**0.555**		0.533	0.145	mg/Kg	☼	04/07/17 08:40	04/10/17 13:39	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Client Sample ID: SJRP-SB09-12-13-03282017

Lab Sample ID: 600-145929-2
Date Collected: 03/28/17 10:10
Matrix: Solid
Date Received: 03/30/17 09:43
Percent Solids: 86.8

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	3.11		1.07	0.125	mg/Kg	☼	04/07/17 08:40	04/10/17 13:39	1
Potassium	296		107	11.7	mg/Kg	☼	04/07/17 08:40	04/10/17 13:39	1
Selenium	0.276	U	2.13	0.276	mg/Kg	☼	04/07/17 08:40	04/10/17 13:39	1
Sodium	820	B	107	0.945	mg/Kg	☼	04/07/17 08:40	04/10/17 13:39	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00412	U	0.0196	0.00412	mg/Kg	☼	04/03/17 08:32	04/03/17 11:21	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	13.2		1.0	1.0	%			03/31/17 15:04	1
Percent Solids	86.8		1.0	1.0	%			03/31/17 15:04	1

Client Sample ID: SJRP-SB10-1-2-03282017

Lab Sample ID: 600-145929-3
Date Collected: 03/28/17 10:45
Matrix: Solid
Date Received: 03/30/17 09:43
Percent Solids: 80.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000838	U H	0.00665	0.000838	mg/Kg	☼	03/30/17 13:20	04/05/17 17:32	1
Ethylbenzene	0.00136	U H	0.00665	0.00136	mg/Kg	☼	03/30/17 13:20	04/05/17 17:32	1
Toluene	0.00184	U H	0.00665	0.00184	mg/Kg	☼	03/30/17 13:20	04/05/17 17:32	1
Xylenes, Total	0.0117	H	0.00665	0.00150	mg/Kg	☼	03/30/17 13:20	04/05/17 17:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*61 - 130*	*03/30/17 13:20*	*04/05/17 17:32*	*1*
Dibromofluoromethane	*89*		*68 - 140*	*03/30/17 13:20*	*04/05/17 17:32*	*1*
Toluene-d8 (Surr)	*94*		*50 - 130*	*03/30/17 13:20*	*04/05/17 17:32*	*1*
4-Bromofluorobenzene	*98*		*57 - 140*	*03/30/17 13:20*	*04/05/17 17:32*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.34	U	4.68	2.34	mg/Kg		04/07/17 08:58	04/11/17 12:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*75*		*50 - 150*	*04/07/17 08:58*	*04/11/17 12:17*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3.02	U	6.05	3.02	mg/Kg	☼	04/04/17 10:32	04/05/17 17:51	1
ORO C24-C40	3.27	J	6.05	3.02	mg/Kg	☼	04/04/17 10:32	04/05/17 17:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*73*		*50 - 150*	*04/04/17 10:32*	*04/05/17 17:51*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	14000	B	156	1.87	mg/Kg	☼	04/07/17 08:40	04/11/17 15:45	5
Arsenic	2.13		1.25	0.272	mg/Kg	☼	04/07/17 08:40	04/10/17 13:41	1
Barium	83.2	B	1.25	0.0375	mg/Kg	☼	04/07/17 08:40	04/10/17 13:41	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Client Sample ID: SJRP-SB10-1-2-03282017

Lab Sample ID: 600-145929-3
Date Collected: 03/28/17 10:45
Matrix: Solid
Date Received: 03/30/17 09:43
Percent Solids: 80.1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2.00	J	25.0	0.482	mg/Kg	☼	04/07/17 08:40	04/10/17 13:41	1
Cadmium	0.200	J	0.312	0.0320	mg/Kg	☼	04/07/17 08:40	04/10/17 13:41	1
Calcium	6730	B	125	1.08	mg/Kg	☼	04/07/17 08:40	04/10/17 13:41	1
Chromium	6.97		0.624	0.0632	mg/Kg	☼	04/07/17 08:40	04/10/17 13:41	1
Cobalt	18.1		0.624	0.0844	mg/Kg	☼	04/07/17 08:40	04/10/17 13:41	1
Iron	17500		125	15.8	mg/Kg	☼	04/07/17 08:40	04/11/17 15:45	5
Lead	11.2		0.624	0.131	mg/Kg	☼	04/07/17 08:40	04/10/17 13:41	1
Magnesium	3830		125	2.40	mg/Kg	☼	04/07/17 08:40	04/10/17 13:41	1
Manganese	338	B	1.87	0.0476	mg/Kg	☼	04/07/17 08:40	04/10/17 13:41	1
Molybdenum	0.537	J	0.624	0.170	mg/Kg	☼	04/07/17 08:40	04/10/17 13:41	1
Nickel	20.7		1.25	0.146	mg/Kg	☼	04/07/17 08:40	04/10/17 13:41	1
Potassium	1530		125	13.7	mg/Kg	☼	04/07/17 08:40	04/10/17 13:41	1
Selenium	0.323	U	2.50	0.323	mg/Kg	☼	04/07/17 08:40	04/10/17 13:41	1
Sodium	12100	B	125	1.11	mg/Kg	☼	04/07/17 08:40	04/10/17 13:41	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0262		0.0199	0.00419	mg/Kg	☼	04/03/17 08:32	04/03/17 11:23	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19.9		1.0	1.0	%			03/31/17 15:04	1
Percent Solids	80.1		1.0	1.0	%			03/31/17 15:04	1

Client Sample ID: SJRP-MW13-10-11-03282017

Lab Sample ID: 600-145929-4
Date Collected: 03/28/17 12:00
Matrix: Solid
Date Received: 03/30/17 09:43
Percent Solids: 98.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00119	J H	0.00510	0.000643	mg/Kg	☼	03/30/17 13:20	04/05/17 17:56	1
Ethylbenzene	0.00104	U H	0.00510	0.00104	mg/Kg	☼	03/30/17 13:20	04/05/17 17:56	1
Toluene	0.00141	U H	0.00510	0.00141	mg/Kg	☼	03/30/17 13:20	04/05/17 17:56	1
Xylenes, Total	0.00115	U H	0.00510	0.00115	mg/Kg	☼	03/30/17 13:20	04/05/17 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*61 - 130*	*03/30/17 13:20*	*04/05/17 17:56*	*1*
Dibromofluoromethane	*88*		*68 - 140*	*03/30/17 13:20*	*04/05/17 17:56*	*1*
Toluene-d8 (Surr)	*98*		*50 - 130*	*03/30/17 13:20*	*04/05/17 17:56*	*1*
4-Bromofluorobenzene	*100*		*57 - 140*	*03/30/17 13:20*	*04/05/17 17:56*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.42	U	4.84	2.42	mg/Kg		04/07/17 08:58	04/11/17 12:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*74*		*50 - 150*	*04/07/17 08:58*	*04/11/17 12:48*	*1*

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Client Sample ID: SJRP-MW13-10-11-03282017

Lab Sample ID: 600-145929-4
Date Collected: 03/28/17 12:00
Matrix: Solid
Date Received: 03/30/17 09:43
Percent Solids: 98.3

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.49	U	4.99	2.49	mg/Kg	☼	04/04/17 10:32	04/05/17 18:08	1
ORO C24-C40	**2.70**	**J**	4.99	2.49	mg/Kg	☼	04/04/17 10:32	04/05/17 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*69*		*50 - 150*	*04/04/17 10:32*	*04/05/17 18:08*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**3660**	**B**	24.5	0.294	mg/Kg	☼	04/07/17 08:40	04/11/17 15:47	1
Arsenic	**2.39**		0.978	0.213	mg/Kg	☼	04/07/17 08:40	04/10/17 13:44	1
Barium	**293**	**B**	0.978	0.0294	mg/Kg	☼	04/07/17 08:40	04/11/17 15:47	1
Boron	0.378	U	19.6	0.378	mg/Kg	☼	04/07/17 08:40	04/10/17 13:44	1
Cadmium	0.0250	U	0.245	0.0250	mg/Kg	☼	04/07/17 08:40	04/10/17 13:44	1
Calcium	**7380**	**B**	97.8	0.845	mg/Kg	☼	04/07/17 08:40	04/10/17 13:44	1
Chromium	**2.90**		0.489	0.0495	mg/Kg	☼	04/07/17 08:40	04/10/17 13:44	1
Cobalt	**4.10**		0.489	0.0661	mg/Kg	☼	04/07/17 08:40	04/10/17 13:44	1
Iron	**8530**		19.6	2.48	mg/Kg	☼	04/07/17 08:40	04/11/17 15:47	1
Lead	**5.76**		0.489	0.103	mg/Kg	☼	04/07/17 08:40	04/10/17 13:44	1
Magnesium	**2190**		97.8	1.88	mg/Kg	☼	04/07/17 08:40	04/10/17 13:44	1
Manganese	**300**	**B**	1.47	0.0373	mg/Kg	☼	04/07/17 08:40	04/10/17 13:44	1
Molybdenum	**0.929**		0.489	0.133	mg/Kg	☼	04/07/17 08:40	04/10/17 13:44	1
Nickel	**3.77**		0.978	0.114	mg/Kg	☼	04/07/17 08:40	04/10/17 13:44	1
Potassium	**377**		97.8	10.8	mg/Kg	☼	04/07/17 08:40	04/10/17 13:44	1
Selenium	0.253	U	1.96	0.253	mg/Kg	☼	04/07/17 08:40	04/10/17 13:44	1
Sodium	**330**	**B**	97.8	0.867	mg/Kg	☼	04/07/17 08:40	04/10/17 13:44	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00331	U	0.0157	0.00331	mg/Kg	☼	04/03/17 08:32	04/03/17 11:25	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**1.7**		1.0	1.0	%			04/01/17 12:24	1
Percent Solids	**98.3**		1.0	1.0	%			04/01/17 12:24	1

Client Sample ID: SJRP-MW13-10-11-03282017 DUP

Lab Sample ID: 600-145929-5
Date Collected: 03/28/17 12:00
Matrix: Solid
Date Received: 03/30/17 09:43
Percent Solids: 97.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00128**	**J H ***	0.00538	0.000677	mg/Kg	☼	03/30/17 13:20	04/04/17 21:56	1
Ethylbenzene	0.00110	U H *	0.00538	0.00110	mg/Kg	☼	03/30/17 13:20	04/04/17 21:56	1
Toluene	0.00148	U H *	0.00538	0.00148	mg/Kg	☼	03/30/17 13:20	04/04/17 21:56	1
Xylenes, Total	0.00121	U H *	0.00538	0.00121	mg/Kg	☼	03/30/17 13:20	04/04/17 21:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*55*	** X*	*61 - 130*	*03/30/17 13:20*	*04/04/17 21:56*	*1*
Dibromofluoromethane	*73*	***	*68 - 140*	*03/30/17 13:20*	*04/04/17 21:56*	*1*
Toluene-d8 (Surr)	*85*	***	*50 - 130*	*03/30/17 13:20*	*04/04/17 21:56*	*1*
4-Bromofluorobenzene	*84*		*57 - 140*	*03/30/17 13:20*	*04/04/17 21:56*	*1*

TestAmerica Houston

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.23	U	4.46	2.23	mg/Kg		04/07/17 08:58	04/11/17 13:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*66*		*50 - 150*	*04/07/17 08:58*	*04/11/17 13:18*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.49	U	4.97	2.49	mg/Kg	☼	04/04/17 10:32	04/05/17 18:26	1
ORO C24-C40	2.49	U	4.97	2.49	mg/Kg	☼	04/04/17 10:32	04/05/17 18:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*69*		*50 - 150*	*04/04/17 10:32*	*04/05/17 18:26*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**4240**	**B**	123	1.48	mg/Kg	☼	04/07/17 08:40	04/11/17 15:49	5
Arsenic	**5.63**		0.985	0.215	mg/Kg	☼	04/07/17 08:40	04/10/17 13:46	1
Barium	**530**	**B**	4.93	0.148	mg/Kg	☼	04/07/17 08:40	04/11/17 15:49	5
Boron	**0.488**	**J**	19.7	0.380	mg/Kg	☼	04/07/17 08:40	04/10/17 13:46	1
Cadmium	0.0252	U	0.246	0.0252	mg/Kg	☼	04/07/17 08:40	04/10/17 13:46	1
Calcium	**13000**	**B**	98.5	0.851	mg/Kg	☼	04/07/17 08:40	04/10/17 13:46	1
Chromium	**3.41**		0.493	0.0499	mg/Kg	☼	04/07/17 08:40	04/10/17 13:46	1
Cobalt	**3.55**		0.493	0.0666	mg/Kg	☼	04/07/17 08:40	04/10/17 13:46	1
Iron	**10100**		98.5	12.5	mg/Kg	☼	04/07/17 08:40	04/11/17 15:49	5
Lead	**12.6**		0.493	0.103	mg/Kg	☼	04/07/17 08:40	04/10/17 13:46	1
Magnesium	**1890**		98.5	1.89	mg/Kg	☼	04/07/17 08:40	04/10/17 13:46	1
Manganese	**381**	**B**	1.48	0.0375	mg/Kg	☼	04/07/17 08:40	04/10/17 13:46	1
Molybdenum	**0.606**		0.493	0.134	mg/Kg	☼	04/07/17 08:40	04/10/17 13:46	1
Nickel	**3.28**		0.985	0.115	mg/Kg	☼	04/07/17 08:40	04/10/17 13:46	1
Potassium	**392**		98.5	10.8	mg/Kg	☼	04/07/17 08:40	04/10/17 13:46	1
Selenium	0.255	U	1.97	0.255	mg/Kg	☼	04/07/17 08:40	04/10/17 13:46	1
Sodium	**443**	**B**	98.5	0.873	mg/Kg	☼	04/07/17 08:40	04/10/17 13:46	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00355	U	0.0169	0.00355	mg/Kg	☼	04/03/17 08:32	04/03/17 11:27	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**2.4**		1.0	1.0	%			03/31/17 15:04	1
Percent Solids	**97.6**		1.0	1.0	%			03/31/17 15:04	1

Client Sample ID: SJRP-MW13-19-20-03282017 — **Lab Sample ID: 600-145929-6**
Date Collected: 03/28/17 12:15 — **Matrix: Solid**
Date Received: 03/30/17 09:43 — **Percent Solids: 88.9**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00128**	**J H**	0.00465	0.000586	mg/Kg	☼	03/30/17 13:20	04/05/17 19:57	1
Ethylbenzene	**0.00343**	**J H**	0.00465	0.000950	mg/Kg	☼	03/30/17 13:20	04/05/17 19:57	1
Toluene	0.00128	U H	0.00465	0.00128	mg/Kg	☼	03/30/17 13:20	04/05/17 19:57	1
Xylenes, Total	**0.00826**	**H**	0.00465	0.00105	mg/Kg	☼	03/30/17 13:20	04/05/17 19:57	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Client Sample ID: SJRP-MW13-19-20-03282017
Date Collected: 03/28/17 12:15
Date Received: 03/30/17 09:43

Lab Sample ID: 600-145929-6
Matrix: Solid
Percent Solids: 88.9

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		61 - 130	03/30/17 13:20	04/05/17 19:57	1
Dibromofluoromethane	93		68 - 140	03/30/17 13:20	04/05/17 19:57	1
Toluene-d8 (Surr)	96		50 - 130	03/30/17 13:20	04/05/17 19:57	1
4-Bromofluorobenzene	96		57 - 140	03/30/17 13:20	04/05/17 19:57	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.41	U	4.82	2.41	mg/Kg		04/07/17 08:58	04/11/17 13:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	65		50 - 150	04/07/17 08:58	04/11/17 13:49	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.79	U	5.57	2.79	mg/Kg	☼	04/04/17 10:32	04/05/17 18:43	1
ORO C24-C40	**2.90**	**J**	5.57	2.79	mg/Kg	☼	04/04/17 10:32	04/05/17 18:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	73		50 - 150	04/04/17 10:32	04/05/17 18:43	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8160**	**B**	136	1.64	mg/Kg	☼	04/07/17 08:40	04/11/17 15:51	5
Arsenic	**1.46**		1.09	0.238	mg/Kg	☼	04/07/17 08:40	04/10/17 13:48	1
Barium	**130**	**B**	1.09	0.0328	mg/Kg	☼	04/07/17 08:40	04/10/17 13:48	1
Boron	**0.753**	**J**	21.8	0.421	mg/Kg	☼	04/07/17 08:40	04/10/17 13:48	1
Cadmium	0.0279	U	0.273	0.0279	mg/Kg	☼	04/07/17 08:40	04/10/17 13:48	1
Calcium	**21600**	**B**	109	0.943	mg/Kg	☼	04/07/17 08:40	04/10/17 13:48	1
Chromium	**6.14**		0.546	0.0552	mg/Kg	☼	04/07/17 08:40	04/10/17 13:48	1
Cobalt	**7.42**		0.546	0.0738	mg/Kg	☼	04/07/17 08:40	04/10/17 13:48	1
Iron	**13400**		109	13.8	mg/Kg	☼	04/07/17 08:40	04/11/17 15:51	5
Lead	**7.91**		0.546	0.115	mg/Kg	☼	04/07/17 08:40	04/10/17 13:48	1
Magnesium	**2890**		109	2.10	mg/Kg	☼	04/07/17 08:40	04/10/17 13:48	1
Manganese	**1310**	**B**	8.19	0.208	mg/Kg	☼	04/07/17 08:40	04/11/17 15:51	5
Molybdenum	**1.94**		0.546	0.148	mg/Kg	☼	04/07/17 08:40	04/10/17 13:48	1
Nickel	**8.36**		1.09	0.128	mg/Kg	☼	04/07/17 08:40	04/10/17 13:48	1
Potassium	**675**		109	12.0	mg/Kg	☼	04/07/17 08:40	04/10/17 13:48	1
Selenium	0.283	U	2.18	0.283	mg/Kg	☼	04/07/17 08:40	04/10/17 13:48	1
Sodium	**2300**	**B**	109	0.967	mg/Kg	☼	04/07/17 08:40	04/10/17 13:48	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00519**	**J**	0.0182	0.00383	mg/Kg	☼	04/03/17 08:32	04/03/17 11:28	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**11.1**		1.0	1.0	%			03/31/17 15:04	1
Percent Solids	**88.9**		1.0	1.0	%			03/31/17 15:04	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Client Sample ID: SJRP-MW13-29-30-03282017
Date Collected: 03/28/17 12:30
Date Received: 03/30/17 09:43

Lab Sample ID: 600-145929-7
Matrix: Solid
Percent Solids: 89.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	46.8		10.8	1.37	mg/Kg		03/30/17 13:20	04/03/17 21:38	50
Ethylbenzene	25.8		10.8	2.21	mg/Kg		03/30/17 13:20	04/03/17 21:38	50
Toluene	178		10.8	2.99	mg/Kg		03/30/17 13:20	04/03/17 21:38	50
Xylenes, Total	360		10.8	2.45	mg/Kg		03/30/17 13:20	04/03/17 21:38	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*61 - 130*	*03/30/17 13:20*	*04/03/17 21:38*	*50*
Dibromofluoromethane	*93*		*68 - 140*	*03/30/17 13:20*	*04/03/17 21:38*	*50*
Toluene-d8 (Surr)	*104*		*50 - 130*	*03/30/17 13:20*	*04/03/17 21:38*	*50*
4-Bromofluorobenzene	*73*		*57 - 140*	*03/30/17 13:20*	*04/03/17 21:38*	*50*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	48.2		4.99	2.50	mg/Kg		04/07/17 08:58	04/11/17 14:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*63*		*50 - 150*	*04/07/17 08:58*	*04/11/17 14:20*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	50.3		5.51	2.75	mg/Kg	☼	04/04/17 10:32	04/05/17 19:01	1
ORO C24-C40	3.75	J	5.51	2.75	mg/Kg	☼	04/04/17 10:32	04/05/17 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*79*		*50 - 150*	*04/04/17 10:32*	*04/05/17 19:01*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	12700	B	25.9	0.310	mg/Kg	☼	04/07/17 08:40	04/11/17 16:00	1
Arsenic	4.47		1.03	0.225	mg/Kg	☼	04/07/17 08:40	04/10/17 13:50	1
Barium	47.0	B	1.03	0.0310	mg/Kg	☼	04/07/17 08:40	04/10/17 13:50	1
Boron	2.07	J	20.7	0.399	mg/Kg	☼	04/07/17 08:40	04/10/17 13:50	1
Cadmium	0.0265	U	0.259	0.0265	mg/Kg	☼	04/07/17 08:40	04/10/17 13:50	1
Calcium	3960	B	103	0.893	mg/Kg	☼	04/07/17 08:40	04/10/17 13:50	1
Chromium	5.85		0.517	0.0523	mg/Kg	☼	04/07/17 08:40	04/10/17 13:50	1
Cobalt	22.0		0.517	0.0699	mg/Kg	☼	04/07/17 08:40	04/10/17 13:50	1
Iron	17700		20.7	2.62	mg/Kg	☼	04/07/17 08:40	04/11/17 16:00	1
Lead	15.1		0.517	0.109	mg/Kg	☼	04/07/17 08:40	04/10/17 13:50	1
Magnesium	4020		103	1.99	mg/Kg	☼	04/07/17 08:40	04/10/17 13:50	1
Manganese	476	B	1.55	0.0394	mg/Kg	☼	04/07/17 08:40	04/10/17 13:50	1
Molybdenum	1.71		0.517	0.141	mg/Kg	☼	04/07/17 08:40	04/10/17 13:50	1
Nickel	22.5		1.03	0.121	mg/Kg	☼	04/07/17 08:40	04/10/17 13:50	1
Potassium	1280		103	11.4	mg/Kg	☼	04/07/17 08:40	04/10/17 13:50	1
Selenium	0.636	J	2.07	0.268	mg/Kg	☼	04/07/17 08:40	04/10/17 13:50	1
Sodium	7000	B	103	0.916	mg/Kg	☼	04/07/17 08:40	04/10/17 13:50	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0249		0.0178	0.00375	mg/Kg	☼	04/03/17 08:32	04/03/17 11:34	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Client Sample ID: SJRP-MW13-29-30-03282017

Lab Sample ID: 600-145929-7
Date Collected: 03/28/17 12:30
Matrix: Solid
Date Received: 03/30/17 09:43
Percent Solids: 89.5

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.5		1.0	1.0	%			03/31/17 15:04	1
Percent Solids	89.5		1.0	1.0	%			03/31/17 15:04	1

Client Sample ID: SJRP-MW13-34-35-03282017

Lab Sample ID: 600-145929-8
Date Collected: 03/28/17 13:30
Matrix: Solid
Date Received: 03/30/17 09:43
Percent Solids: 91.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0229		0.00832	0.00105	mg/Kg	☼	03/30/17 13:20	04/05/17 13:45	1
Ethylbenzene	0.00556	J	0.00832	0.00170	mg/Kg	☼	03/30/17 13:20	04/05/17 13:45	1
Toluene	0.0568		0.00832	0.00230	mg/Kg	☼	03/30/17 13:20	04/05/17 13:45	1
Xylenes, Total	0.0668		0.00832	0.00188	mg/Kg	☼	03/30/17 13:20	04/05/17 13:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*61 - 130*	*03/30/17 13:20*	*04/05/17 13:45*	*1*
Dibromofluoromethane	*88*		*68 - 140*	*03/30/17 13:20*	*04/05/17 13:45*	*1*
Toluene-d8 (Surr)	*100*		*50 - 130*	*03/30/17 13:20*	*04/05/17 13:45*	*1*
4-Bromofluorobenzene	*103*		*57 - 140*	*03/30/17 13:20*	*04/05/17 13:45*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.45	U	4.89	2.45	mg/Kg		04/07/17 08:58	04/11/17 14:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*67*		*50 - 150*	*04/07/17 08:58*	*04/11/17 14:50*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.70	U	5.39	2.70	mg/Kg	☼	04/04/17 10:32	04/05/17 19:18	1
ORO C24-C40	2.77	J	5.39	2.70	mg/Kg	☼	04/04/17 10:32	04/05/17 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*71*		*50 - 150*	*04/04/17 10:32*	*04/05/17 19:18*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	15400	B	26.4	0.317	mg/Kg	☼	04/07/17 08:40	04/11/17 16:02	1
Arsenic	1.46		1.06	0.230	mg/Kg	☼	04/07/17 08:40	04/10/17 13:52	1
Barium	45.8	B	1.06	0.0317	mg/Kg	☼	04/07/17 08:40	04/10/17 13:52	1
Boron	2.28	J F1	21.1	0.407	mg/Kg	☼	04/07/17 08:40	04/10/17 13:52	1
Cadmium	0.0270	U	0.264	0.0270	mg/Kg	☼	04/07/17 08:40	04/10/17 13:52	1
Calcium	2830	B	106	0.912	mg/Kg	☼	04/07/17 08:40	04/10/17 13:52	1
Chromium	6.37		0.528	0.0534	mg/Kg	☼	04/07/17 08:40	04/10/17 13:52	1
Cobalt	8.44		0.528	0.0713	mg/Kg	☼	04/07/17 08:40	04/10/17 13:52	1
Iron	17000		21.1	2.67	mg/Kg	☼	04/07/17 08:40	04/11/17 16:02	1
Lead	14.1		0.528	0.111	mg/Kg	☼	04/07/17 08:40	04/10/17 13:52	1
Magnesium	4270		106	2.03	mg/Kg	☼	04/07/17 08:40	04/10/17 13:52	1
Manganese	122	B	1.58	0.0402	mg/Kg	☼	04/07/17 08:40	04/10/17 13:52	1
Molybdenum	0.206	J F1	0.528	0.144	mg/Kg	☼	04/07/17 08:40	04/10/17 13:52	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Client Sample ID: SJRP-MW13-34-35-03282017

Lab Sample ID: 600-145929-8
Date Collected: 03/28/17 13:30
Matrix: Solid
Date Received: 03/30/17 09:43
Percent Solids: 91.1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	9.62		1.06	0.123	mg/Kg	☼	04/07/17 08:40	04/10/17 13:52	1
Potassium	1640		106	11.6	mg/Kg	☼	04/07/17 08:40	04/10/17 13:52	1
Selenium	0.273	U	2.11	0.273	mg/Kg	☼	04/07/17 08:40	04/10/17 13:52	1
Sodium	7800	B	106	0.935	mg/Kg	☼	04/07/17 08:40	04/10/17 13:52	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00363	U	0.0172	0.00363	mg/Kg	☼	04/03/17 08:32	04/03/17 11:36	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	8.9		1.0	1.0	%			03/31/17 15:04	1
Percent Solids	91.1		1.0	1.0	%			03/31/17 15:04	1

Client Sample ID: SJRP-EB-03282017

Lab Sample ID: 600-145929-9
Date Collected: 03/28/17 14:30
Matrix: Water
Date Received: 03/30/17 09:43

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/04/17 13:55	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/04/17 13:55	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/04/17 13:55	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/04/17 13:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*50 - 134*		*04/04/17 13:55*	*1*
Dibromofluoromethane	*100*		*62 - 130*		*04/04/17 13:55*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*04/04/17 13:55*	*1*
4-Bromofluorobenzene	*121*		*67 - 139*		*04/04/17 13:55*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			04/06/17 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*99*		*50 - 150*		*04/06/17 16:28*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0910	U	0.100	0.0910	mg/L		04/03/17 19:42	04/04/17 15:36	1
ORO C24-C40	0.0910	U	0.100	0.0910	mg/L		04/03/17 19:42	04/04/17 15:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*77*		*50 - 150*	*04/03/17 19:42*	*04/04/17 15:36*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.138	J	0.500	0.0926	mg/L		04/06/17 18:40	04/10/17 18:03	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		04/06/17 18:40	04/10/17 18:03	1
Barium	0.00667	J	0.0200	0.000530	mg/L		04/06/17 18:40	04/10/17 18:03	1

TestAmerica Houston

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Client Sample ID: SJRP-EB-03282017
Date Collected: 03/28/17 14:30
Date Received: 03/30/17 09:43

Lab Sample ID: 600-145929-9
Matrix: Water

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.0116	U	0.200	0.0116	mg/L		04/06/17 18:40	04/10/17 18:03	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		04/06/17 18:40	04/10/17 18:03	1
Calcium	**0.213**	**J**	1.00	0.0240	mg/L		04/06/17 18:40	04/10/17 18:03	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/06/17 18:40	04/10/17 18:03	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		04/06/17 18:40	04/10/17 18:03	1
Iron	**0.0959**	**J**	0.400	0.0270	mg/L		04/06/17 18:40	04/10/17 18:03	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/06/17 18:40	04/10/17 18:03	1
Magnesium	**0.0590**	**J**	1.00	0.0555	mg/L		04/06/17 18:40	04/10/17 18:03	1
Manganese	**0.00329**	**J B**	0.0100	0.000360	mg/L		04/06/17 18:40	04/10/17 18:03	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		04/11/17 09:05	04/11/17 18:28	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		04/06/17 18:40	04/10/17 18:03	1
Potassium	**0.0497**	**J**	1.00	0.0374	mg/L		04/06/17 18:40	04/10/17 18:03	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/06/17 18:40	04/10/17 18:03	1
Sodium	**0.519**	**J B**	1.00	0.0214	mg/L		04/06/17 18:40	04/10/17 18:03	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000820	U F1	0.000200	0.0000820	mg/L		04/03/17 09:19	04/03/17 14:16	1

Definitions/Glossary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	ISTD response or retention time outside acceptable limits
X	Surrogate is outside control limits

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F2	MS/MSD RPD exceeds control limits

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	12DCE (61-130)	DBFM (68-140)	TOL (50-130)	BFB (57-140)
600-145929-1	SJRP-SB09-9-10-03282017	98	86	92	99
600-145929-2	SJRP-SB09-12-13-03282017	89	91	92	98
600-145929-3	SJRP-SB10-1-2-03282017	88	89	94	98
600-145929-4	SJRP-MW13-10-11-03282017	91	88	98	100
600-145929-5	SJRP-MW13-10-11-03282017 DUP	55 * X	73 *	85 *	84
600-145929-6	SJRP-MW13-19-20-03282017	100	93	96	96
600-145929-7	SJRP-MW13-29-30-03282017	99	93	104	73
600-145929-8	SJRP-MW13-34-35-03282017	84	88	100	103
LCS 600-209848/1-A	Lab Control Sample	121	120	107	87
LCS 600-209893/10	Lab Control Sample	84	92	96	103
LCS 600-210004/3	Lab Control Sample	79	96	110	107
LCSD 600-209848/2-A	Lab Control Sample Dup	116	113	116	95
LCSD 600-209893/11	Lab Control Sample Dup	76	87	89	94
LCSD 600-210004/4	Lab Control Sample Dup	78	95	106	104
MB 600-209848/3-A	Method Blank	94	97	107	75
MB 600-209893/13	Method Blank	81	82	82	89
MB 600-210004/6	Method Blank	85	86	98	99

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	12DCE (50-134)	DBFM (62-130)	TOL (70-130)	BFB (67-139)
600-145929-9	SJRP-EB-03282017	115	100	97	121
LCS 600-209915/3	Lab Control Sample	105	98	90	117
LCSD 600-209915/4	Lab Control Sample Dup	101	95	91	116
MB 600-209915/6	Method Blank	115	99	93	121

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	TFT2 (50-150)
600-145929-1	SJRP-SB09-9-10-03282017	72
600-145929-2	SJRP-SB09-12-13-03282017	71

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(50-150)
600-145929-2 MS	SJRP-SB09-12-13-03282017	79
600-145929-2 MSD	SJRP-SB09-12-13-03282017	73
600-145929-3	SJRP-SB10-1-2-03282017	75
600-145929-4	SJRP-MW13-10-11-03282017	74
600-145929-5	SJRP-MW13-10-11-03282017 DUP	66
600-145929-6	SJRP-MW13-19-20-03282017	65
600-145929-7	SJRP-MW13-29-30-03282017	63
600-145929-8	SJRP-MW13-34-35-03282017	67
LCS 490-420503/2-A	Lab Control Sample	83
LCS 490-420919/2-A	Lab Control Sample	87
LCSD 490-420503/3-A	Lab Control Sample Dup	74
LCSD 490-420919/3-A	Lab Control Sample Dup	87
MB 490-420503/1-A	Method Blank	72
MB 490-420503/1-A	Method Blank	77
MB 490-420919/1-A	Method Blank	71

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(50-150)
600-145929-9	SJRP-EB-03282017	99
LCS 490-420124/4	Lab Control Sample	101
LCSD 490-420124/5	Lab Control Sample Dup	102
MB 490-420124/6	Method Blank	103

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		OTPH1
Lab Sample ID	Client Sample ID	(50-150)
600-145929-1	SJRP-SB09-9-10-03282017	67
600-145929-2	SJRP-SB09-12-13-03282017	52
600-145929-3	SJRP-SB10-1-2-03282017	73
600-145929-4	SJRP-MW13-10-11-03282017	69
600-145929-5	SJRP-MW13-10-11-03282017 DUP	69
600-145929-6	SJRP-MW13-19-20-03282017	73
600-145929-7	SJRP-MW13-29-30-03282017	79
600-145929-8	SJRP-MW13-34-35-03282017	71

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	OTPH1 (50-150)							
LCS 490-419579/2-A	Lab Control Sample	72							
MB 490-419579/1-A	Method Blank	81							

Surrogate Legend

OTPH = o-Terphenyl (Surr)

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	OTPH1 (50-150)							
600-145929-9	SJRP-EB-03282017	77							
LCS 490-419412/2-A	Lab Control Sample	78							
LCSD 490-419412/3-A	Lab Control Sample Dup	79							
MB 490-419412/1-A	Method Blank	84							

Surrogate Legend

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-209848/3-A
Matrix: Solid
Analysis Batch: 209850

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 209848

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0788	U	0.625	0.0788	mg/Kg		04/03/17 11:00	04/03/17 20:41	1
Ethylbenzene	0.128	U	0.625	0.128	mg/Kg		04/03/17 11:00	04/03/17 20:41	1
Toluene	0.173	U	0.625	0.173	mg/Kg		04/03/17 11:00	04/03/17 20:41	1
Xylenes, Total	0.141	U	0.625	0.141	mg/Kg		04/03/17 11:00	04/03/17 20:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*61 - 130*	*04/03/17 11:00*	*04/03/17 20:41*	*1*
Dibromofluoromethane	*97*		*68 - 140*	*04/03/17 11:00*	*04/03/17 20:41*	*1*
Toluene-d8 (Surr)	*107*		*50 - 130*	*04/03/17 11:00*	*04/03/17 20:41*	*1*
4-Bromofluorobenzene	*75*		*57 - 140*	*04/03/17 11:00*	*04/03/17 20:41*	*1*

Lab Sample ID: LCS 600-209848/1-A
Matrix: Solid
Analysis Batch: 209850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 209848

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	6.25	5.449		mg/Kg		87	70 - 131
Ethylbenzene	6.25	5.241		mg/Kg		84	66 - 130
Toluene	6.25	4.731		mg/Kg		76	67 - 130
Xylenes, Total	12.5	9.466		mg/Kg		76	63 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*121*		*61 - 130*
Dibromofluoromethane	*120*		*68 - 140*
Toluene-d8 (Surr)	*107*		*50 - 130*
4-Bromofluorobenzene	*87*		*57 - 140*

Lab Sample ID: LCSD 600-209848/2-A
Matrix: Solid
Analysis Batch: 209850

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 209848

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	6.25	5.883		mg/Kg		94	70 - 131	8	30
Ethylbenzene	6.25	6.053		mg/Kg		97	66 - 130	14	30
Toluene	6.25	5.789		mg/Kg		93	67 - 130	20	30
Xylenes, Total	12.5	11.80		mg/Kg		94	63 - 130	22	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*116*		*61 - 130*
Dibromofluoromethane	*113*		*68 - 140*
Toluene-d8 (Surr)	*116*		*50 - 130*
4-Bromofluorobenzene	*95*		*57 - 140*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-209893/13
Matrix: Solid
Analysis Batch: 209893

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			04/04/17 16:16	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			04/04/17 16:16	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			04/04/17 16:16	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			04/04/17 16:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*61 - 130*		*04/04/17 16:16*	*1*
Dibromofluoromethane	*82*		*68 - 140*		*04/04/17 16:16*	*1*
Toluene-d8 (Surr)	*82*		*50 - 130*		*04/04/17 16:16*	*1*
4-Bromofluorobenzene	*89*		*57 - 140*		*04/04/17 16:16*	*1*

Lab Sample ID: LCS 600-209893/10
Matrix: Solid
Analysis Batch: 209893

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.04808		mg/Kg		96	70 - 131		
Ethylbenzene			0.0500	0.04755		mg/Kg		95	66 - 130		
Toluene			0.0500	0.04850		mg/Kg		97	67 - 130		
Xylenes, Total			0.100	0.09629		mg/Kg		96	63 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*84*		*61 - 130*
Dibromofluoromethane	*92*		*68 - 140*
Toluene-d8 (Surr)	*96*		*50 - 130*
4-Bromofluorobenzene	*103*		*57 - 140*

Lab Sample ID: LCSD 600-209893/11
Matrix: Solid
Analysis Batch: 209893

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.04641		mg/Kg		93	70 - 131	4	30
Ethylbenzene			0.0500	0.04454		mg/Kg		89	66 - 130	7	30
Toluene			0.0500	0.04638		mg/Kg		93	67 - 130	4	30
Xylenes, Total			0.100	0.09142		mg/Kg		91	63 - 130	5	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*76*		*61 - 130*
Dibromofluoromethane	*87*		*68 - 140*
Toluene-d8 (Surr)	*89*		*50 - 130*
4-Bromofluorobenzene	*94*		*57 - 140*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-209915/6
Matrix: Water
Analysis Batch: 209915

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/04/17 12:38	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/04/17 12:38	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/04/17 12:38	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/04/17 12:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*50 - 134*		*04/04/17 12:38*	*1*
Dibromofluoromethane	*99*		*62 - 130*		*04/04/17 12:38*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*04/04/17 12:38*	*1*
4-Bromofluorobenzene	*121*		*67 - 139*		*04/04/17 12:38*	*1*

Lab Sample ID: LCS 600-209915/3
Matrix: Water
Analysis Batch: 209915

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0100	0.01011		mg/L		101	70 - 130		
Ethylbenzene			0.0100	0.008920		mg/L		89	70 - 130		
Toluene			0.0100	0.008962		mg/L		90	70 - 130		
Xylenes, Total			0.0200	0.01829		mg/L		91	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*50 - 134*
Dibromofluoromethane	*98*		*62 - 130*
Toluene-d8 (Surr)	*90*		*70 - 130*
4-Bromofluorobenzene	*117*		*67 - 139*

Lab Sample ID: LCSD 600-209915/4
Matrix: Water
Analysis Batch: 209915

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0100	0.009548		mg/L		95	70 - 130	6	20
Ethylbenzene			0.0100	0.008635		mg/L		86	70 - 130	3	20
Toluene			0.0100	0.008681		mg/L		87	70 - 130	3	20
Xylenes, Total			0.0200	0.01808		mg/L		90	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*50 - 134*
Dibromofluoromethane	*95*		*62 - 130*
Toluene-d8 (Surr)	*91*		*70 - 130*
4-Bromofluorobenzene	*116*		*67 - 139*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-210004/6
Matrix: Solid
Analysis Batch: 210004

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			04/05/17 13:21	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			04/05/17 13:21	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			04/05/17 13:21	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			04/05/17 13:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*61 - 130*		*04/05/17 13:21*	*1*
Dibromofluoromethane	*86*		*68 - 140*		*04/05/17 13:21*	*1*
Toluene-d8 (Surr)	*98*		*50 - 130*		*04/05/17 13:21*	*1*
4-Bromofluorobenzene	*99*		*57 - 140*		*04/05/17 13:21*	*1*

Lab Sample ID: LCS 600-210004/3
Matrix: Solid
Analysis Batch: 210004

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.05336		mg/Kg		107	70 - 131		
Ethylbenzene			0.0500	0.05479		mg/Kg		110	66 - 130		
Toluene			0.0500	0.05576		mg/Kg		112	67 - 130		
Xylenes, Total			0.100	0.1088		mg/Kg		109	63 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*79*		*61 - 130*
Dibromofluoromethane	*96*		*68 - 140*
Toluene-d8 (Surr)	*110*		*50 - 130*
4-Bromofluorobenzene	*107*		*57 - 140*

Lab Sample ID: LCSD 600-210004/4
Matrix: Solid
Analysis Batch: 210004

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.04940		mg/Kg		99	70 - 131	8	30
Ethylbenzene			0.0500	0.04789		mg/Kg		96	66 - 130	13	30
Toluene			0.0500	0.04972		mg/Kg		99	67 - 130	11	30
Xylenes, Total			0.100	0.09442		mg/Kg		94	63 - 130	14	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*78*		*61 - 130*
Dibromofluoromethane	*95*		*68 - 140*
Toluene-d8 (Surr)	*106*		*50 - 130*
4-Bromofluorobenzene	*104*		*57 - 140*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 490-420124/6
Matrix: Water
Analysis Batch: 420124

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			04/06/17 10:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*103*		*50 - 150*		*04/06/17 10:19*	*1*

Lab Sample ID: LCS 490-420124/4
Matrix: Water
Analysis Batch: 420124

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	1.00	1.182		mg/L		118	66 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*101*		*50 - 150*

Lab Sample ID: LCSD 490-420124/5
Matrix: Water
Analysis Batch: 420124

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	1.00	1.176		mg/L		118	66 - 140	1	42

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*102*		*50 - 150*

Lab Sample ID: MB 490-420503/1-A
Matrix: Solid
Analysis Batch: 421012

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 420503

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		04/07/17 08:45	04/10/17 13:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*77*		*50 - 150*	*04/07/17 08:45*	*04/10/17 13:17*	*1*

Lab Sample ID: MB 490-420503/1-A
Matrix: Solid
Analysis Batch: 421012

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 420503

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		04/07/17 08:45	04/11/17 11:16	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: MB 490-420503/1-A
Matrix: Solid
Analysis Batch: 421012

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 420503

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	72		50 - 150	04/07/17 08:45	04/11/17 11:16	1

Lab Sample ID: LCS 490-420503/2-A
Matrix: Solid
Analysis Batch: 421012

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 420503

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C6-C10			500	383.5		mg/Kg		77	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	83		50 - 150

Lab Sample ID: LCSD 490-420503/3-A
Matrix: Solid
Analysis Batch: 421012

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 420503

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10			500	347.6		mg/Kg		70	70 - 130	10	21

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	74		50 - 150

Lab Sample ID: 600-145929-2 MS
Matrix: Solid
Analysis Batch: 421012

Client Sample ID: SJRP-SB09-12-13-03282017
Prep Type: Total/NA
Prep Batch: 420503

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C6-C10	2.46	U F2	492	442.9		mg/Kg		90	56 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene	79		50 - 150

Lab Sample ID: 600-145929-2 MSD
Matrix: Solid
Analysis Batch: 421012

Client Sample ID: SJRP-SB09-12-13-03282017
Prep Type: Total/NA
Prep Batch: 420503

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	2.46	U F2	492	351.7	F2	mg/Kg		71	56 - 130	23	21

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene	73		50 - 150

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: MB 490-420919/1-A
Matrix: Solid
Analysis Batch: 421012

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 420919

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		04/09/17 20:42	04/11/17 10:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*71*		*50 - 150*	*04/09/17 20:42*	*04/11/17 10:45*	*1*

Lab Sample ID: LCS 490-420919/2-A
Matrix: Solid
Analysis Batch: 421012

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 420919

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	500	537.4		mg/Kg		107	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*87*		*50 - 150*

Lab Sample ID: LCSD 490-420919/3-A
Matrix: Solid
Analysis Batch: 421012

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 420919

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	500	492.3		mg/Kg		98	70 - 130	9	21

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*87*		*50 - 150*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Lab Sample ID: MB 490-419412/1-A
Matrix: Water
Analysis Batch: 419500

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 419412

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0910	U	0.100	0.0910	mg/L		04/03/17 17:01	04/04/17 11:25	1
ORO C24-C40	0.0910	U	0.100	0.0910	mg/L		04/03/17 17:01	04/04/17 11:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*84*		*50 - 150*	*04/03/17 17:01*	*04/04/17 11:25*	*1*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Lab Sample ID: LCS 490-419412/2-A
Matrix: Water
Analysis Batch: 419500

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 419412

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			0.800	0.7012		mg/L		88	46 - 132		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*78*		*50 - 150*

Lab Sample ID: LCSD 490-419412/3-A
Matrix: Water
Analysis Batch: 419500

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 419412

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			0.800	0.6773		mg/L		85	46 - 132	3	31

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl (Surr)	*79*		*50 - 150*

Lab Sample ID: MB 490-419579/1-A
Matrix: Solid
Analysis Batch: 419797

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 419579

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.50	U	5.00	2.50	mg/Kg		04/04/17 10:32	04/05/17 14:19	1
ORO C24-C40	2.50	U	5.00	2.50	mg/Kg		04/04/17 10:32	04/05/17 14:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*81*		*50 - 150*	*04/04/17 10:32*	*04/05/17 14:19*	*1*

Lab Sample ID: LCS 490-419579/2-A
Matrix: Solid
Analysis Batch: 419797

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 419579

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			40.0	40.08		mg/Kg		100	54 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*72*		*50 - 150*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-210217/1-A
Matrix: Water
Analysis Batch: 210426

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210217

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		04/06/17 18:40	04/10/17 17:18	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		04/06/17 18:40	04/10/17 17:18	1
Barium	0.000530	U	0.0200	0.000530	mg/L		04/06/17 18:40	04/10/17 17:18	1
Boron	0.0116	U	0.200	0.0116	mg/L		04/06/17 18:40	04/10/17 17:18	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		04/06/17 18:40	04/10/17 17:18	1
Calcium	0.0240	U	1.00	0.0240	mg/L		04/06/17 18:40	04/10/17 17:18	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/06/17 18:40	04/10/17 17:18	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		04/06/17 18:40	04/10/17 17:18	1
Iron	0.0270	U	0.400	0.0270	mg/L		04/06/17 18:40	04/10/17 17:18	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/06/17 18:40	04/10/17 17:18	1
Magnesium	0.0555	U	1.00	0.0555	mg/L		04/06/17 18:40	04/10/17 17:18	1
Manganese	0.0003960	J	0.0100	0.000360	mg/L		04/06/17 18:40	04/10/17 17:18	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		04/06/17 18:40	04/10/17 17:18	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		04/06/17 18:40	04/10/17 17:18	1
Potassium	0.0374	U	1.00	0.0374	mg/L		04/06/17 18:40	04/10/17 17:18	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/06/17 18:40	04/10/17 17:18	1
Sodium	0.03108	J	1.00	0.0214	mg/L		04/06/17 18:40	04/10/17 17:18	1

Lab Sample ID: LCS 600-210217/2-A
Matrix: Water
Analysis Batch: 210426

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210217

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	20.0	20.04		mg/L		100	80 - 120
Arsenic	2.00	2.195		mg/L		110	80 - 120
Barium	2.00	1.986		mg/L		99	80 - 120
Boron	2.00	1.996		mg/L		100	80 - 120
Cadmium	1.00	1.001		mg/L		100	80 - 120
Calcium	20.0	20.24		mg/L		101	80 - 120
Chromium	2.00	2.001		mg/L		100	80 - 120
Cobalt	2.00	2.014		mg/L		101	80 - 120
Iron	20.0	19.97		mg/L		100	80 - 120
Lead	2.00	2.009		mg/L		100	80 - 120
Magnesium	20.0	20.04		mg/L		100	80 - 120
Manganese	2.00	1.991		mg/L		100	80 - 120
Nickel	2.00	2.004		mg/L		100	80 - 120
Potassium	20.0	19.79		mg/L		99	80 - 120
Selenium	2.00	2.003		mg/L		100	80 - 120
Sodium	20.0	19.72		mg/L		99	80 - 120

Lab Sample ID: MB 600-210240/1-A
Matrix: Solid
Analysis Batch: 210401

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210240

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.218	U	1.00	0.218	mg/Kg		04/07/17 08:40	04/10/17 12:59	1
Barium	0.06500	J	1.00	0.0300	mg/Kg		04/07/17 08:40	04/10/17 12:59	1
Boron	0.386	U	20.0	0.386	mg/Kg		04/07/17 08:40	04/10/17 12:59	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: MB 600-210240/1-A
Matrix: Solid
Analysis Batch: 210401

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210240

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		04/07/17 08:40	04/10/17 12:59	1
Calcium	1.975	J	100	0.864	mg/Kg		04/07/17 08:40	04/10/17 12:59	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		04/07/17 08:40	04/10/17 12:59	1
Cobalt	0.0676	U	0.500	0.0676	mg/Kg		04/07/17 08:40	04/10/17 12:59	1
Iron	2.53	U	20.0	2.53	mg/Kg		04/07/17 08:40	04/10/17 12:59	1
Lead	0.105	U	0.500	0.105	mg/Kg		04/07/17 08:40	04/10/17 12:59	1
Magnesium	1.92	U	100	1.92	mg/Kg		04/07/17 08:40	04/10/17 12:59	1
Manganese	0.05500	J	1.50	0.0381	mg/Kg		04/07/17 08:40	04/10/17 12:59	1
Molybdenum	0.136	U	0.500	0.136	mg/Kg		04/07/17 08:40	04/10/17 12:59	1
Nickel	0.117	U	1.00	0.117	mg/Kg		04/07/17 08:40	04/10/17 12:59	1
Potassium	11.0	U	100	11.0	mg/Kg		04/07/17 08:40	04/10/17 12:59	1
Selenium	0.259	U	2.00	0.259	mg/Kg		04/07/17 08:40	04/10/17 12:59	1
Sodium	76.85	J	100	0.886	mg/Kg		04/07/17 08:40	04/10/17 12:59	1

Lab Sample ID: MB 600-210240/1-A
Matrix: Solid
Analysis Batch: 210521

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210240

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	27.14		25.0	0.300	mg/Kg		04/07/17 08:40	04/11/17 15:35	1
Iron	2.53	U	20.0	2.53	mg/Kg		04/07/17 08:40	04/11/17 15:35	1
Manganese	0.04675	J	1.50	0.0381	mg/Kg		04/07/17 08:40	04/11/17 15:35	1

Lab Sample ID: LCSSRM 600-210240/2-A
Matrix: Solid
Analysis Batch: 210401

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210240

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	97.5	96.55		mg/Kg		99.0	69.2 - 145.6
Barium	306	273.6		mg/Kg		89.4	82.7 - 117.0
Boron	116	108.5		mg/Kg		93.5	73.0 - 127.6
Cadmium	76.6	74.69		mg/Kg		97.5	73.2 - 126.8
Calcium	5880	5580		mg/Kg		94.9	81.8 - 118.4
Chromium	103	100.9		mg/Kg		98.0	79.7 - 121.4
Cobalt	103	107.0		mg/Kg		103.9	83.3 - 116.5
Lead	96.7	95.75		mg/Kg		99.0	81.7 - 117.9
Magnesium	2680	2493		mg/Kg		93.0	75.4 - 124.6
Manganese	400	378.2		mg/Kg		94.6	81.0 - 119.0
Molybdenum	94.9	93.71		mg/Kg		98.7	78.5 - 121.2
Nickel	153	158.9		mg/Kg		103.9	73.2 - 126.8

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-210240/2-A
Matrix: Solid
Analysis Batch: 210401

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210240

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	2230	2077		mg/Kg		93.1	69.5 - 130.5
Selenium	161	160.5		mg/Kg		99.7	77.6 - 123.0
Sodium	370	331.0		mg/Kg		89.5	70.5 - 129.7

Lab Sample ID: LCSSRM 600-210240/2-A
Matrix: Solid
Analysis Batch: 210521

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210240

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	7590	6710		mg/Kg		88.4	34.9 - 151.5
Iron	14500	12110		mg/Kg		83.5	45.0 - 155.9
Manganese	400	368.5		mg/Kg		92.1	81.0 - 119.0

Lab Sample ID: 600-145929-8 MS
Matrix: Solid
Analysis Batch: 210401

Client Sample ID: SJRP-MW13-34-35-03282017
Prep Type: Total/NA
Prep Batch: 210240

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.46		51.8	49.88		mg/Kg	☼	94	75 - 125
Barium	45.8	B	51.8	92.00		mg/Kg	☼	89	75 - 125
Boron	2.28	J F1	51.8	27.41	F1	mg/Kg	☼	49	75 - 125
Cadmium	0.0270	U	25.9	25.19		mg/Kg	☼	97	75 - 125
Calcium	2830	B	518	3463	4	mg/Kg	☼	122	75 - 125
Chromium	6.37		51.8	54.05		mg/Kg	☼	92	75 - 125
Cobalt	8.44		51.8	62.28		mg/Kg	☼	104	75 - 125
Lead	14.1		51.8	66.37		mg/Kg	☼	101	75 - 125
Magnesium	4270		518	5229	4	mg/Kg	☼	186	75 - 125
Manganese	122	B	51.8	167.9		mg/Kg	☼	89	75 - 125
Molybdenum	0.206	J F1	51.8	38.20	F1	mg/Kg	☼	73	75 - 125
Nickel	9.62		51.8	63.01		mg/Kg	☼	103	75 - 125
Potassium	1640		518	2269		mg/Kg	☼	122	75 - 125
Selenium	0.273	U	51.8	46.86		mg/Kg	☼	91	75 - 125
Sodium	7800	B	518	8516	4	mg/Kg	☼	138	75 - 125

Lab Sample ID: 600-145929-8 MS
Matrix: Solid
Analysis Batch: 210521

Client Sample ID: SJRP-MW13-34-35-03282017
Prep Type: Total/NA
Prep Batch: 210240

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	15400	B	518	18840	4	mg/Kg	☼	661	75 - 125
Arsenic	0.230	U	51.8	45.76		mg/Kg	☼	88	75 - 125
Iron	17000		518	18210	4	mg/Kg	☼	228	75 - 125
Manganese	122	B	51.8	176.9		mg/Kg	☼	107	75 - 125

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-145929-8 DU — **Client Sample ID: SJRP-MW13-34-35-03282017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 210401 — **Prep Batch: 210240**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	1.46		0.9027	J F5	mg/Kg	☼	47	20
Barium	45.8	B	45.51		mg/Kg	☼	0.6	20
Boron	2.28	J F1	1.723	J F5	mg/Kg	☼	28	20
Cadmium	0.0270	U	0.0263	U	mg/Kg	☼	NC	20
Calcium	2830	B	2819		mg/Kg	☼	0.4	20
Chromium	6.37		6.406		mg/Kg	☼	0.5	20
Cobalt	8.44		7.934		mg/Kg	☼	6	20
Lead	14.1		14.75		mg/Kg	☼	5	20
Magnesium	4270		4231		mg/Kg	☼	0.9	20
Manganese	122	B	122.6		mg/Kg	☼	0.5	20
Molybdenum	0.206	J F1	0.1539	J F5	mg/Kg	☼	29	20
Nickel	9.62		9.170		mg/Kg	☼	5	20
Potassium	1640		1644		mg/Kg	☼	0.4	20
Selenium	0.273	U	0.266	U	mg/Kg	☼	NC	20
Sodium	7800	B	7765		mg/Kg	☼	0.5	20

Lab Sample ID: 600-145929-8 DU — **Client Sample ID: SJRP-MW13-34-35-03282017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 210521 — **Prep Batch: 210240**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	15400	B	15480		mg/Kg	☼	0.4	20
Iron	17000		16860		mg/Kg	☼	1	20
Manganese	122	B	122.8		mg/Kg	☼	1	20

Lab Sample ID: MB 600-210464/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 210521 — **Prep Batch: 210464**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		04/11/17 09:05	04/11/17 17:56	1

Lab Sample ID: LCS 600-210464/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 210521 — **Prep Batch: 210464**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Molybdenum	1.00	1.043		mg/L		104	80 - 120

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-209814/7-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 209866 — **Prep Batch: 209814**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000820	U	0.000200	0.0000820	mg/L		04/03/17 09:19	04/03/17 13:58	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) (Continued)

Lab Sample ID: LCS 600-209814/8-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 209866 — **Prep Batch: 209814**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00300	0.003097		mg/L		103	70 - 130

Lab Sample ID: 600-145929-9 MS — **Client Sample ID: SJRP-EB-03282017**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 209866 — **Prep Batch: 209814**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0000820	U F1	0.00300	0.002136	F1	mg/L		71	75 - 125

Lab Sample ID: 600-145929-9 DU — **Client Sample ID: SJRP-EB-03282017**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 209866 — **Prep Batch: 209814**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.0000820	U F1	0.0000820	U	mg/L		NC	20

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-209811/7-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 209856 — **Prep Batch: 209811**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00325	U	0.0155	0.00325	mg/Kg		04/03/17 08:32	04/03/17 10:49	1

Lab Sample ID: LCSSRM 600-209811/8-A ^100 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 209856 — **Prep Batch: 209811**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	20.2	25.59		mg/Kg		126.7	70.8 - 129.2

Lab Sample ID: 600-145929-8 MS — **Client Sample ID: SJRP-MW13-34-35-03282017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 209856 — **Prep Batch: 209811**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00363	U	0.253	0.2729		mg/Kg	☼	108	75 - 125

Lab Sample ID: 600-145929-8 DU — **Client Sample ID: SJRP-MW13-34-35-03282017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 209856 — **Prep Batch: 209811**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.00363	U	0.03593		mg/Kg	☼	NC	20

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Method: 2540B - Percent Moisture

Lab Sample ID: 600-145929-3 DU
Matrix: Solid
Analysis Batch: 209757

Client Sample ID: SJRP-SB10-1-2-03282017
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	19.9			18.1		%				9	20
Percent Solids	80.1			81.9		%				2	20

Lab Sample ID: 600-145929-4 DU
Matrix: Solid
Analysis Batch: 209757

Client Sample ID: SJRP-MW13-10-11-03282017
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	1.7			1.7		%				0	20
Percent Solids	98.3			98.3		%				0	20

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

GC/MS VOA

Prep Batch: 209763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145929-1	SJRP-SB09-9-10-03282017	Total/NA	Solid	5035	
600-145929-2	SJRP-SB09-12-13-03282017	Total/NA	Solid	5035	
600-145929-3	SJRP-SB10-1-2-03282017	Total/NA	Solid	5035	
600-145929-4	SJRP-MW13-10-11-03282017	Total/NA	Solid	5035	
600-145929-5	SJRP-MW13-10-11-03282017 DUP	Total/NA	Solid	5035	
600-145929-6	SJRP-MW13-19-20-03282017	Total/NA	Solid	5035	
600-145929-8	SJRP-MW13-34-35-03282017	Total/NA	Solid	5035	

Prep Batch: 209848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-209848/3-A	Method Blank	Total/NA	Solid	5030B	
LCS 600-209848/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 600-209848/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 209850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145929-7	SJRP-MW13-29-30-03282017	Total/NA	Solid	8260B	209858
MB 600-209848/3-A	Method Blank	Total/NA	Solid	8260B	209848
LCS 600-209848/1-A	Lab Control Sample	Total/NA	Solid	8260B	209848
LCSD 600-209848/2-A	Lab Control Sample Dup	Total/NA	Solid	8260B	209848

Prep Batch: 209858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145929-7	SJRP-MW13-29-30-03282017	Total/NA	Solid	5035	

Analysis Batch: 209893

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145929-5	SJRP-MW13-10-11-03282017 DUP	Total/NA	Solid	8260B	209763
MB 600-209893/13	Method Blank	Total/NA	Solid	8260B	
LCS 600-209893/10	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-209893/11	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 209915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145929-9	SJRP-EB-03282017	Total/NA	Water	8260B	
MB 600-209915/6	Method Blank	Total/NA	Water	8260B	
LCS 600-209915/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-209915/4	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 210004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145929-1	SJRP-SB09-9-10-03282017	Total/NA	Solid	8260B	209763
600-145929-2	SJRP-SB09-12-13-03282017	Total/NA	Solid	8260B	209763
600-145929-3	SJRP-SB10-1-2-03282017	Total/NA	Solid	8260B	209763
600-145929-4	SJRP-MW13-10-11-03282017	Total/NA	Solid	8260B	209763
600-145929-6	SJRP-MW13-19-20-03282017	Total/NA	Solid	8260B	209763
600-145929-8	SJRP-MW13-34-35-03282017	Total/NA	Solid	8260B	209763
MB 600-210004/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-210004/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-210004/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

GC VOA

Analysis Batch: 420124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145929-9	SJRP-EB-03282017	Total/NA	Water	8015C	
MB 490-420124/6	Method Blank	Total/NA	Water	8015C	
LCS 490-420124/4	Lab Control Sample	Total/NA	Water	8015C	
LCSD 490-420124/5	Lab Control Sample Dup	Total/NA	Water	8015C	

Prep Batch: 420503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145929-1	SJRP-SB09-9-10-03282017	Total/NA	Solid	5030B	
600-145929-2	SJRP-SB09-12-13-03282017	Total/NA	Solid	5030B	
600-145929-3	SJRP-SB10-1-2-03282017	Total/NA	Solid	5030B	
600-145929-4	SJRP-MW13-10-11-03282017	Total/NA	Solid	5030B	
600-145929-5	SJRP-MW13-10-11-03282017 DUP	Total/NA	Solid	5030B	
600-145929-6	SJRP-MW13-19-20-03282017	Total/NA	Solid	5030B	
600-145929-7	SJRP-MW13-29-30-03282017	Total/NA	Solid	5030B	
600-145929-8	SJRP-MW13-34-35-03282017	Total/NA	Solid	5030B	
MB 490-420503/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 490-420503/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 490-420503/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
600-145929-2 MS	SJRP-SB09-12-13-03282017	Total/NA	Solid	5030B	
600-145929-2 MSD	SJRP-SB09-12-13-03282017	Total/NA	Solid	5030B	

Prep Batch: 420919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-420919/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 490-420919/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 490-420919/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 421012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145929-1	SJRP-SB09-9-10-03282017	Total/NA	Solid	8015C	420503
600-145929-2	SJRP-SB09-12-13-03282017	Total/NA	Solid	8015C	420503
600-145929-3	SJRP-SB10-1-2-03282017	Total/NA	Solid	8015C	420503
600-145929-4	SJRP-MW13-10-11-03282017	Total/NA	Solid	8015C	420503
600-145929-5	SJRP-MW13-10-11-03282017 DUP	Total/NA	Solid	8015C	420503
600-145929-6	SJRP-MW13-19-20-03282017	Total/NA	Solid	8015C	420503
600-145929-7	SJRP-MW13-29-30-03282017	Total/NA	Solid	8015C	420503
600-145929-8	SJRP-MW13-34-35-03282017	Total/NA	Solid	8015C	420503
MB 490-420503/1-A	Method Blank	Total/NA	Solid	8015C	420503
MB 490-420503/1-A	Method Blank	Total/NA	Solid	8015C	420503
MB 490-420919/1-A	Method Blank	Total/NA	Solid	8015C	420919
LCS 490-420503/2-A	Lab Control Sample	Total/NA	Solid	8015C	420503
LCS 490-420919/2-A	Lab Control Sample	Total/NA	Solid	8015C	420919
LCSD 490-420503/3-A	Lab Control Sample Dup	Total/NA	Solid	8015C	420503
LCSD 490-420919/3-A	Lab Control Sample Dup	Total/NA	Solid	8015C	420919
600-145929-2 MS	SJRP-SB09-12-13-03282017	Total/NA	Solid	8015C	420503
600-145929-2 MSD	SJRP-SB09-12-13-03282017	Total/NA	Solid	8015C	420503

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

GC Semi VOA

Prep Batch: 419412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145929-9	SJRP-EB-03282017	Total/NA	Water	3510C	
MB 490-419412/1-A	Method Blank	Total/NA	Water	3510C	
LCS 490-419412/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 490-419412/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 419500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145929-9	SJRP-EB-03282017	Total/NA	Water	8015C	419412
MB 490-419412/1-A	Method Blank	Total/NA	Water	8015C	419412
LCS 490-419412/2-A	Lab Control Sample	Total/NA	Water	8015C	419412
LCSD 490-419412/3-A	Lab Control Sample Dup	Total/NA	Water	8015C	419412

Prep Batch: 419579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145929-1	SJRP-SB09-9-10-03282017	Total/NA	Solid	3550C	
600-145929-2	SJRP-SB09-12-13-03282017	Total/NA	Solid	3550C	
600-145929-3	SJRP-SB10-1-2-03282017	Total/NA	Solid	3550C	
600-145929-4	SJRP-MW13-10-11-03282017	Total/NA	Solid	3550C	
600-145929-5	SJRP-MW13-10-11-03282017 DUP	Total/NA	Solid	3550C	
600-145929-6	SJRP-MW13-19-20-03282017	Total/NA	Solid	3550C	
600-145929-7	SJRP-MW13-29-30-03282017	Total/NA	Solid	3550C	
600-145929-8	SJRP-MW13-34-35-03282017	Total/NA	Solid	3550C	
MB 490-419579/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-419579/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 419797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145929-1	SJRP-SB09-9-10-03282017	Total/NA	Solid	8015C	419579
600-145929-2	SJRP-SB09-12-13-03282017	Total/NA	Solid	8015C	419579
600-145929-3	SJRP-SB10-1-2-03282017	Total/NA	Solid	8015C	419579
600-145929-4	SJRP-MW13-10-11-03282017	Total/NA	Solid	8015C	419579
600-145929-5	SJRP-MW13-10-11-03282017 DUP	Total/NA	Solid	8015C	419579
600-145929-6	SJRP-MW13-19-20-03282017	Total/NA	Solid	8015C	419579
600-145929-7	SJRP-MW13-29-30-03282017	Total/NA	Solid	8015C	419579
600-145929-8	SJRP-MW13-34-35-03282017	Total/NA	Solid	8015C	419579
MB 490-419579/1-A	Method Blank	Total/NA	Solid	8015C	419579
LCS 490-419579/2-A	Lab Control Sample	Total/NA	Solid	8015C	419579

Metals

Prep Batch: 209811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145929-1	SJRP-SB09-9-10-03282017	Total/NA	Solid	7471A	
600-145929-2	SJRP-SB09-12-13-03282017	Total/NA	Solid	7471A	
600-145929-3	SJRP-SB10-1-2-03282017	Total/NA	Solid	7471A	
600-145929-4	SJRP-MW13-10-11-03282017	Total/NA	Solid	7471A	
600-145929-5	SJRP-MW13-10-11-03282017 DUP	Total/NA	Solid	7471A	
600-145929-6	SJRP-MW13-19-20-03282017	Total/NA	Solid	7471A	
600-145929-7	SJRP-MW13-29-30-03282017	Total/NA	Solid	7471A	
600-145929-8	SJRP-MW13-34-35-03282017	Total/NA	Solid	7471A	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Metals (Continued)

Prep Batch: 209811 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-209811/7-A	Method Blank	Total/NA	Solid	7471A	
LCSSRM 600-209811/8-A ^100	Lab Control Sample	Total/NA	Solid	7471A	
600-145929-8 MS	SJRP-MW13-34-35-03282017	Total/NA	Solid	7471A	
600-145929-8 DU	SJRP-MW13-34-35-03282017	Total/NA	Solid	7471A	

Prep Batch: 209814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145929-9	SJRP-EB-03282017	Total/NA	Water	7470A	
MB 600-209814/7-A	Method Blank	Total/NA	Water	7470A	
LCS 600-209814/8-A	Lab Control Sample	Total/NA	Water	7470A	
600-145929-9 MS	SJRP-EB-03282017	Total/NA	Water	7470A	
600-145929-9 DU	SJRP-EB-03282017	Total/NA	Water	7470A	

Analysis Batch: 209856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145929-1	SJRP-SB09-9-10-03282017	Total/NA	Solid	7471A	209811
600-145929-2	SJRP-SB09-12-13-03282017	Total/NA	Solid	7471A	209811
600-145929-3	SJRP-SB10-1-2-03282017	Total/NA	Solid	7471A	209811
600-145929-4	SJRP-MW13-10-11-03282017	Total/NA	Solid	7471A	209811
600-145929-5	SJRP-MW13-10-11-03282017 DUP	Total/NA	Solid	7471A	209811
600-145929-6	SJRP-MW13-19-20-03282017	Total/NA	Solid	7471A	209811
600-145929-7	SJRP-MW13-29-30-03282017	Total/NA	Solid	7471A	209811
600-145929-8	SJRP-MW13-34-35-03282017	Total/NA	Solid	7471A	209811
MB 600-209811/7-A	Method Blank	Total/NA	Solid	7471A	209811
LCSSRM 600-209811/8-A ^100	Lab Control Sample	Total/NA	Solid	7471A	209811
600-145929-8 MS	SJRP-MW13-34-35-03282017	Total/NA	Solid	7471A	209811
600-145929-8 DU	SJRP-MW13-34-35-03282017	Total/NA	Solid	7471A	209811

Analysis Batch: 209866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145929-9	SJRP-EB-03282017	Total/NA	Water	7470A	209814
MB 600-209814/7-A	Method Blank	Total/NA	Water	7470A	209814
LCS 600-209814/8-A	Lab Control Sample	Total/NA	Water	7470A	209814
600-145929-9 MS	SJRP-EB-03282017	Total/NA	Water	7470A	209814
600-145929-9 DU	SJRP-EB-03282017	Total/NA	Water	7470A	209814

Prep Batch: 210217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145929-9	SJRP-EB-03282017	Total/NA	Water	3010A	
MB 600-210217/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-210217/2-A	Lab Control Sample	Total/NA	Water	3010A	

Prep Batch: 210240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145929-1	SJRP-SB09-9-10-03282017	Total/NA	Solid	3050B	
600-145929-2	SJRP-SB09-12-13-03282017	Total/NA	Solid	3050B	
600-145929-3	SJRP-SB10-1-2-03282017	Total/NA	Solid	3050B	
600-145929-4	SJRP-MW13-10-11-03282017	Total/NA	Solid	3050B	
600-145929-5	SJRP-MW13-10-11-03282017 DUP	Total/NA	Solid	3050B	
600-145929-6	SJRP-MW13-19-20-03282017	Total/NA	Solid	3050B	
600-145929-7	SJRP-MW13-29-30-03282017	Total/NA	Solid	3050B	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Metals (Continued)

Prep Batch: 210240 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145929-8	SJRP-MW13-34-35-03282017	Total/NA	Solid	3050B	
MB 600-210240/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-210240/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-145929-8 MS	SJRP-MW13-34-35-03282017	Total/NA	Solid	3050B	
600-145929-8 DU	SJRP-MW13-34-35-03282017	Total/NA	Solid	3050B	

Analysis Batch: 210401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145929-1	SJRP-SB09-9-10-03282017	Total/NA	Solid	6010B	210240
600-145929-2	SJRP-SB09-12-13-03282017	Total/NA	Solid	6010B	210240
600-145929-3	SJRP-SB10-1-2-03282017	Total/NA	Solid	6010B	210240
600-145929-4	SJRP-MW13-10-11-03282017	Total/NA	Solid	6010B	210240
600-145929-5	SJRP-MW13-10-11-03282017 DUP	Total/NA	Solid	6010B	210240
600-145929-6	SJRP-MW13-19-20-03282017	Total/NA	Solid	6010B	210240
600-145929-7	SJRP-MW13-29-30-03282017	Total/NA	Solid	6010B	210240
600-145929-8	SJRP-MW13-34-35-03282017	Total/NA	Solid	6010B	210240
MB 600-210240/1-A	Method Blank	Total/NA	Solid	6010B	210240
LCSSRM 600-210240/2-A	Lab Control Sample	Total/NA	Solid	6010B	210240
600-145929-8 MS	SJRP-MW13-34-35-03282017	Total/NA	Solid	6010B	210240
600-145929-8 DU	SJRP-MW13-34-35-03282017	Total/NA	Solid	6010B	210240

Analysis Batch: 210426

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145929-9	SJRP-EB-03282017	Total/NA	Water	6010B	210217
MB 600-210217/1-A	Method Blank	Total/NA	Water	6010B	210217
LCS 600-210217/2-A	Lab Control Sample	Total/NA	Water	6010B	210217

Prep Batch: 210464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145929-9	SJRP-EB-03282017	Total/NA	Water	3010A	
MB 600-210464/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-210464/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 210521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145929-1	SJRP-SB09-9-10-03282017	Total/NA	Solid	6010B	210240
600-145929-2	SJRP-SB09-12-13-03282017	Total/NA	Solid	6010B	210240
600-145929-3	SJRP-SB10-1-2-03282017	Total/NA	Solid	6010B	210240
600-145929-4	SJRP-MW13-10-11-03282017	Total/NA	Solid	6010B	210240
600-145929-5	SJRP-MW13-10-11-03282017 DUP	Total/NA	Solid	6010B	210240
600-145929-6	SJRP-MW13-19-20-03282017	Total/NA	Solid	6010B	210240
600-145929-7	SJRP-MW13-29-30-03282017	Total/NA	Solid	6010B	210240
600-145929-8	SJRP-MW13-34-35-03282017	Total/NA	Solid	6010B	210240
600-145929-9	SJRP-EB-03282017	Total/NA	Water	6010B	210464
MB 600-210240/1-A	Method Blank	Total/NA	Solid	6010B	210240
MB 600-210464/1-A	Method Blank	Total/NA	Water	6010B	210464
LCS 600-210464/2-A	Lab Control Sample	Total/NA	Water	6010B	210464
LCSSRM 600-210240/2-A	Lab Control Sample	Total/NA	Solid	6010B	210240
600-145929-8 MS	SJRP-MW13-34-35-03282017	Total/NA	Solid	6010B	210240
600-145929-8 DU	SJRP-MW13-34-35-03282017	Total/NA	Solid	6010B	210240

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

General Chemistry

Analysis Batch: 209757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145929-1	SJRP-SB09-9-10-03282017	Total/NA	Solid	2540B	
600-145929-2	SJRP-SB09-12-13-03282017	Total/NA	Solid	2540B	
600-145929-3	SJRP-SB10-1-2-03282017	Total/NA	Solid	2540B	
600-145929-4	SJRP-MW13-10-11-03282017	Total/NA	Solid	2540B	
600-145929-5	SJRP-MW13-10-11-03282017 DUP	Total/NA	Solid	2540B	
600-145929-6	SJRP-MW13-19-20-03282017	Total/NA	Solid	2540B	
600-145929-7	SJRP-MW13-29-30-03282017	Total/NA	Solid	2540B	
600-145929-8	SJRP-MW13-34-35-03282017	Total/NA	Solid	2540B	
600-145929-3 DU	SJRP-SB10-1-2-03282017	Total/NA	Solid	2540B	
600-145929-4 DU	SJRP-MW13-10-11-03282017	Total/NA	Solid	2540B	

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Client Sample ID: SJRP-SB09-9-10-03282017 **Lab Sample ID: 600-145929-1**
Date Collected: 03/28/17 09:15 **Matrix: Solid**
Date Received: 03/30/17 09:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.75 g	5.0 mL	420503	04/07/17 08:58	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421012	04/11/17 19:56	A1B	TAL NSH
Total/NA	Analysis	2540B		1			209757	03/31/17 15:04	B1K	TAL HOU

Client Sample ID: SJRP-SB09-9-10-03282017 **Lab Sample ID: 600-145929-1**
Date Collected: 03/28/17 09:15 **Matrix: Solid**
Date Received: 03/30/17 09:43 **Percent Solids: 78.2**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.428 g	5 mL	209763	03/30/17 13:20	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210004	04/05/17 19:33	WS1	TAL HOU
Total/NA	Prep	3550C			25.39 g	1.00 mL	419579	04/04/17 10:32	MNM	TAL NSH
Total/NA	Analysis	8015C		1			419797	04/05/17 17:16	A1B	TAL NSH
Total/NA	Prep	3050B			1.05 g	50 mL	210240	04/07/17 08:40	DCL	TAL HOU
Total/NA	Analysis	6010B		1			210521	04/11/17 15:39	DCL	TAL HOU
Total/NA	Prep	3050B			1.05 g	50 mL	210240	04/07/17 08:40	DCL	TAL HOU
Total/NA	Analysis	6010B		1			210401	04/10/17 13:37	DCL	TAL HOU
Total/NA	Prep	7471A			.62 g	50 mL	209811	04/03/17 08:32	DDE	TAL HOU
Total/NA	Analysis	7471A		1			209856	04/03/17 11:19	DDE	TAL HOU

Client Sample ID: SJRP-SB09-12-13-03282017 **Lab Sample ID: 600-145929-2**
Date Collected: 03/28/17 10:10 **Matrix: Solid**
Date Received: 03/30/17 09:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.08 g	5.0 mL	420503	04/07/17 08:58	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421012	04/11/17 11:46	A1B	TAL NSH
Total/NA	Analysis	2540B		1			209757	03/31/17 15:04	B1K	TAL HOU

Client Sample ID: SJRP-SB09-12-13-03282017 **Lab Sample ID: 600-145929-2**
Date Collected: 03/28/17 10:10 **Matrix: Solid**
Date Received: 03/30/17 09:43 **Percent Solids: 86.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.278 g	5 mL	209763	03/30/17 13:20	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210004	04/05/17 17:08	WS1	TAL HOU
Total/NA	Prep	3550C			25.67 g	1.00 mL	419579	04/04/17 10:32	MNM	TAL NSH
Total/NA	Analysis	8015C		1			419797	04/05/17 17:34	A1B	TAL NSH
Total/NA	Prep	3050B			1.08 g	50 mL	210240	04/07/17 08:40	DCL	TAL HOU
Total/NA	Analysis	6010B		1			210521	04/11/17 15:42	DCL	TAL HOU
Total/NA	Prep	3050B			1.08 g	50 mL	210240	04/07/17 08:40	DCL	TAL HOU
Total/NA	Analysis	6010B		1			210401	04/10/17 13:39	DCL	TAL HOU
Total/NA	Prep	7471A			.60 g	50 mL	209811	04/03/17 08:32	DDE	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Client Sample ID: SJRP-SB09-12-13-03282017 — Lab Sample ID: 600-145929-2

Date Collected: 03/28/17 10:10 — **Matrix: Solid**
Date Received: 03/30/17 09:43 — **Percent Solids: 86.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1			209856	04/03/17 11:21	DDE	TAL HOU

Client Sample ID: SJRP-SB10-1-2-03282017 — Lab Sample ID: 600-145929-3

Date Collected: 03/28/17 10:45 — **Matrix: Solid**
Date Received: 03/30/17 09:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.34 g	5.0 mL	420503	04/07/17 08:58	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421012	04/11/17 12:17	A1B	TAL NSH
Total/NA	Analysis	2540B		1			209757	03/31/17 15:04	B1K	TAL HOU

Client Sample ID: SJRP-SB10-1-2-03282017 — Lab Sample ID: 600-145929-3

Date Collected: 03/28/17 10:45 — **Matrix: Solid**
Date Received: 03/30/17 09:43 — **Percent Solids: 80.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.696 g	5 mL	209763	03/30/17 13:20	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210004	04/05/17 17:32	WS1	TAL HOU
Total/NA	Prep	3550C			25.81 g	1.00 mL	419579	04/04/17 10:32	MNM	TAL NSH
Total/NA	Analysis	8015C		1			419797	04/05/17 17:51	A1B	TAL NSH
Total/NA	Prep	3050B			1.00 g	50 mL	210240	04/07/17 08:40	DCL	TAL HOU
Total/NA	Analysis	6010B		5			210521	04/11/17 15:45	DCL	TAL HOU
Total/NA	Prep	3050B			1.00 g	50 mL	210240	04/07/17 08:40	DCL	TAL HOU
Total/NA	Analysis	6010B		1			210401	04/10/17 13:41	DCL	TAL HOU
Total/NA	Prep	7471A			.64 g	50 mL	209811	04/03/17 08:32	DDE	TAL HOU
Total/NA	Analysis	7471A		1			209856	04/03/17 11:23	DDE	TAL HOU

Client Sample ID: SJRP-MW13-10-11-03282017 — Lab Sample ID: 600-145929-4

Date Collected: 03/28/17 12:00 — **Matrix: Solid**
Date Received: 03/30/17 09:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.16 g	5.0 mL	420503	04/07/17 08:58	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421012	04/11/17 12:48	A1B	TAL NSH
Total/NA	Analysis	2540B		1			209757	04/01/17 12:24	B1K	TAL HOU

Client Sample ID: SJRP-MW13-10-11-03282017 — Lab Sample ID: 600-145929-4

Date Collected: 03/28/17 12:00 — **Matrix: Solid**
Date Received: 03/30/17 09:43 — **Percent Solids: 98.3**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.983 g	5 mL	209763	03/30/17 13:20	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210004	04/05/17 17:56	WS1	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			25.51 g	1.00 mL	419579	04/04/17 10:32	MNM	TAL NSH
Total/NA	Analysis	8015C		1			419797	04/05/17 18:08	A1B	TAL NSH
Total/NA	Prep	3050B			1.04 g	50 mL	210240	04/07/17 08:40	DCL	TAL HOU
Total/NA	Analysis	6010B		1			210521	04/11/17 15:47	DCL	TAL HOU
Total/NA	Prep	3050B			1.04 g	50 mL	210240	04/07/17 08:40	DCL	TAL HOU
Total/NA	Analysis	6010B		1			210401	04/10/17 13:44	DCL	TAL HOU
Total/NA	Prep	7471A			.66 g	50 mL	209811	04/03/17 08:32	DDE	TAL HOU
Total/NA	Analysis	7471A		1			209856	04/03/17 11:25	DDE	TAL HOU

Client Sample ID: SJRP-MW13-10-11-03282017 DUP

Lab Sample ID: 600-145929-5

Date Collected: 03/28/17 12:00

Matrix: Solid

Date Received: 03/30/17 09:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.61 g	5.0 mL	420503	04/07/17 08:58	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421012	04/11/17 13:18	A1B	TAL NSH
Total/NA	Analysis	2540B		1			209757	03/31/17 15:04	B1K	TAL HOU

Client Sample ID: SJRP-MW13-10-11-03282017 DUP

Lab Sample ID: 600-145929-5

Date Collected: 03/28/17 12:00

Matrix: Solid

Date Received: 03/30/17 09:43

Percent Solids: 97.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.766 g	5 mL	209763	03/30/17 13:20	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	209893	04/04/17 21:56	WS1	TAL HOU
Total/NA	Prep	3550C			25.76 g	1.00 mL	419579	04/04/17 10:32	MNM	TAL NSH
Total/NA	Analysis	8015C		1			419797	04/05/17 18:26	A1B	TAL NSH
Total/NA	Prep	3050B			1.04 g	50 mL	210240	04/07/17 08:40	DCL	TAL HOU
Total/NA	Analysis	6010B		5			210521	04/11/17 15:49	DCL	TAL HOU
Total/NA	Prep	3050B			1.04 g	50 mL	210240	04/07/17 08:40	DCL	TAL HOU
Total/NA	Analysis	6010B		1			210401	04/10/17 13:46	DCL	TAL HOU
Total/NA	Prep	7471A			.62 g	50 mL	209811	04/03/17 08:32	DDE	TAL HOU
Total/NA	Analysis	7471A		1			209856	04/03/17 11:27	DDE	TAL HOU

Client Sample ID: SJRP-MW13-19-20-03282017

Lab Sample ID: 600-145929-6

Date Collected: 03/28/17 12:15

Matrix: Solid

Date Received: 03/30/17 09:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.19 g	5.0 mL	420503	04/07/17 08:58	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421012	04/11/17 13:49	A1B	TAL NSH
Total/NA	Analysis	2540B		1			209757	03/31/17 15:04	B1K	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Client Sample ID: SJRP-MW13-19-20-03282017 — Lab Sample ID: 600-145929-6

Date Collected: 03/28/17 12:15 — **Matrix: Solid**
Date Received: 03/30/17 09:43 — **Percent Solids: 88.9**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.04 g	5 mL	209763	03/30/17 13:20	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210004	04/05/17 19:57	WS1	TAL HOU
Total/NA	Prep	3550C			25.22 g	1.00 mL	419579	04/04/17 10:32	MNM	TAL NSH
Total/NA	Analysis	8015C		1			419797	04/05/17 18:43	A1B	TAL NSH
Total/NA	Prep	3050B			1.03 g	50 mL	210240	04/07/17 08:40	DCL	TAL HOU
Total/NA	Analysis	6010B		5			210521	04/11/17 15:51	DCL	TAL HOU
Total/NA	Prep	3050B			1.03 g	50 mL	210240	04/07/17 08:40	DCL	TAL HOU
Total/NA	Analysis	6010B		1			210401	04/10/17 13:48	DCL	TAL HOU
Total/NA	Prep	7471A			.63 g	50 mL	209811	04/03/17 08:32	DDE	TAL HOU
Total/NA	Analysis	7471A		1			209856	04/03/17 11:28	DDE	TAL HOU

Client Sample ID: SJRP-MW13-29-30-03282017 — Lab Sample ID: 600-145929-7

Date Collected: 03/28/17 12:30 — **Matrix: Solid**
Date Received: 03/30/17 09:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.769 g	5 mL	209858	03/30/17 13:20	KLV	TAL HOU
Total/NA	Analysis	8260B		50	100 uL	5 mL	209850	04/03/17 21:38	KLV	TAL HOU
Total/NA	Prep	5030B			5.01 g	5.0 mL	420503	04/07/17 08:58	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421012	04/11/17 14:20	A1B	TAL NSH
Total/NA	Analysis	2540B		1			209757	03/31/17 15:04	B1K	TAL HOU

Client Sample ID: SJRP-MW13-29-30-03282017 — Lab Sample ID: 600-145929-7

Date Collected: 03/28/17 12:30 — **Matrix: Solid**
Date Received: 03/30/17 09:43 — **Percent Solids: 89.5**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			25.34 g	1.00 mL	419579	04/04/17 10:32	MNM	TAL NSH
Total/NA	Analysis	8015C		1			419797	04/05/17 19:01	A1B	TAL NSH
Total/NA	Prep	3050B			1.08 g	50 mL	210240	04/07/17 08:40	DCL	TAL HOU
Total/NA	Analysis	6010B		1			210521	04/11/17 16:00	DCL	TAL HOU
Total/NA	Prep	3050B			1.08 g	50 mL	210240	04/07/17 08:40	DCL	TAL HOU
Total/NA	Analysis	6010B		1			210401	04/10/17 13:50	DCL	TAL HOU
Total/NA	Prep	7471A			.64 g	50 mL	209811	04/03/17 08:32	DDE	TAL HOU
Total/NA	Analysis	7471A		1			209856	04/03/17 11:34	DDE	TAL HOU

Client Sample ID: SJRP-MW13-34-35-03282017 — Lab Sample ID: 600-145929-8

Date Collected: 03/28/17 13:30 — **Matrix: Solid**
Date Received: 03/30/17 09:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.11 g	5.0 mL	420503	04/07/17 08:58	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421012	04/11/17 14:50	A1B	TAL NSH

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Client Sample ID: SJRP-MW13-34-35-03282017 **Lab Sample ID: 600-145929-8**
Date Collected: 03/28/17 13:30 **Matrix: Solid**
Date Received: 03/30/17 09:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			209757	03/31/17 15:04	B1K	TAL HOU

Client Sample ID: SJRP-MW13-34-35-03282017 **Lab Sample ID: 600-145929-8**
Date Collected: 03/28/17 13:30 **Matrix: Solid**
Date Received: 03/30/17 09:43 **Percent Solids: 91.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3.296 g	5 mL	209763	03/30/17 13:20	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210004	04/05/17 13:45	WS1	TAL HOU
Total/NA	Prep	3550C			25.44 g	1.00 mL	419579	04/04/17 10:32	MNM	TAL NSH
Total/NA	Analysis	8015C		1			419797	04/05/17 19:18	A1B	TAL NSH
Total/NA	Prep	3050B			1.04 g	50 mL	210240	04/07/17 08:40	DCL	TAL HOU
Total/NA	Analysis	6010B		1			210521	04/11/17 16:02	DCL	TAL HOU
Total/NA	Prep	3050B			1.04 g	50 mL	210240	04/07/17 08:40	DCL	TAL HOU
Total/NA	Analysis	6010B		1			210401	04/10/17 13:52	DCL	TAL HOU
Total/NA	Prep	7471A			.65 g	50 mL	209811	04/03/17 08:32	DDE	TAL HOU
Total/NA	Analysis	7471A		1			209856	04/03/17 11:36	DDE	TAL HOU

Client Sample ID: SJRP-EB-03282017 **Lab Sample ID: 600-145929-9**
Date Collected: 03/28/17 14:30 **Matrix: Water**
Date Received: 03/30/17 09:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	209915	04/04/17 13:55	YX1	TAL HOU
Total/NA	Analysis	8015C		1	5 mL	5 mL	420124	04/06/17 16:28	GWM	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	419412	04/03/17 19:42	MRM	TAL NSH
Total/NA	Analysis	8015C		1			419500	04/04/17 15:36	A1B	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	210217	04/06/17 18:40	DCL	TAL HOU
Total/NA	Analysis	6010B		1			210426	04/10/17 18:03	DCL	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	210464	04/11/17 09:05	DCL	TAL HOU
Total/NA	Analysis	6010B		1			210521	04/11/17 18:28	DCL	TAL HOU
Total/NA	Prep	7470A			40 mL	40 mL	209814	04/03/17 09:19	DDE	TAL HOU
Total/NA	Analysis	7470A		1			209866	04/03/17 14:16	DDE	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-145929-1

Laboratory: TestAmerica Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	16-046-0	08-04-17
Louisiana	NELAP	6	01967	06-30-17
Oklahoma	State Program	6	2015-050	08-31-17
Texas	NELAP	6	T104704223-17-21	10-31-17
USDA	Federal		P330-14-00192	06-06-17

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	A2LA		NA: NELAP & A2LA	12-31-17
A2LA	ISO/IEC 17025		0453.07	12-31-17
Alaska (UST)	State Program	10	UST-087	09-01-17
Arizona	State Program	9	AZ0473	05-05-17
Arkansas DEQ	State Program	6	88-0737	04-25-17
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-17
Florida	NELAP	4	E87358	06-30-17
Georgia	State Program	4	N/A	12-31-17
Illinois	NELAP	5	200010	12-09-17
Iowa	State Program	7	131	04-01-18
Kansas	NELAP	7	E-10229	10-31-17
Kentucky (UST)	State Program	4	19	06-30-17
Kentucky (WW)	State Program	4	90038	12-31-17
Louisiana	NELAP	6	30613	06-30-17
Maine	State Program	1	TN00032	11-03-17
Maryland	State Program	3	316	03-31-18
Massachusetts	State Program	1	M-TN032	06-30-17
Minnesota	NELAP	5	047-999-345	12-31-17
Mississippi	State Program	4	N/A	06-30-17
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-17
New Hampshire	NELAP	1	2963	10-09-17
New Jersey	NELAP	2	TN965	06-30-17
New York	NELAP	2	11342	03-31-18
North Carolina (WW/SW)	State Program	4	387	12-31-17
North Dakota	State Program	8	R-146	06-30-17
Ohio VAP	State Program	5	CL0033	07-10-17
Oklahoma	State Program	6	9412	08-31-17
Oregon	NELAP	10	TN200001	04-27-17
Pennsylvania	NELAP	3	68-00585	06-30-17
Rhode Island	State Program	1	LAO00268	12-30-17
South Carolina	State Program	4	84009 (001)	02-18-17 *
South Carolina (Do Not Use - DW)	State Program	4	84009 (002)	12-16-17
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-17
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-17
Virginia	NELAP	3	460152	06-14-17
Washington	State Program	10	C789	07-19-17

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc. TestAmerica Job ID: 600-145929-1
Project/Site: San Juan Site Characterization

Laboratory: TestAmerica Nashville (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
West Virginia DEP	State Program	3	219	02-28-18
Wisconsin	State Program	5	998020430	08-31-17
Wyoming (UST)	A2LA	8	453.07	12-31-17

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica

Client Information	Sampler: Katherine Mouzakis	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-52002-15345.10
Client Contact: Jeffrey Minchak	Phone: 904-386-1073	E-Mail: cathy.upton@testamericainc.com		Page: Page ~~19 of 40~~ 1 of 2
Company: CH2M Hill, Inc.				Job #:
Address: 3721 Rutledge Rd. NE Suite B-1	Due Date Requested:			
City: Albuquerque	TAT Requested (days):			
State, Zip: NM, 87109				
Phone: 281-721-8546(Tel)	PO #: Purchase Order Requested			
Email: Jeffrey.Minchak@ch2m.com	WO #: WD225383			
Project Name: Kinder Morgan Bloomfield, NM San Juan	Project #: 60005961-Analysis group BTEX/GRO/DRO/Metals			
Site: San Juan Site Characterization	SSOW#:			

Analysis Requested — Dallas . Ft Worth

560501

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO - Diesel and Oil Range Organics	8015C_GRO - GRO Range (C6-C10)	6010B, 7471A - NM/WQCC List Metals	8260B - 8021 BTEX	Moisture	Waters	6010B, 7470A - NM/WQCC List Metals	8260B_LL - BTEX Only	8015C_GRO - GRO Range (C6-C10)	8015C_DRO - Diesel and Oil Range Organics	Total Number of containers	Special Instructions/Note:
Preservation Code:					X	X	N	N	N	N	N		D	A	A	N	X	
SJRP-SB09-9-10-03282017	3/28/2017	9:15	G	Solid	N	N	X	X	X	X	X						7	Cooler 1 of 2
SJRP-SB09-12-13-03282017	3/28/2017	10:10	G	Solid	N	N	X	X	X	X	X						7	
SJRP-SB10-1-2-03282017	3/28/2017	10:45	G	Solid	N	N	X	X	X	X	X						7	
* SJRP-MW13-10-11-03282017	3/28/2017	12:00	G	Solid	N	N	X	X	X	X	X						7	
* SJRP-MW13-10-11-03282017-DUP	3/28/2017	12:00	G	Solid	N	N	X	X	X	X	X						7	1200
* SJRP-MW13-19-20-03282017	3/28/2017	12:15	G	Solid	N	N	X	X	X	X	X						7	1215
* SJRP-MW13-29-30-03282017	3/28/2017	12:30	G	Solid	N	N	X	X	X	X	X						7	
* SJRP-MW13-34-35-03282017	3/28/2017	1330	G	Solid	N	N	X	X	X	X	X						7	
			G	Solid														
			G	Solid														
SJRP-~~MW13~~-EB-03282017	3/28/2017	1430	G	Water	N	N							X	X	X	X	9	

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: Katherine Mouzakis	Date/Time: 3/29/2017/1600	Company: CH2M	Received by:	Date/Time: 3/30/17 0943	Company: TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

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TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-26259.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: cathy.upton@testamericainc.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):		Job #: 600-145929-1
Address: 2960 Foster Creighton Drive,	Due Date Requested: 4/11/2017			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: San Juan Site Characterization	Project #: 60005961			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO/3560C DRO/ORO	8015C_GRO/5030B_SolidNAC GRO Range (C6-C10)	8015C_DRO/3510C_LVI DRO/ORO	8015C_GRO/5030B GRO Range (C6-C10)	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
SJRP-SB09-9-10-03282017 (600-145929-1)	3/28/17	09:15 Mountain		Solid			X	X			2	
SJRP-SB09-12-13-03282017 (600-145929-2)	3/28/17	10:10 Mountain		Solid			X	X			2	
SJRP-SB10-1-2-03282017 (600-145929-3)	3/28/17	10:45 Mountain		Solid			X	X			2	
SJRP-MW13-10-11-03282017 (600-145929-4)	3/28/17	12:00 Mountain		Solid			X	X			2	
SJRP-MW13-10-11-03282017 DUP (600-145929-5)	3/28/17	12:00 Mountain		Solid			X	X			2	
SJRP-MW13-19-20-03282017 (600-145929-6)	3/28/17	12:15 Mountain		Solid			X	X			2	
SJRP-MW13-29-30-03282017 (600-145929-7)	3/28/17	12:30 Mountain		Solid			X	X			2	
SJRP-MW13-34-35-03282017 (600-145929-8)	3/28/17	13:30 Mountain		Solid			X	X			2	
SJRP-EB-03282017 (600-145929-9)	3/28/17	14:30 Mountain		Water					X	X	5	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 3/17 1700	Company	Received by:	Date/Time: 4-1-17 1000	Company TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.5

12/7/2020 (Rev. 1)
Page 52 of 56
Received by OCD: 11/13/2025 11:14:36 AM
Released to Imaging: 11/14/2025 9:30:04 AM

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

Loc: 600
145933

COOLER RECEIPT FORM

Cooler Received/Opened On 4/1/2017 @ 1000

Time Samples Removed From Cooler 1236 Time Samples Placed In Storage_____ (2 Hour Window)

1. Tracking # 5875 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 14740456 pH Strip Lot_____ Chlorine Strip Lot_____

2. Temperature of rep. sample or temp blank when opened: 2.5 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO (NA)

4. Were custody seals on outside of cooler? YES (NO) NA

If yes, how many and where:_____

5. Were the seals intact, signed, and dated correctly? YES...NO...(NA)

6. Were custody papers inside cooler? (YES)...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) HG

7. Were custody seals on containers: YES (NO) and Intact YES...NO...(NA)

Were these signed and dated correctly? YES...NO...(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)...NO...NA

12. Did all container labels and tags agree with custody papers? (YES)...NO...NA

13a. Were VOA vials received? (YES)...NO...NA

b. Was there any observable headspace present in any VOA vial? YES (NO) NA

14. Was there a Trip Blank in this cooler? YES (NO) NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES NO (NA)

b. Did the bottle labels indicate that the correct preservatives were used (YES)...NO...NA

16. Was residual chlorine present? YES...NO...(NA)

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) DA

17. Were custody papers properly filled out (ink, signed, etc)? (YES)...NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)...NO...NA

19. Were correct containers used for the analysis requested? (YES)...NO...NA

20. Was sufficient amount of sample sent in each container? (YES)...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) DA

I certify that I attached a label with the unique LIMS number to each container (intial) DA

21. Were there Non-Conformance issues at login? YES (NO) Was a NCM generated? YES (NO) #_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 12/15/15

12/7/2020 (Rev. 1)

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc. Job Number: 600-145929-1

Login Number: 145929 **List Source: TestAmerica Houston**
List Number: 1
Creator: Justus, Sherry E

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.4, 1.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	False	Refer to Job Narrative for details.
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc. Job Number: 600-145929-1

Login Number: 145929 **List Source: TestAmerica Nashville**
List Number: 2 **List Creation: 04/03/17 04:14 PM**
Creator: Armstrong, Daniel

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.5C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc. Job Number: 600-145929-1

Login Number: 145929 **List Source: TestAmerica Nashville**
List Number: 3 **List Creation: 04/03/17 04:16 PM**
Creator: Armstrong, Daniel

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.5C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-145933-1
Client Project/Site: San Juan Site Investigation
Revision: 1

For:
CH2M Hill Constructors, Inc.
14701 St. Mary's Lane
Suite 300
Houston, Texas 77079-2923

Attn: Mr. John Ynfante

Steve A Stepanski

Authorized for release by:
12/7/2020 4:08:49 PM
Steve Stepanski, Project Mgmt. Assistant
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Designee for

Cathy Upton, Project Manager I
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LINKS
Review your project results through TotalAccess
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

Job ID: 600-145933-1

Job ID: 600-145933-1

Laboratory: TestAmerica Houston

Narrative

CASE NARRATIVE

Client: CH2M Hill Constructors, Inc.

Project: San Juan Site Investigation

Report Number: 600-145933-1

COMMENTS

This report was revised to a Level 2 deliverable per client's request.

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

Note: All samples that require thermal preservation are considered acceptable if the arrival temperature is within 2°C of the required temperature or method specified range. For samples with a specified temperature of 4°C, samples with a temperature ranging from just above freezing temperature of water to 6°C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

The samples were received on 03/30/2017; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.9º C and 1.7º C.

Receipt Exceptions

The following sample(s) was received with less than 2 days remaining on the holding time or less than one shift (8 hours) remaining on a test with a holding time of 48 hours or less. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: SJRP-SB19-13-14-03272017 (600-145933-1), SJRP-SB19-17-18-03272017 (600-145933-2), SJRP-SB10-10-11-03272017 (600-145933-3), SJRP-SB10-21-22-03272017 (600-145933-4) and SJRP-SB10-31-32-03272017 (600-145933-5).

The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. The date in the sample ID did not match the sample collection date, so the ID was changed to match the rest of the samples.

VOLATILE ORGANIC COMPOUNDS (GC-MS)-Soil

Samples SJRP-SB19-13-14-03272017 (600-145933-1), SJRP-SB19-17-18-03282017 (600-145933-2), SJRP-SB10-10-11-03272017 (600-145933-3), SJRP-SB10-21-22-03272017 (600-145933-4) and SJRP-SB10-31-32-03272017 (600-145933-5) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were prepared on 03/30/2017 and analyzed on 03/31/2017, 04/03/2017 and 04/05/2017.

The following sample(s) was prepared outside of preparation holding time. Samples were not frozen within the 48 hours required by the method: SJRP-SB19-13-14-03272017 (600-145933-1), SJRP-SB19-17-18-03272017 (600-145933-2), SJRP-SB10-10-11-03272017 (600-145933-3), and SJRP-SB10-31-32-03272017 (600-145933-5).

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-145933-1
Project/Site: San Juan Site Investigation

Job ID: 600-145933-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

Internal standard (1,4-Dichlorobenzene-d4) response for the following sample was below control limits: SJRP-SB10-31-32-03272017 (600-145933-5). The sample(s) was re-extracted and/or re-analyzed with concurring results, and the second set of data has been reported.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GC-MS)-Water

Samples SJRP-EB-03272017 (600-145933-6) and TRIP BLANK (600-145933-7) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/04/2017.

The following volatile sample was analyzed with significant headspace in the sample vial(s): TRIP BLANK (600-145933-7). Significant headspace is defined as a bubble greater than 6 mm in diameter.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GASOLINE RANGE ORGANICS (GRO)-Soil

Samples SJRP-SB19-13-14-03272017 (600-145933-1), SJRP-SB19-17-18-03282017 (600-145933-2), SJRP-SB10-10-11-03272017 (600-145933-3), SJRP-SB10-21-22-03272017 (600-145933-4) and SJRP-SB10-31-32-03272017 (600-145933-5) were analyzed for gasoline range organics (GRO) in accordance with EPA SW-846 Method 8015C - GRO. The samples were analyzed on 04/08/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GASOLINE RANGE ORGANICS (GRO)-Water

Sample SJRP-EB-03272017 (600-145933-6) was analyzed for gasoline range organics (GRO) in accordance with 8015C GRO. The samples were analyzed on 04/06/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DIESEL RANGE ORGANICS (DRO)-Soil

Samples SJRP-SB19-13-14-03272017 (600-145933-1), SJRP-SB19-17-18-03282017 (600-145933-2), SJRP-SB10-10-11-03272017 (600-145933-3), SJRP-SB10-21-22-03272017 (600-145933-4) and SJRP-SB10-31-32-03272017 (600-145933-5) were analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 04/04/2017 and analyzed on 04/05/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DIESEL RANGE ORGANICS (DRO)-Water

Sample SJRP-EB-03272017 (600-145933-6) was analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 04/03/2017 and analyzed on 04/04/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)-Soil

Samples SJRP-SB19-13-14-03272017 (600-145933-1), SJRP-SB19-17-18-03282017 (600-145933-2), SJRP-SB10-10-11-03272017 (600-145933-3), SJRP-SB10-21-22-03272017 (600-145933-4) and SJRP-SB10-31-32-03272017 (600-145933-5) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 04/07/2017 and analyzed on 04/10/2017 and 04/11/2017.

Iron was detected in method blank MB 600-210290/1-A at a level exceeding the reporting limit. Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Several analytes were detected in method blank MB 600-210290/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-145933-1
Project/Site: San Juan Site Investigation

Job ID: 600-145933-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)-Water
Sample SJRP-EB-03272017 (600-145933-6) was analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 04/06/2017 and 04/11/2017 and analyzed on 04/10/2017 and 04/11/2017.

Manganese and Sodium were detected in method blank MB 600-210217/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY-Soil
Samples SJRP-SB19-13-14-03272017 (600-145933-1), SJRP-SB19-17-18-03282017 (600-145933-2), SJRP-SB10-10-11-03272017 (600-145933-3), SJRP-SB10-21-22-03272017 (600-145933-4) and SJRP-SB10-31-32-03272017 (600-145933-5) were analyzed for total mercury in accordance with EPA SW-846 Method 7471A. The samples were prepared and analyzed on 04/03/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY-Water
Sample SJRP-EB-03272017 (600-145933-6) was analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 04/03/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PERCENT SOLIDS
Samples SJRP-SB19-13-14-03272017 (600-145933-1), SJRP-SB19-17-18-03282017 (600-145933-2), SJRP-SB10-10-11-03272017 (600-145933-3), SJRP-SB10-21-22-03272017 (600-145933-4) and SJRP-SB10-31-32-03272017 (600-145933-5) were analyzed for percent solids in accordance with EPA SW846 Method 3550C. The samples were analyzed on 03/31/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL NSH
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL NSH
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU

Protocol References:

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-145933-1	SJRP-SB19-13-14-03272017	Solid	03/27/17 12:15	03/30/17 09:43
600-145933-2	SJRP-SB19-17-18-03272017	Solid	03/27/17 12:30	03/30/17 09:43
600-145933-3	SJRP-SB10-10-11-03272017	Solid	03/27/17 14:25	03/30/17 09:43
600-145933-4	SJRP-SB10-21-22-03272017	Solid	03/27/17 14:45	03/30/17 09:43
600-145933-5	SJRP-SB10-31-32-03272017	Solid	03/27/17 15:15	03/30/17 09:43
600-145933-6	SJRP-EB-03272017	Water	03/27/17 15:45	03/30/17 09:43
600-145933-7	TRIP BLANK	Water	03/27/17 00:00	03/30/17 09:43

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Client Sample ID: SJRP-SB19-13-14-03272017
Date Collected: 03/27/17 12:15
Date Received: 03/30/17 09:43

Lab Sample ID: 600-145933-1
Matrix: Solid
Percent Solids: 88.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000505	U H	0.00401	0.000505	mg/Kg	☼	03/30/17 13:20	03/31/17 18:55	1
Ethylbenzene	0.000818	U H	0.00401	0.000818	mg/Kg	☼	03/30/17 13:20	03/31/17 18:55	1
Toluene	0.00111	U H	0.00401	0.00111	mg/Kg	☼	03/30/17 13:20	03/31/17 18:55	1
Xylenes, Total	0.000906	U H	0.00401	0.000906	mg/Kg	☼	03/30/17 13:20	03/31/17 18:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*61 - 130*	*03/30/17 13:20*	*03/31/17 18:55*	*1*
Dibromofluoromethane	*87*		*68 - 140*	*03/30/17 13:20*	*03/31/17 18:55*	*1*
Toluene-d8 (Surr)	*83*		*50 - 130*	*03/30/17 13:20*	*03/31/17 18:55*	*1*
4-Bromofluorobenzene	*98*		*57 - 140*	*03/30/17 13:20*	*03/31/17 18:55*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.99	U	5.99	2.99	mg/Kg	☼	04/04/17 13:44	04/08/17 00:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*73*		*50 - 150*	*04/04/17 13:44*	*04/08/17 00:41*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.82	U	5.64	2.82	mg/Kg	☼	04/04/17 10:32	04/05/17 19:36	1
ORO C24-C40	2.82	U	5.64	2.82	mg/Kg	☼	04/04/17 10:32	04/05/17 19:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*67*		*50 - 150*	*04/04/17 10:32*	*04/05/17 19:36*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**11400**	**B**	27.8	0.333	mg/Kg	☼	04/07/17 14:28	04/11/17 16:14	1
Arsenic	**1.71**		1.11	0.242	mg/Kg	☼	04/07/17 14:28	04/10/17 14:29	1
Barium	**216**	**B**	1.11	0.0333	mg/Kg	☼	04/07/17 14:28	04/10/17 14:29	1
Boron	**0.850**	**J**	22.2	0.429	mg/Kg	☼	04/07/17 14:28	04/10/17 14:29	1
Cadmium	**0.0333**	**J**	0.278	0.0285	mg/Kg	☼	04/07/17 14:28	04/10/17 14:29	1
Calcium	**3890**	**B**	111	0.960	mg/Kg	☼	04/07/17 14:28	04/10/17 14:29	1
Chromium	**6.84**	**B**	0.556	0.0562	mg/Kg	☼	04/07/17 14:28	04/10/17 14:29	1
Cobalt	**6.74**		0.556	0.0751	mg/Kg	☼	04/07/17 14:28	04/10/17 14:29	1
Iron	**22000**	**B**	22.2	2.81	mg/Kg	☼	04/07/17 14:28	04/10/17 14:29	1
Lead	**11.0**		0.556	0.117	mg/Kg	☼	04/07/17 14:28	04/10/17 14:29	1
Magnesium	**3250**	**B**	111	2.13	mg/Kg	☼	04/07/17 14:28	04/10/17 14:29	1
Manganese	**105**	**B**	1.67	0.0424	mg/Kg	☼	04/07/17 14:28	04/10/17 14:29	1
Molybdenum	**0.634**	**B**	0.556	0.151	mg/Kg	☼	04/07/17 14:28	04/10/17 14:29	1
Nickel	**17.7**	**B**	1.11	0.130	mg/Kg	☼	04/07/17 14:28	04/10/17 14:29	1
Potassium	**1130**		111	12.2	mg/Kg	☼	04/07/17 14:28	04/10/17 14:29	1
Selenium	0.288	U	2.22	0.288	mg/Kg	☼	04/07/17 14:28	04/10/17 14:29	1
Sodium	**2150**	**B**	111	0.985	mg/Kg	☼	04/07/17 14:28	04/10/17 14:29	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00978**	**J**	0.0190	0.00399	mg/Kg	☼	04/03/17 08:32	04/03/17 11:06	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Client Sample ID: SJRP-SB19-13-14-03272017

Lab Sample ID: 600-145933-1
Date Collected: 03/27/17 12:15
Matrix: Solid
Date Received: 03/30/17 09:43
Percent Solids: 88.2

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**11.8**		1.0	1.0	%			03/31/17 15:04	1
Percent Solids	**88.2**		1.0	1.0	%			03/31/17 15:04	1

Client Sample ID: SJRP-SB19-17-18-03272017

Lab Sample ID: 600-145933-2
Date Collected: 03/27/17 12:30
Matrix: Solid
Date Received: 03/30/17 09:43
Percent Solids: 87.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000633	U H	0.00502	0.000633	mg/Kg	☼	03/30/17 13:20	03/31/17 19:19	1
Ethylbenzene	0.00102	U H	0.00502	0.00102	mg/Kg	☼	03/30/17 13:20	03/31/17 19:19	1
Toluene	0.00139	U H	0.00502	0.00139	mg/Kg	☼	03/30/17 13:20	03/31/17 19:19	1
Xylenes, Total	0.00114	U H	0.00502	0.00114	mg/Kg	☼	03/30/17 13:20	03/31/17 19:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*61 - 130*	*03/30/17 13:20*	*03/31/17 19:19*	*1*
Dibromofluoromethane	*83*		*68 - 140*	*03/30/17 13:20*	*03/31/17 19:19*	*1*
Toluene-d8 (Surr)	*85*		*50 - 130*	*03/30/17 13:20*	*03/31/17 19:19*	*1*
4-Bromofluorobenzene	*101*		*57 - 140*	*03/30/17 13:20*	*03/31/17 19:19*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.02	U	6.05	3.02	mg/Kg	☼	04/04/17 13:44	04/08/17 01:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*69*		*50 - 150*	*04/04/17 13:44*	*04/08/17 01:11*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.76	U	5.52	2.76	mg/Kg	☼	04/04/17 10:32	04/05/17 19:53	1
ORO C24-C40	**2.89**	**J**	5.52	2.76	mg/Kg	☼	04/04/17 10:32	04/05/17 19:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*66*		*50 - 150*	*04/04/17 10:32*	*04/05/17 19:53*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**11700**	**B**	27.1	0.325	mg/Kg	☼	04/07/17 14:28	04/11/17 16:16	1
Arsenic	**2.67**		1.08	0.236	mg/Kg	☼	04/07/17 14:28	04/10/17 14:31	1
Barium	**98.8**	**B**	1.08	0.0325	mg/Kg	☼	04/07/17 14:28	04/10/17 14:31	1
Boron	**0.662**	**J**	21.7	0.419	mg/Kg	☼	04/07/17 14:28	04/10/17 14:31	1
Cadmium	0.0278	U	0.271	0.0278	mg/Kg	☼	04/07/17 14:28	04/10/17 14:31	1
Calcium	**4230**	**B**	108	0.937	mg/Kg	☼	04/07/17 14:28	04/10/17 14:31	1
Chromium	**7.55**	**B**	0.542	0.0549	mg/Kg	☼	04/07/17 14:28	04/10/17 14:31	1
Cobalt	**10.9**		0.542	0.0733	mg/Kg	☼	04/07/17 14:28	04/10/17 14:31	1
Iron	**26300**	**B**	21.7	2.74	mg/Kg	☼	04/07/17 14:28	04/10/17 14:31	1
Lead	**10.4**		0.542	0.114	mg/Kg	☼	04/07/17 14:28	04/10/17 14:31	1
Magnesium	**3240**	**B**	108	2.08	mg/Kg	☼	04/07/17 14:28	04/10/17 14:31	1
Manganese	**100**	**B**	1.63	0.0413	mg/Kg	☼	04/07/17 14:28	04/10/17 14:31	1
Molybdenum	**1.30**	**B**	0.542	0.147	mg/Kg	☼	04/07/17 14:28	04/10/17 14:31	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Client Sample ID: SJRP-SB19-17-18-03272017

Lab Sample ID: 600-145933-2
Date Collected: 03/27/17 12:30
Matrix: Solid
Date Received: 03/30/17 09:43
Percent Solids: 87.8

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	16.1	B	1.08	0.127	mg/Kg	☼	04/07/17 14:28	04/10/17 14:31	1
Potassium	1170		108	11.9	mg/Kg	☼	04/07/17 14:28	04/10/17 14:31	1
Selenium	0.281	U	2.17	0.281	mg/Kg	☼	04/07/17 14:28	04/10/17 14:31	1
Sodium	1320	B	108	0.961	mg/Kg	☼	04/07/17 14:28	04/10/17 14:31	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0250		0.0190	0.00401	mg/Kg	☼	04/03/17 08:32	04/03/17 11:12	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.2		1.0	1.0	%			03/31/17 15:04	1
Percent Solids	87.8		1.0	1.0	%			03/31/17 15:04	1

Client Sample ID: SJRP-SB10-10-11-03272017

Lab Sample ID: 600-145933-3
Date Collected: 03/27/17 14:25
Matrix: Solid
Date Received: 03/30/17 09:43
Percent Solids: 77.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000574	U H	0.00455	0.000574	mg/Kg	☼	03/30/17 13:20	03/31/17 19:44	1
Ethylbenzene	0.000929	U H	0.00455	0.000929	mg/Kg	☼	03/30/17 13:20	03/31/17 19:44	1
Toluene	0.00126	U H	0.00455	0.00126	mg/Kg	☼	03/30/17 13:20	03/31/17 19:44	1
Xylenes, Total	0.00103	U H	0.00455	0.00103	mg/Kg	☼	03/30/17 13:20	03/31/17 19:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*61 - 130*	*03/30/17 13:20*	*03/31/17 19:44*	*1*
Dibromofluoromethane	*85*		*68 - 140*	*03/30/17 13:20*	*03/31/17 19:44*	*1*
Toluene-d8 (Surr)	*88*		*50 - 130*	*03/30/17 13:20*	*03/31/17 19:44*	*1*
4-Bromofluorobenzene	*96*		*57 - 140*	*03/30/17 13:20*	*03/31/17 19:44*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	105		6.91	3.46	mg/Kg	☼	04/04/17 13:44	04/08/17 01:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*75*		*50 - 150*	*04/04/17 13:44*	*04/08/17 01:41*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	8.22		6.19	3.10	mg/Kg	☼	04/04/17 10:32	04/05/17 20:10	1
ORO C24-C40	3.22	J	6.19	3.10	mg/Kg	☼	04/04/17 10:32	04/05/17 20:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*88*		*50 - 150*	*04/04/17 10:32*	*04/05/17 20:10*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11100	B	28.2	0.338	mg/Kg	☼	04/07/17 14:28	04/11/17 16:20	1
Arsenic	4.73		1.13	0.246	mg/Kg	☼	04/07/17 14:28	04/10/17 14:33	1
Barium	40.3	B	1.13	0.0338	mg/Kg	☼	04/07/17 14:28	04/10/17 14:33	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Client Sample ID: SJRP-SB10-10-11-03272017

Lab Sample ID: 600-145933-3
Date Collected: 03/27/17 14:25
Matrix: Solid
Date Received: 03/30/17 09:43
Percent Solids: 77.8

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1.30	J	22.5	0.435	mg/Kg	☼	04/07/17 14:28	04/10/17 14:33	1
Cadmium	0.141	J	0.282	0.0288	mg/Kg	☼	04/07/17 14:28	04/10/17 14:33	1
Calcium	7210	B	113	0.974	mg/Kg	☼	04/07/17 14:28	04/10/17 14:33	1
Chromium	8.85	B	0.563	0.0570	mg/Kg	☼	04/07/17 14:28	04/10/17 14:33	1
Cobalt	11.9		0.563	0.0762	mg/Kg	☼	04/07/17 14:28	04/10/17 14:33	1
Iron	25700	B	22.5	2.85	mg/Kg	☼	04/07/17 14:28	04/10/17 14:33	1
Lead	14.1		0.563	0.118	mg/Kg	☼	04/07/17 14:28	04/10/17 14:33	1
Magnesium	4280	B	113	2.16	mg/Kg	☼	04/07/17 14:28	04/10/17 14:33	1
Manganese	275	B	1.69	0.0429	mg/Kg	☼	04/07/17 14:28	04/10/17 14:33	1
Molybdenum	1.77	B	0.563	0.153	mg/Kg	☼	04/07/17 14:28	04/10/17 14:33	1
Nickel	21.5	B	1.13	0.132	mg/Kg	☼	04/07/17 14:28	04/10/17 14:33	1
Potassium	1250		113	12.4	mg/Kg	☼	04/07/17 14:28	04/10/17 14:33	1
Selenium	0.292	U	2.25	0.292	mg/Kg	☼	04/07/17 14:28	04/10/17 14:33	1
Sodium	3480	B	113	0.998	mg/Kg	☼	04/07/17 14:28	04/10/17 14:33	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0353		0.0218	0.00460	mg/Kg	☼	04/03/17 08:32	04/03/17 11:14	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22.1		1.0	1.0	%			03/31/17 15:04	1
Percent Solids	77.9		1.0	1.0	%			03/31/17 15:04	1

Client Sample ID: SJRP-SB10-21-22-03272017

Lab Sample ID: 600-145933-4
Date Collected: 03/27/17 14:45
Matrix: Solid
Date Received: 03/30/17 09:43
Percent Solids: 84.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.763		0.244	0.0307	mg/Kg		03/30/17 13:20	04/03/17 21:10	1
Ethylbenzene	2.53		0.244	0.0497	mg/Kg		03/30/17 13:20	04/03/17 21:10	1
Toluene	0.0672	U	0.244	0.0672	mg/Kg		03/30/17 13:20	04/03/17 21:10	1
Xylenes, Total	7.96		0.244	0.0551	mg/Kg		03/30/17 13:20	04/03/17 21:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*61 - 130*	*03/30/17 13:20*	*04/03/17 21:10*	*1*
Dibromofluoromethane	*114*		*68 - 140*	*03/30/17 13:20*	*04/03/17 21:10*	*1*
Toluene-d8 (Surr)	*111*		*50 - 130*	*03/30/17 13:20*	*04/03/17 21:10*	*1*
4-Bromofluorobenzene	*74*		*57 - 140*	*03/30/17 13:20*	*04/03/17 21:10*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	136		5.93	2.97	mg/Kg	☼	04/04/17 14:49	04/08/17 02:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*78*		*50 - 150*	*04/04/17 14:49*	*04/08/17 02:11*	*1*

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Client Sample ID: SJRP-SB10-21-22-03272017

Lab Sample ID: 600-145933-4
Date Collected: 03/27/17 14:45
Matrix: Solid
Date Received: 03/30/17 09:43
Percent Solids: 84.6

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	25.2		5.90	2.95	mg/Kg	☼	04/04/17 10:32	04/05/17 20:28	1
ORO C24-C40	4.71	J	5.90	2.95	mg/Kg	☼	04/04/17 10:32	04/05/17 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*84*		*50 - 150*	*04/04/17 10:32*	*04/05/17 20:28*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11500	B	26.9	0.322	mg/Kg	☼	04/07/17 14:28	04/11/17 16:22	1
Arsenic	5.98		1.07	0.234	mg/Kg	☼	04/07/17 14:28	04/10/17 14:35	1
Barium	56.2	B	1.07	0.0322	mg/Kg	☼	04/07/17 14:28	04/10/17 14:35	1
Boron	1.65	J	21.5	0.415	mg/Kg	☼	04/07/17 14:28	04/10/17 14:35	1
Cadmium	0.0275	U	0.269	0.0275	mg/Kg	☼	04/07/17 14:28	04/10/17 14:35	1
Calcium	6150	B	107	0.928	mg/Kg	☼	04/07/17 14:28	04/10/17 14:35	1
Chromium	5.86	B	0.537	0.0544	mg/Kg	☼	04/07/17 14:28	04/10/17 14:35	1
Cobalt	11.1		0.537	0.0726	mg/Kg	☼	04/07/17 14:28	04/10/17 14:35	1
Iron	26000	B	21.5	2.72	mg/Kg	☼	04/07/17 14:28	04/10/17 14:35	1
Lead	13.5		0.537	0.113	mg/Kg	☼	04/07/17 14:28	04/10/17 14:35	1
Magnesium	3130	B	107	2.06	mg/Kg	☼	04/07/17 14:28	04/10/17 14:35	1
Manganese	101	B	1.61	0.0409	mg/Kg	☼	04/07/17 14:28	04/10/17 14:35	1
Molybdenum	1.77	B	0.537	0.146	mg/Kg	☼	04/07/17 14:28	04/10/17 14:35	1
Nickel	10.4	B	1.07	0.126	mg/Kg	☼	04/07/17 14:28	04/10/17 14:35	1
Potassium	1300		107	11.8	mg/Kg	☼	04/07/17 14:28	04/10/17 14:35	1
Selenium	0.278	U	2.15	0.278	mg/Kg	☼	04/07/17 14:28	04/10/17 14:35	1
Sodium	5210	B	107	0.952	mg/Kg	☼	04/07/17 14:28	04/10/17 14:35	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0270		0.0185	0.00391	mg/Kg	☼	04/03/17 08:32	04/03/17 11:16	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.4		1.0	1.0	%			03/31/17 15:04	1
Percent Solids	84.6		1.0	1.0	%			03/31/17 15:04	1

Client Sample ID: SJRP-SB10-31-32-03272017

Lab Sample ID: 600-145933-5
Date Collected: 03/27/17 15:15
Matrix: Solid
Date Received: 03/30/17 09:43
Percent Solids: 88.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00174	J H	0.00557	0.000702	mg/Kg	☼	03/30/17 13:20	04/05/17 18:45	1
Ethylbenzene	0.00114	U H	0.00557	0.00114	mg/Kg	☼	03/30/17 13:20	04/05/17 18:45	1
Toluene	0.00154	U H	0.00557	0.00154	mg/Kg	☼	03/30/17 13:20	04/05/17 18:45	1
Xylenes, Total	0.00126	U H	0.00557	0.00126	mg/Kg	☼	03/30/17 13:20	04/05/17 18:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*61 - 130*	*03/30/17 13:20*	*04/05/17 18:45*	*1*
Dibromofluoromethane	*88*		*68 - 140*	*03/30/17 13:20*	*04/05/17 18:45*	*1*
Toluene-d8 (Surr)	*97*		*50 - 130*	*03/30/17 13:20*	*04/05/17 18:45*	*1*
4-Bromofluorobenzene	*111*	*	*57 - 140*	*03/30/17 13:20*	*04/05/17 18:45*	*1*

TestAmerica Houston

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.14	U	6.28	3.14	mg/Kg	☼	04/04/17 14:49	04/08/17 02:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*78*		*50 - 150*	*04/04/17 14:49*	*04/08/17 02:42*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**7.82**		5.60	2.80	mg/Kg	☼	04/04/17 10:32	04/05/17 20:45	1
ORO C24-C40	**8.89**		5.60	2.80	mg/Kg	☼	04/04/17 10:32	04/05/17 20:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*82*		*50 - 150*	*04/04/17 10:32*	*04/05/17 20:45*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**13500**	**B**	24.1	0.289	mg/Kg	☼	04/07/17 14:28	04/11/17 16:28	1
Arsenic	**7.29**		0.962	0.210	mg/Kg	☼	04/07/17 14:28	04/10/17 14:37	1
Barium	**60.8**	**B**	0.962	0.0289	mg/Kg	☼	04/07/17 14:28	04/10/17 14:37	1
Boron	**1.76**	**J**	19.2	0.372	mg/Kg	☼	04/07/17 14:28	04/10/17 14:37	1
Cadmium	0.0246	U	0.241	0.0246	mg/Kg	☼	04/07/17 14:28	04/10/17 14:37	1
Calcium	**2600**	**B**	96.2	0.832	mg/Kg	☼	04/07/17 14:28	04/10/17 14:37	1
Chromium	**4.90**	**B**	0.481	0.0487	mg/Kg	☼	04/07/17 14:28	04/10/17 14:37	1
Cobalt	**21.2**		0.481	0.0651	mg/Kg	☼	04/07/17 14:28	04/10/17 14:37	1
Iron	**26500**	**B**	19.2	2.44	mg/Kg	☼	04/07/17 14:28	04/10/17 14:37	1
Lead	**15.0**		0.481	0.101	mg/Kg	☼	04/07/17 14:28	04/10/17 14:37	1
Magnesium	**3680**	**B**	96.2	1.85	mg/Kg	☼	04/07/17 14:28	04/10/17 14:37	1
Manganese	**150**	**B**	1.44	0.0367	mg/Kg	☼	04/07/17 14:28	04/10/17 14:37	1
Molybdenum	**5.04**	**B**	0.481	0.131	mg/Kg	☼	04/07/17 14:28	04/10/17 14:37	1
Nickel	**23.8**	**B**	0.962	0.113	mg/Kg	☼	04/07/17 14:28	04/10/17 14:37	1
Potassium	**1500**		96.2	10.6	mg/Kg	☼	04/07/17 14:28	04/10/17 14:37	1
Selenium	**0.322**	**J**	1.92	0.249	mg/Kg	☼	04/07/17 14:28	04/10/17 14:37	1
Sodium	**9230**	**B**	96.2	0.853	mg/Kg	☼	04/07/17 14:28	04/10/17 14:37	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0188**		0.0178	0.00375	mg/Kg	☼	04/03/17 08:32	04/03/17 11:17	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**11.9**		1.0	1.0	%			03/31/17 15:04	1
Percent Solids	**88.1**		1.0	1.0	%			03/31/17 15:04	1

Client Sample ID: SJRP-EB-03272017 — **Lab Sample ID: 600-145933-6**
Date Collected: 03/27/17 15:45 — **Matrix: Water**
Date Received: 03/30/17 09:43

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/04/17 13:29	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/04/17 13:29	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/04/17 13:29	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/04/17 13:29	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Client Sample ID: SJRP-EB-03272017

Lab Sample ID: 600-145933-6

Date Collected: 03/27/17 15:45
Matrix: Water
Date Received: 03/30/17 09:43

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		50 - 134		04/04/17 13:29	1
Dibromofluoromethane	98		62 - 130		04/04/17 13:29	1
Toluene-d8 (Surr)	94		70 - 130		04/04/17 13:29	1
4-Bromofluorobenzene	121		67 - 139		04/04/17 13:29	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			04/06/17 17:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	102		50 - 150		04/06/17 17:00	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0910	U	0.100	0.0910	mg/L		04/03/17 19:42	04/04/17 15:51	1
ORO C24-C40	0.0910	U	0.100	0.0910	mg/L		04/03/17 19:42	04/04/17 15:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	80		50 - 150	04/03/17 19:42	04/04/17 15:51	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		04/06/17 18:40	04/10/17 18:05	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		04/06/17 18:40	04/10/17 18:05	1
Barium	**0.00611**	**J**	0.0200	0.000530	mg/L		04/06/17 18:40	04/10/17 18:05	1
Boron	0.0116	U	0.200	0.0116	mg/L		04/06/17 18:40	04/10/17 18:05	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		04/06/17 18:40	04/10/17 18:05	1
Calcium	**0.152**	**J**	1.00	0.0240	mg/L		04/06/17 18:40	04/10/17 18:05	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/06/17 18:40	04/10/17 18:05	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		04/06/17 18:40	04/10/17 18:05	1
Iron	**0.0558**	**J**	0.400	0.0270	mg/L		04/06/17 18:40	04/10/17 18:05	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/06/17 18:40	04/10/17 18:05	1
Magnesium	0.0555	U	1.00	0.0555	mg/L		04/06/17 18:40	04/10/17 18:05	1
Manganese	**0.00226**	**J B**	0.0100	0.000360	mg/L		04/06/17 18:40	04/10/17 18:05	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		04/11/17 09:05	04/11/17 18:36	1
Nickel	**0.00111**	**J**	0.0100	0.000800	mg/L		04/06/17 18:40	04/10/17 18:05	1
Potassium	0.0374	U	1.00	0.0374	mg/L		04/06/17 18:40	04/10/17 18:05	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/06/17 18:40	04/10/17 18:05	1
Sodium	**0.483**	**J B**	1.00	0.0214	mg/L		04/06/17 18:40	04/10/17 18:05	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000820	U	0.000200	0.0000820	mg/L		04/03/17 09:19	04/03/17 14:14	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 600-145933-7

Date Collected: 03/27/17 00:00
Matrix: Water
Date Received: 03/30/17 09:43

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/04/17 13:04	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Client Sample ID: TRIP BLANK — **Lab Sample ID: 600-145933-7**
Date Collected: 03/27/17 00:00 — **Matrix: Water**
Date Received: 03/30/17 09:43

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/04/17 13:04	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/04/17 13:04	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/04/17 13:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*50 - 134*		*04/04/17 13:04*	*1*
Dibromofluoromethane	*95*		*62 - 130*		*04/04/17 13:04*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*04/04/17 13:04*	*1*
4-Bromofluorobenzene	*121*		*67 - 139*		*04/04/17 13:04*	*1*

Definitions/Glossary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
U	Indicates the analyte was analyzed for but not detected.
*	ISTD response or retention time outside acceptable limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(61-130)	(68-140)	(50-130)	(57-140)
600-145933-1	SJRP-SB19-13-14-03272017	106	87	83	98
600-145933-2	SJRP-SB19-17-18-03272017	101	83	85	101
600-145933-3	SJRP-SB10-10-11-03272017	100	85	88	96
600-145933-4	SJRP-SB10-21-22-03272017	97	114	111	74
600-145933-5	SJRP-SB10-31-32-03272017	89	88	97	111 *
LCS 600-209703/16	Lab Control Sample	91	83	85	102
LCS 600-209848/1-A	Lab Control Sample	121	120	107	87
LCS 600-210004/3	Lab Control Sample	79	96	110	107
LCSD 600-209703/17	Lab Control Sample Dup	93	84	84	101
LCSD 600-209848/2-A	Lab Control Sample Dup	116	113	116	95
LCSD 600-210004/4	Lab Control Sample Dup	78	95	106	104
MB 600-209703/19	Method Blank	100	85	84	100
MB 600-209848/3-A	Method Blank	94	97	107	75
MB 600-210004/6	Method Blank	85	86	98	99

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(50-134)	(62-130)	(70-130)	(67-139)
600-145933-6	SJRP-EB-03272017	111	98	94	121
600-145933-7	TRIP BLANK	113	95	96	121
LCS 600-209915/3	Lab Control Sample	105	98	90	117
LCSD 600-209915/4	Lab Control Sample Dup	101	95	91	116
MB 600-209915/6	Method Blank	115	99	93	121

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(50-150)
600-145933-1	SJRP-SB19-13-14-03272017	73
600-145933-1 MS	SJRP-SB19-13-14-03272017	97
600-145933-1 MSD	SJRP-SB19-13-14-03272017	98
600-145933-2	SJRP-SB19-17-18-03272017	69
600-145933-3	SJRP-SB10-10-11-03272017	75

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(50-150)
600-145933-4	SJRP-SB10-21-22-03272017	78
600-145933-5	SJRP-SB10-31-32-03272017	78
LCS 490-419671/2-A	Lab Control Sample	85
LCSD 490-419671/3-A	Lab Control Sample Dup	92
MB 490-419671/1-A	Method Blank	78
MB 490-419926/53	Method Blank	72

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(50-150)
600-145933-6	SJRP-EB-03272017	102
LCS 490-420124/4	Lab Control Sample	101
LCSD 490-420124/5	Lab Control Sample Dup	102
MB 490-420124/6	Method Blank	103

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		OTPH1
Lab Sample ID	Client Sample ID	(50-150)
600-145933-1	SJRP-SB19-13-14-03272017	67
600-145933-2	SJRP-SB19-17-18-03272017	66
600-145933-3	SJRP-SB10-10-11-03272017	88
600-145933-4	SJRP-SB10-21-22-03272017	84
600-145933-5	SJRP-SB10-31-32-03272017	82
LCS 490-419579/2-A	Lab Control Sample	72
MB 490-419579/1-A	Method Blank	81

Surrogate Legend

OTPH = o-Terphenyl (Surr)

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		OTPH1
Lab Sample ID	Client Sample ID	(50-150)
600-145933-6	SJRP-EB-03272017	80
LCS 490-419412/2-A	Lab Control Sample	78

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		OTPH1							
Lab Sample ID	Client Sample ID	(50-150)							
LCSD 490-419412/3-A	Lab Control Sample Dup	79							
MB 490-419412/1-A	Method Blank	84							

Surrogate Legend

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-209703/19
Matrix: Solid
Analysis Batch: 209703

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			03/31/17 18:31	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			03/31/17 18:31	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			03/31/17 18:31	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			03/31/17 18:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*61 - 130*		*03/31/17 18:31*	*1*
Dibromofluoromethane	*85*		*68 - 140*		*03/31/17 18:31*	*1*
Toluene-d8 (Surr)	*84*		*50 - 130*		*03/31/17 18:31*	*1*
4-Bromofluorobenzene	*100*		*57 - 140*		*03/31/17 18:31*	*1*

Lab Sample ID: LCS 600-209703/16
Matrix: Solid
Analysis Batch: 209703

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*61 - 130*
Dibromofluoromethane	*83*		*68 - 140*
Toluene-d8 (Surr)	*85*		*50 - 130*
4-Bromofluorobenzene	*102*		*57 - 140*

Lab Sample ID: LCSD 600-209703/17
Matrix: Solid
Analysis Batch: 209703

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*61 - 130*
Dibromofluoromethane	*84*		*68 - 140*
Toluene-d8 (Surr)	*84*		*50 - 130*
4-Bromofluorobenzene	*101*		*57 - 140*

Lab Sample ID: MB 600-209848/3-A
Matrix: Solid
Analysis Batch: 209850

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 209848

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0788	U	0.625	0.0788	mg/Kg		04/03/17 11:00	04/03/17 20:41	1
Ethylbenzene	0.128	U	0.625	0.128	mg/Kg		04/03/17 11:00	04/03/17 20:41	1
Toluene	0.173	U	0.625	0.173	mg/Kg		04/03/17 11:00	04/03/17 20:41	1
Xylenes, Total	0.141	U	0.625	0.141	mg/Kg		04/03/17 11:00	04/03/17 20:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*61 - 130*	*04/03/17 11:00*	*04/03/17 20:41*	*1*
Dibromofluoromethane	*97*		*68 - 140*	*04/03/17 11:00*	*04/03/17 20:41*	*1*
Toluene-d8 (Surr)	*107*		*50 - 130*	*04/03/17 11:00*	*04/03/17 20:41*	*1*
4-Bromofluorobenzene	*75*		*57 - 140*	*04/03/17 11:00*	*04/03/17 20:41*	*1*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-209848/1-A
Matrix: Solid
Analysis Batch: 209850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 209848

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	6.25	5.449		mg/Kg		87	70 - 131
Ethylbenzene	6.25	5.241		mg/Kg		84	66 - 130
Toluene	6.25	4.731		mg/Kg		76	67 - 130
Xylenes, Total	12.5	9.466		mg/Kg		76	63 - 130
m-Xylene & p-Xylene	6.25	4.774		mg/Kg		76	64 - 130
o-Xylene	6.25	4.692		mg/Kg		75	62 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*121*		*61 - 130*
Dibromofluoromethane	*120*		*68 - 140*
Toluene-d8 (Surr)	*107*		*50 - 130*
4-Bromofluorobenzene	*87*		*57 - 140*

Lab Sample ID: LCSD 600-209848/2-A
Matrix: Solid
Analysis Batch: 209850

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 209848

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	6.25	5.883		mg/Kg		94	70 - 131	8	30
Ethylbenzene	6.25	6.053		mg/Kg		97	66 - 130	14	30
Toluene	6.25	5.789		mg/Kg		93	67 - 130	20	30
Xylenes, Total	12.5	11.80		mg/Kg		94	63 - 130	22	30
m-Xylene & p-Xylene	6.25	5.899		mg/Kg		94	64 - 130	21	30
o-Xylene	6.25	5.904		mg/Kg		94	62 - 130	23	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*116*		*61 - 130*
Dibromofluoromethane	*113*		*68 - 140*
Toluene-d8 (Surr)	*116*		*50 - 130*
4-Bromofluorobenzene	*95*		*57 - 140*

Lab Sample ID: MB 600-209915/6
Matrix: Water
Analysis Batch: 209915

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/04/17 12:38	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/04/17 12:38	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/04/17 12:38	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/04/17 12:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*50 - 134*		*04/04/17 12:38*	*1*
Dibromofluoromethane	*99*		*62 - 130*		*04/04/17 12:38*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*04/04/17 12:38*	*1*
4-Bromofluorobenzene	*121*		*67 - 139*		*04/04/17 12:38*	*1*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-209915/3
Matrix: Water
Analysis Batch: 209915

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0100	0.01011		mg/L		101	70 - 130		
Ethylbenzene			0.0100	0.008920		mg/L		89	70 - 130		
Toluene			0.0100	0.008962		mg/L		90	70 - 130		
Xylenes, Total			0.0200	0.01829		mg/L		91	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*50 - 134*
Dibromofluoromethane	*98*		*62 - 130*
Toluene-d8 (Surr)	*90*		*70 - 130*
4-Bromofluorobenzene	*117*		*67 - 139*

Lab Sample ID: LCSD 600-209915/4
Matrix: Water
Analysis Batch: 209915

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0100	0.009548		mg/L		95	70 - 130	6	20
Ethylbenzene			0.0100	0.008635		mg/L		86	70 - 130	3	20
Toluene			0.0100	0.008681		mg/L		87	70 - 130	3	20
Xylenes, Total			0.0200	0.01808		mg/L		90	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*50 - 134*
Dibromofluoromethane	*95*		*62 - 130*
Toluene-d8 (Surr)	*91*		*70 - 130*
4-Bromofluorobenzene	*116*		*67 - 139*

Lab Sample ID: MB 600-210004/6
Matrix: Solid
Analysis Batch: 210004

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			04/05/17 13:21	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			04/05/17 13:21	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			04/05/17 13:21	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			04/05/17 13:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*61 - 130*		*04/05/17 13:21*	*1*
Dibromofluoromethane	*86*		*68 - 140*		*04/05/17 13:21*	*1*
Toluene-d8 (Surr)	*98*		*50 - 130*		*04/05/17 13:21*	*1*
4-Bromofluorobenzene	*99*		*57 - 140*		*04/05/17 13:21*	*1*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-210004/3
Matrix: Solid
Analysis Batch: 210004

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.05336		mg/Kg		107	70 - 131
Ethylbenzene	0.0500	0.05479		mg/Kg		110	66 - 130
Toluene	0.0500	0.05576		mg/Kg		112	67 - 130
Xylenes, Total	0.100	0.1088		mg/Kg		109	63 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*79*		*61 - 130*
Dibromofluoromethane	*96*		*68 - 140*
Toluene-d8 (Surr)	*110*		*50 - 130*
4-Bromofluorobenzene	*107*		*57 - 140*

Lab Sample ID: LCSD 600-210004/4
Matrix: Solid
Analysis Batch: 210004

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.04940		mg/Kg		99	70 - 131	8	30
Ethylbenzene	0.0500	0.04789		mg/Kg		96	66 - 130	13	30
Toluene	0.0500	0.04972		mg/Kg		99	67 - 130	11	30
Xylenes, Total	0.100	0.09442		mg/Kg		94	63 - 130	14	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*78*		*61 - 130*
Dibromofluoromethane	*95*		*68 - 140*
Toluene-d8 (Surr)	*106*		*50 - 130*
4-Bromofluorobenzene	*104*		*57 - 140*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 490-419671/1-A
Matrix: Solid
Analysis Batch: 419926

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 419671

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		04/04/17 13:43	04/06/17 22:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*78*		*50 - 150*	*04/04/17 13:43*	*04/06/17 22:57*	*1*

Lab Sample ID: LCS 490-419671/2-A
Matrix: Solid
Analysis Batch: 419926

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 419671

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	500	485.5		mg/Kg		97	70 - 130

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: LCS 490-419671/2-A
Matrix: Solid
Analysis Batch: 419926

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 419671

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	85		50 - 150

Lab Sample ID: LCSD 490-419671/3-A
Matrix: Solid
Analysis Batch: 419926

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 419671

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10			500	539.9		mg/Kg		108	70 - 130	11	21

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	92		50 - 150

Lab Sample ID: 600-145933-1 MS
Matrix: Solid
Analysis Batch: 420674

Client Sample ID: SJRP-SB19-13-14-03272017
Prep Type: Total/NA
Prep Batch: 419671

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C6-C10	2.99	U	599	644.7		mg/Kg	☼	108	56 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene	97		50 - 150

Lab Sample ID: 600-145933-1 MSD
Matrix: Solid
Analysis Batch: 420674

Client Sample ID: SJRP-SB19-13-14-03272017
Prep Type: Total/NA
Prep Batch: 419671

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	2.99	U	599	658.4		mg/Kg	☼	110	56 - 130	2	21

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene	98		50 - 150

Lab Sample ID: MB 490-419926/53
Matrix: Solid
Analysis Batch: 419926

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg			04/06/17 23:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	72		50 - 150		04/06/17 23:27	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: MB 490-420124/6
Matrix: Water
Analysis Batch: 420124

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			04/06/17 10:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*103*		*50 - 150*		*04/06/17 10:19*	*1*

Lab Sample ID: LCS 490-420124/4
Matrix: Water
Analysis Batch: 420124

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	1.00	1.182		mg/L		118	66 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*101*		*50 - 150*

Lab Sample ID: LCSD 490-420124/5
Matrix: Water
Analysis Batch: 420124

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	1.00	1.176		mg/L		118	66 - 140	1	42

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*102*		*50 - 150*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Lab Sample ID: MB 490-419412/1-A
Matrix: Water
Analysis Batch: 419500

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 419412

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0910	U	0.100	0.0910	mg/L		04/03/17 17:01	04/04/17 11:25	1
ORO C24-C40	0.0910	U	0.100	0.0910	mg/L		04/03/17 17:01	04/04/17 11:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*84*		*50 - 150*	*04/03/17 17:01*	*04/04/17 11:25*	*1*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Lab Sample ID: LCS 490-419412/2-A
Matrix: Water
Analysis Batch: 419500

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 419412

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			0.800	0.7012		mg/L		88	46 - 132		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*78*		*50 - 150*

Lab Sample ID: LCSD 490-419412/3-A
Matrix: Water
Analysis Batch: 419500

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 419412

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			0.800	0.6773		mg/L		85	46 - 132	3	31

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl (Surr)	*79*		*50 - 150*

Lab Sample ID: MB 490-419579/1-A
Matrix: Solid
Analysis Batch: 419797

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 419579

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.50	U	5.00	2.50	mg/Kg		04/04/17 10:32	04/05/17 14:19	1
ORO C24-C40	2.50	U	5.00	2.50	mg/Kg		04/04/17 10:32	04/05/17 14:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*81*		*50 - 150*	*04/04/17 10:32*	*04/05/17 14:19*	*1*

Lab Sample ID: LCS 490-419579/2-A
Matrix: Solid
Analysis Batch: 419797

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 419579

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			40.0	40.08		mg/Kg		100	54 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*72*		*50 - 150*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-210217/1-A
Matrix: Water
Analysis Batch: 210426

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210217

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		04/06/17 18:40	04/10/17 17:18	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		04/06/17 18:40	04/10/17 17:18	1
Barium	0.000530	U	0.0200	0.000530	mg/L		04/06/17 18:40	04/10/17 17:18	1
Boron	0.0116	U	0.200	0.0116	mg/L		04/06/17 18:40	04/10/17 17:18	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		04/06/17 18:40	04/10/17 17:18	1
Calcium	0.0240	U	1.00	0.0240	mg/L		04/06/17 18:40	04/10/17 17:18	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/06/17 18:40	04/10/17 17:18	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		04/06/17 18:40	04/10/17 17:18	1
Iron	0.0270	U	0.400	0.0270	mg/L		04/06/17 18:40	04/10/17 17:18	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/06/17 18:40	04/10/17 17:18	1
Magnesium	0.0555	U	1.00	0.0555	mg/L		04/06/17 18:40	04/10/17 17:18	1
Manganese	0.0003960	J	0.0100	0.000360	mg/L		04/06/17 18:40	04/10/17 17:18	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		04/06/17 18:40	04/10/17 17:18	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		04/06/17 18:40	04/10/17 17:18	1
Potassium	0.0374	U	1.00	0.0374	mg/L		04/06/17 18:40	04/10/17 17:18	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/06/17 18:40	04/10/17 17:18	1
Sodium	0.03108	J	1.00	0.0214	mg/L		04/06/17 18:40	04/10/17 17:18	1

Lab Sample ID: LCS 600-210217/2-A
Matrix: Water
Analysis Batch: 210426

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210217

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	20.0	20.04		mg/L		100	80 - 120
Arsenic	2.00	2.195		mg/L		110	80 - 120
Barium	2.00	1.986		mg/L		99	80 - 120
Boron	2.00	1.996		mg/L		100	80 - 120
Cadmium	1.00	1.001		mg/L		100	80 - 120
Calcium	20.0	20.24		mg/L		101	80 - 120
Chromium	2.00	2.001		mg/L		100	80 - 120
Cobalt	2.00	2.014		mg/L		101	80 - 120
Iron	20.0	19.97		mg/L		100	80 - 120
Lead	2.00	2.009		mg/L		100	80 - 120
Magnesium	20.0	20.04		mg/L		100	80 - 120
Manganese	2.00	1.991		mg/L		100	80 - 120
Nickel	2.00	2.004		mg/L		100	80 - 120
Potassium	20.0	19.79		mg/L		99	80 - 120
Selenium	2.00	2.003		mg/L		100	80 - 120
Sodium	20.0	19.72		mg/L		99	80 - 120

Lab Sample ID: MB 600-210290/1-A
Matrix: Solid
Analysis Batch: 210401

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210290

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.218	U	1.00	0.218	mg/Kg		04/07/17 14:28	04/10/17 14:05	1
Barium	0.6450	J	1.00	0.0300	mg/Kg		04/07/17 14:28	04/10/17 14:05	1
Boron	0.386	U	20.0	0.386	mg/Kg		04/07/17 14:28	04/10/17 14:05	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: MB 600-210290/1-A
Matrix: Solid
Analysis Batch: 210401

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210290

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		04/07/17 14:28	04/10/17 14:05	1
Calcium	10.60	J	100	0.864	mg/Kg		04/07/17 14:28	04/10/17 14:05	1
Chromium	0.1150	J	0.500	0.0506	mg/Kg		04/07/17 14:28	04/10/17 14:05	1
Cobalt	0.0676	U	0.500	0.0676	mg/Kg		04/07/17 14:28	04/10/17 14:05	1
Iron	77.75		20.0	2.53	mg/Kg		04/07/17 14:28	04/10/17 14:05	1
Lead	0.105	U	0.500	0.105	mg/Kg		04/07/17 14:28	04/10/17 14:05	1
Magnesium	17.59	J	100	1.92	mg/Kg		04/07/17 14:28	04/10/17 14:05	1
Manganese	0.5350	J	1.50	0.0381	mg/Kg		04/07/17 14:28	04/10/17 14:05	1
Molybdenum	0.1950	J	0.500	0.136	mg/Kg		04/07/17 14:28	04/10/17 14:05	1
Nickel	0.1450	J	1.00	0.117	mg/Kg		04/07/17 14:28	04/10/17 14:05	1
Potassium	11.0	U	100	11.0	mg/Kg		04/07/17 14:28	04/10/17 14:05	1
Selenium	0.259	U	2.00	0.259	mg/Kg		04/07/17 14:28	04/10/17 14:05	1
Sodium	29.62	J	100	0.886	mg/Kg		04/07/17 14:28	04/10/17 14:05	1

Lab Sample ID: MB 600-210290/1-A
Matrix: Solid
Analysis Batch: 210521

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210290

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	1.725	J	25.0	0.300	mg/Kg		04/07/17 14:28	04/11/17 16:10	1

Lab Sample ID: LCSSRM 600-210290/2-A
Matrix: Solid
Analysis Batch: 210401

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210290

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	97.5	97.25		mg/Kg		99.7	69.2 - 145.6
Barium	306	280.8		mg/Kg		91.8	82.7 - 117.0
Boron	116	110.3		mg/Kg		95.1	73.0 - 127.6
Cadmium	76.6	78.26		mg/Kg		102.2	73.2 - 126.8
Calcium	5880	5754		mg/Kg		97.9	81.8 - 118.4
Chromium	103	91.50		mg/Kg		88.8	79.7 - 121.4
Cobalt	103	109.6		mg/Kg		106.4	83.3 - 116.5
Iron	14500	13480		mg/Kg		92.9	45.0 - 155.9
Lead	96.7	97.08		mg/Kg		100.4	81.7 - 117.9
Magnesium	2680	2508		mg/Kg		93.6	75.4 - 124.6
Manganese	400	355.2		mg/Kg		88.8	81.0 - 119.0
Molybdenum	94.9	94.17		mg/Kg		99.2	78.5 - 121.2
Nickel	153	160.9		mg/Kg		105.2	73.2 - 126.8

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-210290/2-A
Matrix: Solid
Analysis Batch: 210401

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210290

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	2230	2034		mg/Kg		91.2	69.5 - 130.5
Selenium	161	162.1		mg/Kg		100.7	77.6 - 123.0
Sodium	370	331.9		mg/Kg		89.7	70.5 - 129.7

Lab Sample ID: LCSSRM 600-210290/2-A
Matrix: Solid
Analysis Batch: 210521

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210290

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	7590	6133		mg/Kg		80.8	34.9 - 151.5

Lab Sample ID: MB 600-210464/1-A
Matrix: Water
Analysis Batch: 210521

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210464

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		04/11/17 09:05	04/11/17 17:56	1

Lab Sample ID: LCS 600-210464/2-A
Matrix: Water
Analysis Batch: 210521

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210464

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Molybdenum	1.00	1.043		mg/L		104	80 - 120

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-209814/7-A
Matrix: Water
Analysis Batch: 209866

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 209814

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000820	U	0.000200	0.0000820	mg/L		04/03/17 09:19	04/03/17 13:58	1

Lab Sample ID: LCS 600-209814/8-A
Matrix: Water
Analysis Batch: 209866

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 209814

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00300	0.003097		mg/L		103	70 - 130

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-209811/7-A
Matrix: Solid
Analysis Batch: 209856

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 209811

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00325	U	0.0155	0.00325	mg/Kg		04/03/17 08:32	04/03/17 10:49	1

Lab Sample ID: LCSSRM 600-209811/8-A ^100
Matrix: Solid
Analysis Batch: 209856

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 209811

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	20.2	25.59		mg/Kg		126.7	70.8 - 129.2

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

GC/MS VOA

Analysis Batch: 209703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145933-1	SJRP-SB19-13-14-03272017	Total/NA	Solid	8260B	209763
600-145933-2	SJRP-SB19-17-18-03272017	Total/NA	Solid	8260B	209763
600-145933-3	SJRP-SB10-10-11-03272017	Total/NA	Solid	8260B	209763
MB 600-209703/19	Method Blank	Total/NA	Solid	8260B	
LCS 600-209703/16	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-209703/17	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 209763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145933-1	SJRP-SB19-13-14-03272017	Total/NA	Solid	5035	
600-145933-2	SJRP-SB19-17-18-03272017	Total/NA	Solid	5035	
600-145933-3	SJRP-SB10-10-11-03272017	Total/NA	Solid	5035	
600-145933-5	SJRP-SB10-31-32-03272017	Total/NA	Solid	5035	

Prep Batch: 209848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-209848/3-A	Method Blank	Total/NA	Solid	5030B	
LCS 600-209848/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 600-209848/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 209850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145933-4	SJRP-SB10-21-22-03272017	Total/NA	Solid	8260B	209860
MB 600-209848/3-A	Method Blank	Total/NA	Solid	8260B	209848
LCS 600-209848/1-A	Lab Control Sample	Total/NA	Solid	8260B	209848
LCSD 600-209848/2-A	Lab Control Sample Dup	Total/NA	Solid	8260B	209848

Prep Batch: 209860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145933-4	SJRP-SB10-21-22-03272017	Total/NA	Solid	5035	

Analysis Batch: 209915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145933-6	SJRP-EB-03272017	Total/NA	Water	8260B	
600-145933-7	TRIP BLANK	Total/NA	Water	8260B	
MB 600-209915/6	Method Blank	Total/NA	Water	8260B	
LCS 600-209915/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-209915/4	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 210004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145933-5	SJRP-SB10-31-32-03272017	Total/NA	Solid	8260B	209763
MB 600-210004/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-210004/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-210004/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

GC VOA

Prep Batch: 419671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145933-1	SJRP-SB19-13-14-03272017	Total/NA	Solid	5030B	
600-145933-2	SJRP-SB19-17-18-03272017	Total/NA	Solid	5030B	
600-145933-3	SJRP-SB10-10-11-03272017	Total/NA	Solid	5030B	
600-145933-4	SJRP-SB10-21-22-03272017	Total/NA	Solid	5030B	
600-145933-5	SJRP-SB10-31-32-03272017	Total/NA	Solid	5030B	
MB 490-419671/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 490-419671/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 490-419671/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
600-145933-1 MS	SJRP-SB19-13-14-03272017	Total/NA	Solid	5030B	
600-145933-1 MSD	SJRP-SB19-13-14-03272017	Total/NA	Solid	5030B	

Analysis Batch: 419926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-419671/1-A	Method Blank	Total/NA	Solid	8015C	419671
MB 490-419926/53	Method Blank	Total/NA	Solid	8015C	
LCS 490-419671/2-A	Lab Control Sample	Total/NA	Solid	8015C	419671
LCSD 490-419671/3-A	Lab Control Sample Dup	Total/NA	Solid	8015C	419671

Analysis Batch: 420124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145933-6	SJRP-EB-03272017	Total/NA	Water	8015C	
MB 490-420124/6	Method Blank	Total/NA	Water	8015C	
LCS 490-420124/4	Lab Control Sample	Total/NA	Water	8015C	
LCSD 490-420124/5	Lab Control Sample Dup	Total/NA	Water	8015C	

Analysis Batch: 420674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145933-1	SJRP-SB19-13-14-03272017	Total/NA	Solid	8015C	419671
600-145933-2	SJRP-SB19-17-18-03272017	Total/NA	Solid	8015C	419671
600-145933-3	SJRP-SB10-10-11-03272017	Total/NA	Solid	8015C	419671
600-145933-4	SJRP-SB10-21-22-03272017	Total/NA	Solid	8015C	419671
600-145933-5	SJRP-SB10-31-32-03272017	Total/NA	Solid	8015C	419671
600-145933-1 MS	SJRP-SB19-13-14-03272017	Total/NA	Solid	8015C	419671
600-145933-1 MSD	SJRP-SB19-13-14-03272017	Total/NA	Solid	8015C	419671

GC Semi VOA

Prep Batch: 419412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145933-6	SJRP-EB-03272017	Total/NA	Water	3510C	
MB 490-419412/1-A	Method Blank	Total/NA	Water	3510C	
LCS 490-419412/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 490-419412/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 419500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145933-6	SJRP-EB-03272017	Total/NA	Water	8015C	419412
MB 490-419412/1-A	Method Blank	Total/NA	Water	8015C	419412
LCS 490-419412/2-A	Lab Control Sample	Total/NA	Water	8015C	419412
LCSD 490-419412/3-A	Lab Control Sample Dup	Total/NA	Water	8015C	419412

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

GC Semi VOA (Continued)

Prep Batch: 419579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145933-1	SJRP-SB19-13-14-03272017	Total/NA	Solid	3550C	
600-145933-2	SJRP-SB19-17-18-03272017	Total/NA	Solid	3550C	
600-145933-3	SJRP-SB10-10-11-03272017	Total/NA	Solid	3550C	
600-145933-4	SJRP-SB10-21-22-03272017	Total/NA	Solid	3550C	
600-145933-5	SJRP-SB10-31-32-03272017	Total/NA	Solid	3550C	
MB 490-419579/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-419579/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 419797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145933-1	SJRP-SB19-13-14-03272017	Total/NA	Solid	8015C	419579
600-145933-2	SJRP-SB19-17-18-03272017	Total/NA	Solid	8015C	419579
600-145933-3	SJRP-SB10-10-11-03272017	Total/NA	Solid	8015C	419579
600-145933-4	SJRP-SB10-21-22-03272017	Total/NA	Solid	8015C	419579
600-145933-5	SJRP-SB10-31-32-03272017	Total/NA	Solid	8015C	419579
MB 490-419579/1-A	Method Blank	Total/NA	Solid	8015C	419579
LCS 490-419579/2-A	Lab Control Sample	Total/NA	Solid	8015C	419579

Metals

Prep Batch: 209811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145933-1	SJRP-SB19-13-14-03272017	Total/NA	Solid	7471A	
600-145933-2	SJRP-SB19-17-18-03272017	Total/NA	Solid	7471A	
600-145933-3	SJRP-SB10-10-11-03272017	Total/NA	Solid	7471A	
600-145933-4	SJRP-SB10-21-22-03272017	Total/NA	Solid	7471A	
600-145933-5	SJRP-SB10-31-32-03272017	Total/NA	Solid	7471A	
MB 600-209811/7-A	Method Blank	Total/NA	Solid	7471A	
LCSSRM 600-209811/8-A ^100	Lab Control Sample	Total/NA	Solid	7471A	

Prep Batch: 209814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145933-6	SJRP-EB-03272017	Total/NA	Water	7470A	
MB 600-209814/7-A	Method Blank	Total/NA	Water	7470A	
LCS 600-209814/8-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 209856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145933-1	SJRP-SB19-13-14-03272017	Total/NA	Solid	7471A	209811
600-145933-2	SJRP-SB19-17-18-03272017	Total/NA	Solid	7471A	209811
600-145933-3	SJRP-SB10-10-11-03272017	Total/NA	Solid	7471A	209811
600-145933-4	SJRP-SB10-21-22-03272017	Total/NA	Solid	7471A	209811
600-145933-5	SJRP-SB10-31-32-03272017	Total/NA	Solid	7471A	209811
MB 600-209811/7-A	Method Blank	Total/NA	Solid	7471A	209811
LCSSRM 600-209811/8-A ^100	Lab Control Sample	Total/NA	Solid	7471A	209811

Analysis Batch: 209866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145933-6	SJRP-EB-03272017	Total/NA	Water	7470A	209814
MB 600-209814/7-A	Method Blank	Total/NA	Water	7470A	209814

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Metals (Continued)

Analysis Batch: 209866 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 600-209814/8-A	Lab Control Sample	Total/NA	Water	7470A	209814

Prep Batch: 210217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145933-6	SJRP-EB-03272017	Total/NA	Water	3010A	
MB 600-210217/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-210217/2-A	Lab Control Sample	Total/NA	Water	3010A	

Prep Batch: 210290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145933-1	SJRP-SB19-13-14-03272017	Total/NA	Solid	3050B	
600-145933-2	SJRP-SB19-17-18-03272017	Total/NA	Solid	3050B	
600-145933-3	SJRP-SB10-10-11-03272017	Total/NA	Solid	3050B	
600-145933-4	SJRP-SB10-21-22-03272017	Total/NA	Solid	3050B	
600-145933-5	SJRP-SB10-31-32-03272017	Total/NA	Solid	3050B	
MB 600-210290/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-210290/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 210401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145933-1	SJRP-SB19-13-14-03272017	Total/NA	Solid	6010B	210290
600-145933-2	SJRP-SB19-17-18-03272017	Total/NA	Solid	6010B	210290
600-145933-3	SJRP-SB10-10-11-03272017	Total/NA	Solid	6010B	210290
600-145933-4	SJRP-SB10-21-22-03272017	Total/NA	Solid	6010B	210290
600-145933-5	SJRP-SB10-31-32-03272017	Total/NA	Solid	6010B	210290
MB 600-210290/1-A	Method Blank	Total/NA	Solid	6010B	210290
LCSSRM 600-210290/2-A	Lab Control Sample	Total/NA	Solid	6010B	210290

Analysis Batch: 210426

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145933-6	SJRP-EB-03272017	Total/NA	Water	6010B	210217
MB 600-210217/1-A	Method Blank	Total/NA	Water	6010B	210217
LCS 600-210217/2-A	Lab Control Sample	Total/NA	Water	6010B	210217

Prep Batch: 210464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145933-6	SJRP-EB-03272017	Total/NA	Water	3010A	
MB 600-210464/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-210464/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 210521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145933-1	SJRP-SB19-13-14-03272017	Total/NA	Solid	6010B	210290
600-145933-2	SJRP-SB19-17-18-03272017	Total/NA	Solid	6010B	210290
600-145933-3	SJRP-SB10-10-11-03272017	Total/NA	Solid	6010B	210290
600-145933-4	SJRP-SB10-21-22-03272017	Total/NA	Solid	6010B	210290
600-145933-5	SJRP-SB10-31-32-03272017	Total/NA	Solid	6010B	210290
600-145933-6	SJRP-EB-03272017	Total/NA	Water	6010B	210464
MB 600-210290/1-A	Method Blank	Total/NA	Solid	6010B	210290
MB 600-210464/1-A	Method Blank	Total/NA	Water	6010B	210464
LCS 600-210464/2-A	Lab Control Sample	Total/NA	Water	6010B	210464

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Metals (Continued)

Analysis Batch: 210521 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSSRM 600-210290/2-A	Lab Control Sample	Total/NA	Solid	6010B	210290

General Chemistry

Analysis Batch: 209757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-145933-1	SJRP-SB19-13-14-03272017	Total/NA	Solid	2540B	
600-145933-2	SJRP-SB19-17-18-03272017	Total/NA	Solid	2540B	
600-145933-3	SJRP-SB10-10-11-03272017	Total/NA	Solid	2540B	
600-145933-4	SJRP-SB10-21-22-03272017	Total/NA	Solid	2540B	
600-145933-5	SJRP-SB10-31-32-03272017	Total/NA	Solid	2540B	

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Client Sample ID: SJRP-SB19-13-14-03272017 — **Lab Sample ID: 600-145933-1**
Date Collected: 03/27/17 12:15 — **Matrix: Solid**
Date Received: 03/30/17 09:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			209757	03/31/17 15:04	B1K	TAL HOU

Client Sample ID: SJRP-SB19-13-14-03272017 — **Lab Sample ID: 600-145933-1**
Date Collected: 03/27/17 12:15 — **Matrix: Solid**
Date Received: 03/30/17 09:43 — **Percent Solids: 88.2**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.067 g	5 mL	209763	03/30/17 13:20	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	209703	03/31/17 18:55	WS1	TAL HOU
Total/NA	Prep	5030B			5.33 g	5.0 mL	419671	04/04/17 13:44	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	420674	04/08/17 00:41	A1B	TAL NSH
Total/NA	Prep	3550C			25.13 g	1.00 mL	419579	04/04/17 10:32	MNM	TAL NSH
Total/NA	Analysis	8015C		1			419797	04/05/17 19:36	A1B	TAL NSH
Total/NA	Prep	3050B			1.02 g	50 mL	210290	04/07/17 14:28	JAH	TAL HOU
Total/NA	Analysis	6010B		1			210521	04/11/17 16:14	DCL	TAL HOU
Total/NA	Prep	3050B			1.02 g	50 mL	210290	04/07/17 14:28	JAH	TAL HOU
Total/NA	Analysis	6010B		1			210401	04/10/17 14:29	DCL	TAL HOU
Total/NA	Prep	7471A			.61 g	50 mL	209811	04/03/17 08:32	DDE	TAL HOU
Total/NA	Analysis	7471A		1			209856	04/03/17 11:06	DDE	TAL HOU

Client Sample ID: SJRP-SB19-17-18-03272017 — **Lab Sample ID: 600-145933-2**
Date Collected: 03/27/17 12:30 — **Matrix: Solid**
Date Received: 03/30/17 09:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			209757	03/31/17 15:04	B1K	TAL HOU

Client Sample ID: SJRP-SB19-17-18-03272017 — **Lab Sample ID: 600-145933-2**
Date Collected: 03/27/17 12:30 — **Matrix: Solid**
Date Received: 03/30/17 09:43 — **Percent Solids: 87.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.667 g	5 mL	209763	03/30/17 13:20	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	209703	03/31/17 19:19	WS1	TAL HOU
Total/NA	Prep	5030B			5.32 g	5.0 mL	419671	04/04/17 13:44	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	420674	04/08/17 01:11	A1B	TAL NSH
Total/NA	Prep	3550C			25.78 g	1.00 mL	419579	04/04/17 10:32	MNM	TAL NSH
Total/NA	Analysis	8015C		1			419797	04/05/17 19:53	A1B	TAL NSH
Total/NA	Prep	3050B			1.05 g	50 mL	210290	04/07/17 14:28	JAH	TAL HOU
Total/NA	Analysis	6010B		1			210521	04/11/17 16:16	DCL	TAL HOU
Total/NA	Prep	3050B			1.05 g	50 mL	210290	04/07/17 14:28	JAH	TAL HOU
Total/NA	Analysis	6010B		1			210401	04/10/17 14:31	DCL	TAL HOU
Total/NA	Prep	7471A			.61 g	50 mL	209811	04/03/17 08:32	DDE	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Client Sample ID: SJRP-SB19-17-18-03272017 — **Lab Sample ID: 600-145933-2**
Date Collected: 03/27/17 12:30 — **Matrix: Solid**
Date Received: 03/30/17 09:43 — **Percent Solids: 87.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1			209856	04/03/17 11:12	DDE	TAL HOU

Client Sample ID: SJRP-SB10-10-11-03272017 — **Lab Sample ID: 600-145933-3**
Date Collected: 03/27/17 14:25 — **Matrix: Solid**
Date Received: 03/30/17 09:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			209757	03/31/17 15:04	B1K	TAL HOU

Client Sample ID: SJRP-SB10-10-11-03272017 — **Lab Sample ID: 600-145933-3**
Date Collected: 03/27/17 14:25 — **Matrix: Solid**
Date Received: 03/30/17 09:43 — **Percent Solids: 77.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.052 g	5 mL	209763	03/30/17 13:20	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	209703	03/31/17 19:44	WS1	TAL HOU
Total/NA	Prep	5030B			5.85 g	5.0 mL	419671	04/04/17 13:44	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	420674	04/08/17 01:41	A1B	TAL NSH
Total/NA	Prep	3550C			25.92 g	1.00 mL	419579	04/04/17 10:32	MNM	TAL NSH
Total/NA	Analysis	8015C		1			419797	04/05/17 20:10	A1B	TAL NSH
Total/NA	Prep	3050B			1.14 g	50 mL	210290	04/07/17 14:28	JAH	TAL HOU
Total/NA	Analysis	6010B		1			210521	04/11/17 16:20	DCL	TAL HOU
Total/NA	Prep	3050B			1.14 g	50 mL	210290	04/07/17 14:28	JAH	TAL HOU
Total/NA	Analysis	6010B		1			210401	04/10/17 14:33	DCL	TAL HOU
Total/NA	Prep	7471A			.60 g	50 mL	209811	04/03/17 08:32	DDE	TAL HOU
Total/NA	Analysis	7471A		1			209856	04/03/17 11:14	DDE	TAL HOU

Client Sample ID: SJRP-SB10-21-22-03272017 — **Lab Sample ID: 600-145933-4**
Date Collected: 03/27/17 14:45 — **Matrix: Solid**
Date Received: 03/30/17 09:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.131 g	5 mL	209860	03/30/17 13:20	KLV	TAL HOU
Total/NA	Analysis	8260B		1	100 uL	5 mL	209850	04/03/17 21:10	KLV	TAL HOU
Total/NA	Analysis	2540B		1			209757	03/31/17 15:04	B1K	TAL HOU

Client Sample ID: SJRP-SB10-21-22-03272017 — **Lab Sample ID: 600-145933-4**
Date Collected: 03/27/17 14:45 — **Matrix: Solid**
Date Received: 03/30/17 09:43 — **Percent Solids: 84.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.88 g	5.0 mL	419671	04/04/17 14:49	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	420674	04/08/17 02:11	A1B	TAL NSH

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			25.06 g	1.00 mL	419579	04/04/17 10:32	MNM	TAL NSH
Total/NA	Analysis	8015C		1			419797	04/05/17 20:28	A1B	TAL NSH
Total/NA	Prep	3050B			1.10 g	50 mL	210290	04/07/17 14:28	JAH	TAL HOU
Total/NA	Analysis	6010B		1			210521	04/11/17 16:22	DCL	TAL HOU
Total/NA	Prep	3050B			1.10 g	50 mL	210290	04/07/17 14:28	JAH	TAL HOU
Total/NA	Analysis	6010B		1			210401	04/10/17 14:35	DCL	TAL HOU
Total/NA	Prep	7471A			.65 g	50 mL	209811	04/03/17 08:32	DDE	TAL HOU
Total/NA	Analysis	7471A		1			209856	04/03/17 11:16	DDE	TAL HOU

Client Sample ID: SJRP-SB10-31-32-03272017

Lab Sample ID: 600-145933-5

Date Collected: 03/27/17 15:15

Matrix: Solid

Date Received: 03/30/17 09:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			209757	03/31/17 15:04	B1K	TAL HOU

Client Sample ID: SJRP-SB10-31-32-03272017

Lab Sample ID: 600-145933-5

Date Collected: 03/27/17 15:15

Matrix: Solid

Date Received: 03/30/17 09:43

Percent Solids: 88.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.099 g	5 mL	209763	03/30/17 13:20	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210004	04/05/17 18:45	WS1	TAL HOU
Total/NA	Prep	5030B			5.07 g	5.0 mL	419671	04/04/17 14:49	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	420674	04/08/17 02:42	A1B	TAL NSH
Total/NA	Prep	3550C			25.37 g	1.00 mL	419579	04/04/17 10:32	MNM	TAL NSH
Total/NA	Analysis	8015C		1			419797	04/05/17 20:45	A1B	TAL NSH
Total/NA	Prep	3050B			1.18 g	50 mL	210290	04/07/17 14:28	JAH	TAL HOU
Total/NA	Analysis	6010B		1			210521	04/11/17 16:28	DCL	TAL HOU
Total/NA	Prep	3050B			1.18 g	50 mL	210290	04/07/17 14:28	JAH	TAL HOU
Total/NA	Analysis	6010B		1			210401	04/10/17 14:37	DCL	TAL HOU
Total/NA	Prep	7471A			.65 g	50 mL	209811	04/03/17 08:32	DDE	TAL HOU
Total/NA	Analysis	7471A		1			209856	04/03/17 11:17	DDE	TAL HOU

Client Sample ID: SJRP-EB-03272017

Lab Sample ID: 600-145933-6

Date Collected: 03/27/17 15:45

Matrix: Water

Date Received: 03/30/17 09:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	209915	04/04/17 13:29	YX1	TAL HOU
Total/NA	Analysis	8015C		1	5 mL	5 mL	420124	04/06/17 17:00	GWM	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	419412	04/03/17 19:42	MRM	TAL NSH
Total/NA	Analysis	8015C		1			419500	04/04/17 15:51	A1B	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	210217	04/06/17 18:40	DCL	TAL HOU
Total/NA	Analysis	6010B		1			210426	04/10/17 18:05	DCL	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	210464	04/11/17 09:05	DCL	TAL HOU
Total/NA	Analysis	6010B		1			210521	04/11/17 18:36	DCL	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Client Sample ID: SJRP-EB-03272017

Lab Sample ID: 600-145933-6

Date Collected: 03/27/17 15:45
Matrix: Water
Date Received: 03/30/17 09:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			40 mL	40 mL	209814	04/03/17 09:19	DDE	TAL HOU
Total/NA	Analysis	7470A		1			209866	04/03/17 14:14	DDE	TAL HOU

Client Sample ID: TRIP BLANK

Lab Sample ID: 600-145933-7

Date Collected: 03/27/17 00:00
Matrix: Water
Date Received: 03/30/17 09:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	209915	04/04/17 13:04	YX1	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Investigation

TestAmerica Job ID: 600-145933-1

Laboratory: TestAmerica Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	16-046-0	08-04-17
Louisiana	NELAP	6	01967	06-30-17
Oklahoma	State Program	6	2015-050	08-31-17
Texas	NELAP	6	T104704223-17-21	10-31-17
USDA	Federal		P330-14-00192	06-06-17

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	A2LA		NA: NELAP & A2LA	12-31-17
A2LA	ISO/IEC 17025		0453.07	12-31-17
Alaska (UST)	State Program	10	UST-087	09-01-17
Arizona	State Program	9	AZ0473	05-05-17
Arkansas DEQ	State Program	6	88-0737	04-25-18
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-17
Florida	NELAP	4	E87358	06-30-17
Georgia	State Program	4	N/A	12-31-17
Illinois	NELAP	5	200010	12-09-17
Iowa	State Program	7	131	04-01-18
Kansas	NELAP	7	E-10229	10-31-17
Kentucky (UST)	State Program	4	19	06-30-17
Kentucky (WW)	State Program	4	90038	12-31-17
Louisiana	NELAP	6	30613	06-30-17
Maine	State Program	1	TN00032	11-03-17
Maryland	State Program	3	316	03-31-18
Massachusetts	State Program	1	M-TN032	06-30-17
Minnesota	NELAP	5	047-999-345	12-31-17
Mississippi	State Program	4	N/A	06-30-17
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-17
New Hampshire	NELAP	1	2963	10-09-17
New Jersey	NELAP	2	TN965	06-30-17
New York	NELAP	2	11342	03-31-18
North Carolina (WW/SW)	State Program	4	387	12-31-17
North Dakota	State Program	8	R-146	06-30-17
Ohio VAP	State Program	5	CL0033	07-10-17
Oklahoma	State Program	6	9412	08-31-17
Oregon	NELAP	10	TN200001	04-27-17 *
Pennsylvania	NELAP	3	68-00585	06-30-17
Rhode Island	State Program	1	LAO00268	12-30-17
South Carolina	State Program	4	84009 (001)	02-18-17 *
South Carolina (Do Not Use - DW)	State Program	4	84009 (002)	12-16-17
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-17
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-17
Virginia	NELAP	3	460152	06-14-17
Washington	State Program	10	C789	07-19-17

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc. TestAmerica Job ID: 600-145933-1
Project/Site: San Juan Site Investigation

Laboratory: TestAmerica Nashville (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
West Virginia DEP	State Program	3	219	02-28-18
Wisconsin	State Program	5	998020430	08-31-17
Wyoming (UST)	A2LA	8	453.07	12-31-17

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica

Client Information	Sampler: Katherine Mouzakis	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-52002-15345.10
Client Contact: Jeffrey Minchak	Phone: 904-386-6573	E-Mail: cathy.upton@testamericainc.com		Page: Page ~~10 of 10~~ 1 of 2
Company: CH2M Hill, Inc.				Job #:
Address: 3721 Rutledge Rd. NE Suite B-1	Due Date Requested:			
City: Albuquerque	TAT Requested (days):			
State, Zip: NM, 87109				
Phone: 281-721-8546(Tel)	PO #: Purchase Order Requested			
Email: Jeffrey.Minchak@ch2m.com	WO #: WD225383			
Project Name: Kinder Morgan Bloomfield, NM San Juan	Project #: 60005961-Analysis group BTEX/GRO/DRO/Metals			
Site: San Juan Site Characterization	SSOW#:			

Analysis Requested

Dallas . Ft Worth

560501

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO - Diesel and Oil Range Organics	8015C_GRO - GRO Range (C6-C10)	6010B, 7471A - NMWQCC List Metals	8260B - 5035 BTEX	Moisture	Waters	6010B, 7470A - NMWQCC List Metals	8260B_LL - BTEX Only	8015C_GRO - GRO Range (C6-C10)	8015C_DRO - Diesel and Oil Range Organics	Total Number of containers	Special Instructions/Note:
Preservation Code:							N	N	N	N	N		D	A	A	N		
SJRP-SB19-13-14-03272017	3/27/2017	1215	G	Solid	N	N	X	X	X	X	X		1				7	Cooler 1 of 2
SJRP-SB19-17-18-03282017	3/27/2017	1230	G	Solid	N	N	X	X	X	X	X						7	
SJRP-SB10-10-11-03272017	3/27/2017	1425	G	Solid	N	N	X	X	X	X	X						7	
SJRP-SB10-21-22-03272017	3/27/2017	1445	G	Solid	N	N	X	X	X	X	X						7	
SJRP-SB10-31-32-03272017	3/27/2017	1515	G	Solid	N	N	X	X	X	X	X						7	
~~SJRP~~-S			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
SJRP-EB-03272017	3/27/2017	1545	G	Water	N	N							X	X	X	X	9	

600-145933 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer th
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ___

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by: Katherine Mouzakis	3/27/2017/1600			3/30/17 943		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

12/7/2020 (Rev. 1)

Loc: 600
145933

TestAmerica Houston

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Receipt Checklist

Date/Time Received: '17 MAR 30 9:43

JOB NUMBER: _____ CLIENT: CHZM

UNPACKED BY: _____ CARRIER/DRIVER: 1

Custody Seal Present: ☒ YES ☐ NO Number of Coolers Received: BW 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Them CF	Corrected Temp (°C)
BW	Y / N	Y / N	1.9	675	-0.2	1.7
BW	Y / N	Y / N	1.9	675	-0.2	0.9
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☒ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☐ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☐ YES ☐ NO

pH paper Lot #_____

VOA headspace acceptable (5-6mm): ☐ YES ☐ NO ☐ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X	

COMMENTS:

3/30/17

FedEx
TRK# 6025 5771 6180
THU – 30 MAR 10:30A
PRIORITY OVERNIGHT
'H LKSA
77040
TX-US IAH

HS-SA-WI-013

Page 202 of 1581

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-26259.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: cathy.upton@testamericainc.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):		Job #: 600-145933-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 4/11/2017			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: San Juan Kinder Morgan Bloomfield, NM	Project #: 60005961			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of containers	Special Instructions/Note:
			Preservation Code:					
SJRP-SB19-13-14-03272017 (600-145933-1)	3/27/17	12:15 Mountain		Solid			2	
SJRP-SB19-17-18-03282017 (600-145933-2)	3/27/17	12:30 Mountain		Solid			2	
SJRP-SB10-10-11-03272017 (600-145933-3)	3/27/17	14:25 Mountain		Solid			2	
SJRP-SB10-21-22-03272017 (600-145933-4)	3/27/17	14:45 Mountain		Solid			2	
SJRP-SB10-31-32-03272017 (600-145933-5)	3/27/17	15:15 Mountain		Solid			2	
SJRP-EB-03272017 (600-145933-6)	3/27/17	15:45 Mountain		Water			5	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:			
Relinquished by:	Date/Time: 3/27/17	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Received by OCD: 11/13/2025 11:14:36 AM

Released to Imaging: 11/14/2025 9:30:04 AM

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

Loc: 600
145933

COOLER RECEIPT FORM

Cooler Received/Opened On 4/1/2017 @ 1000

Time Samples Removed From Cooler 1236 Time Samples Placed In Storage _____ (2 Hour Window)

1. Tracking # 5875 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 14740456 pH Strip Lot N/A Chlorine Strip Lot N/A

2. Temperature of rep. sample or temp blank when opened: 2.5 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES NO NA

6. Were custody papers inside cooler? YES NO NA

I certify that I opened the cooler and answered questions 1-6 (intial) HG

7. Were custody seals on containers: YES NO and Intact YES NO NA

Were these signed and dated correctly? YES NO NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES NO NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES NO NA

12. Did all container labels and tags agree with custody papers? YES NO NA

13a. Were VOA vials received? YES NO NA

b. Was there any observable headspace present in any VOA vial? YES NO NA

14. Was there a Trip Blank in this cooler? YES NO NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (intial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES NO NA

b. Did the bottle labels indicate that the correct preservatives were used YES NO NA

16. Was residual chlorine present? YES NO NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) DA

17. Were custody papers properly filled out (ink, signed, etc)? YES NO NA

18. Did you sign the custody papers in the appropriate place? YES NO NA

19. Were correct containers used for the analysis requested? YES NO NA

20. Was sufficient amount of sample sent in each container? YES NO NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) DA

I certify that I attached a label with the unique LIMS number to each container (intial) DA

21. Were there Non-Conformance issues at login? YES NO Was a NCM generated? YES NO #_____

BIS = Broken in shipment

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc. Job Number: 600-145933-1

Login Number: 145933 **List Source: TestAmerica Houston**
List Number: 1
Creator: Justus, Sherry E

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.7, 0.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Received Trip Blank(s) not listed on COC.
Samples are received within Holding Time (excluding tests with immediate HTs)	False	Refer to Job Narrative for details.
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-145933-1

Login Number: 145933
List Number: 2
Creator: Armstrong, Daniel

List Source: TestAmerica Nashville
List Creation: 04/03/17 03:47 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.5C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-145933-1

Login Number: 145933
List Number: 3
Creator: Armstrong, Daniel

List Source: TestAmerica Nashville
List Creation: 04/03/17 03:57 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.5C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-146022-1
Client Project/Site: San Juan Site Characterization
Revision: 1

For:
CH2M Hill Constructors, Inc.
14701 St. Mary's Lane
Suite 300
Houston, Texas 77079-2923

Attn: Mr. John Ynfante

Steve A Stepanski

Authorized for release by:
12/7/2020 4:10:31 PM
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LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-146022-1
Project/Site: San Juan Site Characterization

Job ID: 600-146022-1

Laboratory: TestAmerica Houston

Narrative

CASE NARRATIVE

Client: CH2M Hill Constructors, Inc.

Project: San Juan Site Characterization

Report Number: 600-146022-1

COMMENTS
This report was revised to a Level 2 deliverable per client's request.

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
Note: All samples that require thermal preservation are considered acceptable if the arrival temperature is within 2°C of the required temperature or method specified range. For samples with a specified temperature of 4°C, samples with a temperature ranging from just above freezing temperature of water to 6°C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

The samples were received on 03/31/2017; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.1 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)-Soil
Samples SJRP-MW12-10-11-03302017 (600-146022-1), SJRP-MW12-16-17-03302017 (600-146022-2) and SJRP-MW12-16-17-03302017 DUP (600-146022-3) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were prepared on 03/31/2017 and analyzed on 04/06/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GC-MS)-Water
Sample TRIP BLANK (600-146022-4) was analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/06/2017.

1,2-Dichloroethane-d4 (Surr) and 4-Bromofluorobenzene failed the surrogate recovery criteria high for TRIP BLANK (600-146022-4). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GASOLINE RANGE ORGANICS (GRO)

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-146022-1
Project/Site: San Juan Site Characterization

Job ID: 600-146022-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

Samples SJRP-MW12-10-11-03302017 (600-146022-1), SJRP-MW12-16-17-03302017 (600-146022-2) and SJRP-MW12-16-17-03302017 DUP (600-146022-3) were analyzed for gasoline range organics (GRO) in accordance with EPA SW-846 Method 8015C - GRO. The samples were analyzed on 04/11/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DIESEL RANGE ORGANICS (DRO)

Samples SJRP-MW12-10-11-03302017 (600-146022-1), SJRP-MW12-16-17-03302017 (600-146022-2) and SJRP-MW12-16-17-03302017 DUP (600-146022-3) were analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 04/06/2017 and analyzed on 04/07/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)

Samples SJRP-MW12-10-11-03302017 (600-146022-1), SJRP-MW12-16-17-03302017 (600-146022-2) and SJRP-MW12-16-17-03302017 DUP (600-146022-3) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 04/07/2017 and analyzed on 04/10/2017 and 04/11/2017.

Iron was detected in method blank MB 600-210290/1-A at a level exceeding the reporting limit. Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Several analytes were detected in method blank MB 600-210290/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

Due to the high concentration of target analytes, sample SJRP-MW12-16-17-03302017 DUPMS (600-146022-3MS) could not be evaluated for accuracy. The associated laboratory control sample (LCS) met acceptance criteria.

Refer to the QC report for details.

Boron and Cobalt exceeded the RPD limit for the duplicate of sample SJRP-MW12-16-17-03302017 DUPDU (600-146022-3).

Refer to the QC report for details.

The post digestion spike recovery in sample 600-146022-C-3-B PDS associated with batch 210401 was outside of control limits for Manganese (73%).

The serial dilution performed for the following sample associated with batch 210401 was outside control limits for Barium at 13% recovery: (600-146022-C-3-B SD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY

Samples SJRP-MW12-10-11-03302017 (600-146022-1), SJRP-MW12-16-17-03302017 (600-146022-2) and SJRP-MW12-16-17-03302017 DUP (600-146022-3) were analyzed for total mercury in accordance with EPA SW-846 Method 7471A. The samples were prepared on 04/04/2017 and analyzed on 04/05/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PERCENT SOLIDS

Samples SJRP-MW12-10-11-03302017 (600-146022-1), SJRP-MW12-16-17-03302017 (600-146022-2) and SJRP-MW12-16-17-03302017 DUP (600-146022-3) were analyzed for percent solids in accordance with EPA SW846 Method 3550C. The samples were analyzed on 04/03/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146022-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL NSH
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL NSH
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU

Protocol References:

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146022-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-146022-1	SJRP-MW12-10-11-03302017	Solid	03/30/17 08:30	03/31/17 09:47
600-146022-2	SJRP-MW12-16-17-03302017	Solid	03/30/17 08:45	03/31/17 09:47
600-146022-3	SJRP-MW12-16-17-03302017 DUP	Solid	03/30/17 08:45	03/31/17 09:47
600-146022-4	TRIP BLANK	Water	03/30/17 00:00	03/31/17 09:47

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146022-1

Client Sample ID: SJRP-MW12-10-11-03302017 **Lab Sample ID: 600-146022-1**
Date Collected: 03/30/17 08:30 **Matrix: Solid**
Date Received: 03/31/17 09:47 **Percent Solids: 86.4**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000605	U	0.00480	0.000605	mg/Kg	☼	03/31/17 17:00	04/06/17 12:25	1
Ethylbenzene	0.000979	U	0.00480	0.000979	mg/Kg	☼	03/31/17 17:00	04/06/17 12:25	1
Toluene	0.00133	U	0.00480	0.00133	mg/Kg	☼	03/31/17 17:00	04/06/17 12:25	1
Xylenes, Total	0.00109	U	0.00480	0.00109	mg/Kg	☼	03/31/17 17:00	04/06/17 12:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*61 - 130*	*03/31/17 17:00*	*04/06/17 12:25*	*1*
Dibromofluoromethane	*94*		*68 - 140*	*03/31/17 17:00*	*04/06/17 12:25*	*1*
Toluene-d8 (Surr)	*99*		*50 - 130*	*03/31/17 17:00*	*04/06/17 12:25*	*1*
4-Bromofluorobenzene	*105*		*57 - 140*	*03/31/17 17:00*	*04/06/17 12:25*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.42	U	4.84	2.42	mg/Kg		04/07/17 08:58	04/11/17 18:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*65*		*50 - 150*	*04/07/17 08:58*	*04/11/17 18:24*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.85	U	5.69	2.85	mg/Kg	☼	04/06/17 10:25	04/07/17 13:56	1
ORO C24-C40	2.85	U	5.69	2.85	mg/Kg	☼	04/06/17 10:25	04/07/17 13:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*79*		*50 - 150*	*04/06/17 10:25*	*04/07/17 13:56*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**10300**	**B**	26.1	0.313	mg/Kg	☼	04/07/17 14:28	04/11/17 16:36	1
Arsenic	**1.97**		1.04	0.227	mg/Kg	☼	04/07/17 14:28	04/10/17 14:43	1
Barium	**27.0**	**B**	1.04	0.0313	mg/Kg	☼	04/07/17 14:28	04/10/17 14:43	1
Boron	**0.610**	**J**	20.9	0.402	mg/Kg	☼	04/07/17 14:28	04/10/17 14:43	1
Cadmium	0.0267	U	0.261	0.0267	mg/Kg	☼	04/07/17 14:28	04/10/17 14:43	1
Calcium	**1920**	**B**	104	0.901	mg/Kg	☼	04/07/17 14:28	04/10/17 14:43	1
Chromium	**6.83**	**B**	0.521	0.0528	mg/Kg	☼	04/07/17 14:28	04/10/17 14:43	1
Cobalt	**5.85**		0.521	0.0705	mg/Kg	☼	04/07/17 14:28	04/10/17 14:43	1
Iron	**16700**	**B**	20.9	2.64	mg/Kg	☼	04/07/17 14:28	04/10/17 14:43	1
Lead	**16.8**		0.521	0.109	mg/Kg	☼	04/07/17 14:28	04/10/17 14:43	1
Magnesium	**3570**	**B**	104	2.00	mg/Kg	☼	04/07/17 14:28	04/10/17 14:43	1
Manganese	**59.7**	**B**	1.56	0.0397	mg/Kg	☼	04/07/17 14:28	04/10/17 14:43	1
Molybdenum	**0.391**	**J B**	0.521	0.142	mg/Kg	☼	04/07/17 14:28	04/10/17 14:43	1
Nickel	**13.6**	**B**	1.04	0.122	mg/Kg	☼	04/07/17 14:28	04/10/17 14:43	1
Potassium	**1300**		104	11.5	mg/Kg	☼	04/07/17 14:28	04/10/17 14:43	1
Selenium	0.270	U	2.09	0.270	mg/Kg	☼	04/07/17 14:28	04/10/17 14:43	1
Sodium	**4660**	**B**	104	0.924	mg/Kg	☼	04/07/17 14:28	04/10/17 14:43	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0269**		0.0182	0.00382	mg/Kg	☼	04/04/17 09:06	04/05/17 08:31	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146022-1

Client Sample ID: SJRP-MW12-10-11-03302017

Lab Sample ID: 600-146022-1
Date Collected: 03/30/17 08:30
Matrix: Solid
Date Received: 03/31/17 09:47
Percent Solids: 86.4

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**13.6**		1.0	1.0	%			04/03/17 15:53	1
Percent Solids	**86.4**		1.0	1.0	%			04/03/17 15:53	1

Client Sample ID: SJRP-MW12-16-17-03302017

Lab Sample ID: 600-146022-2
Date Collected: 03/30/17 08:45
Matrix: Solid
Date Received: 03/31/17 09:47
Percent Solids: 86.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000690	U	0.00548	0.000690	mg/Kg	☼	03/31/17 17:00	04/06/17 12:49	1
Ethylbenzene	0.00112	U	0.00548	0.00112	mg/Kg	☼	03/31/17 17:00	04/06/17 12:49	1
Toluene	0.00151	U	0.00548	0.00151	mg/Kg	☼	03/31/17 17:00	04/06/17 12:49	1
Xylenes, Total	0.00124	U	0.00548	0.00124	mg/Kg	☼	03/31/17 17:00	04/06/17 12:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*61 - 130*	*03/31/17 17:00*	*04/06/17 12:49*	*1*
Dibromofluoromethane	*92*		*68 - 140*	*03/31/17 17:00*	*04/06/17 12:49*	*1*
Toluene-d8 (Surr)	*95*		*50 - 130*	*03/31/17 17:00*	*04/06/17 12:49*	*1*
4-Bromofluorobenzene	*105*		*57 - 140*	*03/31/17 17:00*	*04/06/17 12:49*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.45	U	4.89	2.45	mg/Kg		04/07/17 08:58	04/11/17 18:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*66*		*50 - 150*	*04/07/17 08:58*	*04/11/17 18:55*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**10.2**		5.68	2.84	mg/Kg	☼	04/06/17 10:25	04/07/17 14:13	1
ORO C24-C40	**5.71**		5.68	2.84	mg/Kg	☼	04/06/17 10:25	04/07/17 14:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*103*		*50 - 150*	*04/06/17 10:25*	*04/07/17 14:13*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**12400**	**B**	26.7	0.320	mg/Kg	☼	04/07/17 14:28	04/11/17 16:38	1
Arsenic	**1.61**		1.07	0.233	mg/Kg	☼	04/07/17 14:28	04/10/17 14:45	1
Barium	**51.9**	**B**	1.07	0.0320	mg/Kg	☼	04/07/17 14:28	04/10/17 14:45	1
Boron	**1.03**	**J**	21.3	0.412	mg/Kg	☼	04/07/17 14:28	04/10/17 14:45	1
Cadmium	0.0273	U	0.267	0.0273	mg/Kg	☼	04/07/17 14:28	04/10/17 14:45	1
Calcium	**4110**	**B**	107	0.922	mg/Kg	☼	04/07/17 14:28	04/10/17 14:45	1
Chromium	**8.29**	**B**	0.534	0.0540	mg/Kg	☼	04/07/17 14:28	04/10/17 14:45	1
Cobalt	**9.67**		0.534	0.0721	mg/Kg	☼	04/07/17 14:28	04/10/17 14:45	1
Iron	**23600**	**B**	21.3	2.70	mg/Kg	☼	04/07/17 14:28	04/10/17 14:45	1
Lead	**11.8**		0.534	0.112	mg/Kg	☼	04/07/17 14:28	04/10/17 14:45	1
Magnesium	**4120**	**B**	107	2.05	mg/Kg	☼	04/07/17 14:28	04/10/17 14:45	1
Manganese	**154**	**B**	1.60	0.0407	mg/Kg	☼	04/07/17 14:28	04/10/17 14:45	1
Molybdenum	**0.491**	**J B**	0.534	0.145	mg/Kg	☼	04/07/17 14:28	04/10/17 14:45	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146022-1

Client Sample ID: SJRP-MW12-16-17-03302017

Lab Sample ID: 600-146022-2
Date Collected: 03/30/17 08:45
Matrix: Solid
Date Received: 03/31/17 09:47
Percent Solids: 86.8

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	15.9	B	1.07	0.125	mg/Kg	☼	04/07/17 14:28	04/10/17 14:45	1
Potassium	1280		107	11.7	mg/Kg	☼	04/07/17 14:28	04/10/17 14:45	1
Selenium	0.276	U	2.13	0.276	mg/Kg	☼	04/07/17 14:28	04/10/17 14:45	1
Sodium	3050	B	107	0.945	mg/Kg	☼	04/07/17 14:28	04/10/17 14:45	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00601	J	0.0184	0.00387	mg/Kg	☼	04/04/17 09:06	04/05/17 08:33	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	13.2		1.0	1.0	%			04/03/17 15:53	1
Percent Solids	86.8		1.0	1.0	%			04/03/17 15:53	1

Client Sample ID: SJRP-MW12-16-17-03302017 DUP

Lab Sample ID: 600-146022-3
Date Collected: 03/30/17 08:45
Matrix: Solid
Date Received: 03/31/17 09:47
Percent Solids: 87.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000652	U	0.00518	0.000652	mg/Kg	☼	03/31/17 17:00	04/06/17 13:14	1
Ethylbenzene	0.00106	U	0.00518	0.00106	mg/Kg	☼	03/31/17 17:00	04/06/17 13:14	1
Toluene	0.00143	U	0.00518	0.00143	mg/Kg	☼	03/31/17 17:00	04/06/17 13:14	1
Xylenes, Total	0.00117	U	0.00518	0.00117	mg/Kg	☼	03/31/17 17:00	04/06/17 13:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*61 - 130*	*03/31/17 17:00*	*04/06/17 13:14*	*1*
Dibromofluoromethane	*92*		*68 - 140*	*03/31/17 17:00*	*04/06/17 13:14*	*1*
Toluene-d8 (Surr)	*96*		*50 - 130*	*03/31/17 17:00*	*04/06/17 13:14*	*1*
4-Bromofluorobenzene	*104*		*57 - 140*	*03/31/17 17:00*	*04/06/17 13:14*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.46	U	4.92	2.46	mg/Kg		04/07/17 08:58	04/11/17 19:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*71*		*50 - 150*	*04/07/17 08:58*	*04/11/17 19:25*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	7.11		5.51	2.76	mg/Kg	☼	04/06/17 10:25	04/07/17 14:30	1
ORO C24-C40	3.41	J	5.51	2.76	mg/Kg	☼	04/06/17 10:25	04/07/17 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*99*		*50 - 150*	*04/06/17 10:25*	*04/07/17 14:30*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	12300	B	26.3	0.315	mg/Kg	☼	04/07/17 14:28	04/11/17 16:40	1
Arsenic	1.47		1.05	0.229	mg/Kg	☼	04/07/17 14:28	04/10/17 14:47	1
Barium	53.1	B	1.05	0.0315	mg/Kg	☼	04/07/17 14:28	04/10/17 14:47	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146022-1

Client Sample ID: SJRP-MW12-16-17-03302017 DUP

Lab Sample ID: 600-146022-3
Date Collected: 03/30/17 08:45
Matrix: Solid
Date Received: 03/31/17 09:47
Percent Solids: 87.4

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.956	J F1	21.0	0.405	mg/Kg	☼	04/07/17 14:28	04/10/17 14:47	1
Cadmium	0.0269	U	0.263	0.0269	mg/Kg	☼	04/07/17 14:28	04/10/17 14:47	1
Calcium	4240	B	105	0.907	mg/Kg	☼	04/07/17 14:28	04/10/17 14:47	1
Chromium	8.28	B	0.525	0.0531	mg/Kg	☼	04/07/17 14:28	04/10/17 14:47	1
Cobalt	8.08		0.525	0.0710	mg/Kg	☼	04/07/17 14:28	04/10/17 14:47	1
Iron	23200	B	21.0	2.66	mg/Kg	☼	04/07/17 14:28	04/10/17 14:47	1
Lead	12.4		0.525	0.110	mg/Kg	☼	04/07/17 14:28	04/10/17 14:47	1
Magnesium	4200	B	105	2.02	mg/Kg	☼	04/07/17 14:28	04/10/17 14:47	1
Manganese	124	B F1	1.58	0.0400	mg/Kg	☼	04/07/17 14:28	04/10/17 14:47	1
Molybdenum	0.410	J B	0.525	0.143	mg/Kg	☼	04/07/17 14:28	04/10/17 14:47	1
Nickel	13.6	B	1.05	0.123	mg/Kg	☼	04/07/17 14:28	04/10/17 14:47	1
Potassium	1350		105	11.6	mg/Kg	☼	04/07/17 14:28	04/10/17 14:47	1
Selenium	0.272	U	2.10	0.272	mg/Kg	☼	04/07/17 14:28	04/10/17 14:47	1
Sodium	2980	B	105	0.931	mg/Kg	☼	04/07/17 14:28	04/10/17 14:47	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00410	U	0.0195	0.00410	mg/Kg	☼	04/04/17 09:06	04/05/17 08:35	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.6		1.0	1.0	%			04/03/17 15:53	1
Percent Solids	87.4		1.0	1.0	%			04/03/17 15:53	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 600-146022-4
Date Collected: 03/30/17 00:00
Matrix: Water
Date Received: 03/31/17 09:47

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/06/17 19:48	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/06/17 19:48	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/06/17 19:48	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/06/17 19:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*136*	*X*	*50 - 134*		*04/06/17 19:48*	*1*
Dibromofluoromethane	*104*		*62 - 130*		*04/06/17 19:48*	*1*
Toluene-d8 (Surr)	*89*		*70 - 130*		*04/06/17 19:48*	*1*
4-Bromofluorobenzene	*143*	*X*	*67 - 139*		*04/06/17 19:48*	*1*

Definitions/Glossary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146022-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
F3	Duplicate RPD exceeds the control limit
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146022-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	12DCE (61-130)	DBFM (68-140)	TOL (50-130)	BFB (57-140)
600-146022-1	SJRP-MW12-10-11-03302017	95	94	99	105
600-146022-2	SJRP-MW12-16-17-03302017	93	92	95	105
600-146022-3	SJRP-MW12-16-17-03302017 DUP	96	92	96	104
LCS 600-210118/3	Lab Control Sample	97	100	104	111
LCSD 600-210118/4	Lab Control Sample Dup	90	100	106	113
MB 600-210118/6	Method Blank	107	96	97	102

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	12DCE (50-134)	DBFM (62-130)	TOL (70-130)	BFB (67-139)
600-146022-4	TRIP BLANK	136 X	104	89	143 X
LCS 600-210159/3	Lab Control Sample	119	98	89	136
LCSD 600-210159/4	Lab Control Sample Dup	123	99	87	134
MB 600-210159/6	Method Blank	123	99	90	139

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	TFT2 (50-150)
600-146022-1	SJRP-MW12-10-11-03302017	65
600-146022-2	SJRP-MW12-16-17-03302017	66
600-146022-3	SJRP-MW12-16-17-03302017 DUP	71
LCS 490-420503/2-A	Lab Control Sample	83
LCS 490-420919/2-A	Lab Control Sample	87
LCSD 490-420503/3-A	Lab Control Sample Dup	74
LCSD 490-420919/3-A	Lab Control Sample Dup	87
MB 490-420503/1-A	Method Blank	72
MB 490-420503/1-A	Method Blank	77
MB 490-420919/1-A	Method Blank	71

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146022-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	OTPH1 (50-150)								
600-146022-1	SJRP-MW12-10-11-03302017	79								
600-146022-2	SJRP-MW12-16-17-03302017	103								
600-146022-3	SJRP-MW12-16-17-03302017 DUP	99								
LCS 490-420223/2-A	Lab Control Sample	99								
LCSD 490-420223/3-A	Lab Control Sample Dup	99								
MB 490-420223/1-A	Method Blank	93								

Surrogate Legend

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146022-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-210118/6
Matrix: Solid
Analysis Batch: 210118

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			04/06/17 11:09	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			04/06/17 11:09	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			04/06/17 11:09	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			04/06/17 11:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*61 - 130*		*04/06/17 11:09*	*1*
Dibromofluoromethane	*96*		*68 - 140*		*04/06/17 11:09*	*1*
Toluene-d8 (Surr)	*97*		*50 - 130*		*04/06/17 11:09*	*1*
4-Bromofluorobenzene	*102*		*57 - 140*		*04/06/17 11:09*	*1*

Lab Sample ID: LCS 600-210118/3
Matrix: Solid
Analysis Batch: 210118

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.04274		mg/Kg		85	70 - 131		
Ethylbenzene			0.0500	0.04203		mg/Kg		84	66 - 130		
Toluene			0.0500	0.04177		mg/Kg		84	67 - 130		
Xylenes, Total			0.100	0.08287		mg/Kg		83	63 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*61 - 130*
Dibromofluoromethane	*100*		*68 - 140*
Toluene-d8 (Surr)	*104*		*50 - 130*
4-Bromofluorobenzene	*111*		*57 - 140*

Lab Sample ID: LCSD 600-210118/4
Matrix: Solid
Analysis Batch: 210118

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.04799		mg/Kg		96	70 - 131	12	30
Ethylbenzene			0.0500	0.04933		mg/Kg		99	66 - 130	16	30
Toluene			0.0500	0.05014		mg/Kg		100	67 - 130	18	30
Xylenes, Total			0.100	0.09876		mg/Kg		99	63 - 130	17	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*61 - 130*
Dibromofluoromethane	*100*		*68 - 140*
Toluene-d8 (Surr)	*106*		*50 - 130*
4-Bromofluorobenzene	*113*		*57 - 140*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146022-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-210159/6
Matrix: Water
Analysis Batch: 210159

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/06/17 15:29	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/06/17 15:29	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/06/17 15:29	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/06/17 15:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*123*		*50 - 134*		*04/06/17 15:29*	*1*
Dibromofluoromethane	*99*		*62 - 130*		*04/06/17 15:29*	*1*
Toluene-d8 (Surr)	*90*		*70 - 130*		*04/06/17 15:29*	*1*
4-Bromofluorobenzene	*139*		*67 - 139*		*04/06/17 15:29*	*1*

Lab Sample ID: LCS 600-210159/3
Matrix: Water
Analysis Batch: 210159

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0100	0.009604		mg/L		96	70 - 130		
Ethylbenzene			0.0100	0.008191		mg/L		82	70 - 130		
Toluene			0.0100	0.008339		mg/L		83	70 - 130		
Xylenes, Total			0.0200	0.01728		mg/L		86	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*119*		*50 - 134*
Dibromofluoromethane	*98*		*62 - 130*
Toluene-d8 (Surr)	*89*		*70 - 130*
4-Bromofluorobenzene	*136*		*67 - 139*

Lab Sample ID: LCSD 600-210159/4
Matrix: Water
Analysis Batch: 210159

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0100	0.009613		mg/L		96	70 - 130	0	20
Ethylbenzene			0.0100	0.008007		mg/L		80	70 - 130	2	20
Toluene			0.0100	0.008175		mg/L		82	70 - 130	2	20
Xylenes, Total			0.0200	0.01696		mg/L		85	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*123*		*50 - 134*
Dibromofluoromethane	*99*		*62 - 130*
Toluene-d8 (Surr)	*87*		*70 - 130*
4-Bromofluorobenzene	*134*		*67 - 139*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146022-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 490-420503/1-A
Matrix: Solid
Analysis Batch: 421012

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 420503

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		04/07/17 08:45	04/10/17 13:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*77*		*50 - 150*	*04/07/17 08:45*	*04/10/17 13:17*	*1*

Lab Sample ID: MB 490-420503/1-A
Matrix: Solid
Analysis Batch: 421012

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 420503

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		04/07/17 08:45	04/11/17 11:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*72*		*50 - 150*	*04/07/17 08:45*	*04/11/17 11:16*	*1*

Lab Sample ID: LCS 490-420503/2-A
Matrix: Solid
Analysis Batch: 421012

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 420503

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C6-C10			500	383.5		mg/Kg		77	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*83*		*50 - 150*

Lab Sample ID: LCSD 490-420503/3-A
Matrix: Solid
Analysis Batch: 421012

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 420503

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10			500	347.6		mg/Kg		70	70 - 130	10	21

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*74*		*50 - 150*

Lab Sample ID: MB 490-420919/1-A
Matrix: Solid
Analysis Batch: 421012

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 420919

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		04/09/17 20:42	04/11/17 10:45	1

TestAmerica Houston

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146022-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: MB 490-420919/1-A
Matrix: Solid
Analysis Batch: 421012

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 420919

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	*71*		*50 - 150*	*04/09/17 20:42*	*04/11/17 10:45*	*1*

Lab Sample ID: LCS 490-420919/2-A
Matrix: Solid
Analysis Batch: 421012

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 420919

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	500	537.4		mg/Kg		107	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	*87*		*50 - 150*

Lab Sample ID: LCSD 490-420919/3-A
Matrix: Solid
Analysis Batch: 421012

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 420919

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	500	492.3		mg/Kg		98	70 - 130	9	21

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	*87*		*50 - 150*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Lab Sample ID: MB 490-420223/1-A
Matrix: Solid
Analysis Batch: 420477

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 420223

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.50	U	5.00	2.50	mg/Kg		04/06/17 10:25	04/07/17 10:04	1
ORO C24-C40	2.50	U	5.00	2.50	mg/Kg		04/06/17 10:25	04/07/17 10:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	*93*		*50 - 150*	*04/06/17 10:25*	*04/07/17 10:04*	*1*

Lab Sample ID: LCS 490-420223/2-A
Matrix: Solid
Analysis Batch: 420477

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 420223

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	40.0	33.41		mg/Kg		84	54 - 130

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146022-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Lab Sample ID: LCS 490-420223/2-A
Matrix: Solid
Analysis Batch: 420477

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 420223

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	99		50 - 150

Lab Sample ID: LCSD 490-420223/3-A
Matrix: Solid
Analysis Batch: 420477

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 420223

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			40.0	33.20		mg/Kg		83	54 - 130	1	47

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o-Terphenyl (Surr)	99		50 - 150

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-210290/1-A
Matrix: Solid
Analysis Batch: 210401

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210290

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.218	U	1.00	0.218	mg/Kg		04/07/17 14:28	04/10/17 14:05	1
Barium	0.6450	J	1.00	0.0300	mg/Kg		04/07/17 14:28	04/10/17 14:05	1
Boron	0.386	U	20.0	0.386	mg/Kg		04/07/17 14:28	04/10/17 14:05	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		04/07/17 14:28	04/10/17 14:05	1
Calcium	10.60	J	100	0.864	mg/Kg		04/07/17 14:28	04/10/17 14:05	1
Chromium	0.1150	J	0.500	0.0506	mg/Kg		04/07/17 14:28	04/10/17 14:05	1
Cobalt	0.0676	U	0.500	0.0676	mg/Kg		04/07/17 14:28	04/10/17 14:05	1
Iron	77.75		20.0	2.53	mg/Kg		04/07/17 14:28	04/10/17 14:05	1
Lead	0.105	U	0.500	0.105	mg/Kg		04/07/17 14:28	04/10/17 14:05	1
Magnesium	17.59	J	100	1.92	mg/Kg		04/07/17 14:28	04/10/17 14:05	1
Manganese	0.5350	J	1.50	0.0381	mg/Kg		04/07/17 14:28	04/10/17 14:05	1
Molybdenum	0.1950	J	0.500	0.136	mg/Kg		04/07/17 14:28	04/10/17 14:05	1
Nickel	0.1450	J	1.00	0.117	mg/Kg		04/07/17 14:28	04/10/17 14:05	1
Potassium	11.0	U	100	11.0	mg/Kg		04/07/17 14:28	04/10/17 14:05	1
Selenium	0.259	U	2.00	0.259	mg/Kg		04/07/17 14:28	04/10/17 14:05	1
Sodium	29.62	J	100	0.886	mg/Kg		04/07/17 14:28	04/10/17 14:05	1

Lab Sample ID: MB 600-210290/1-A
Matrix: Solid
Analysis Batch: 210521

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210290

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	1.725	J	25.0	0.300	mg/Kg		04/07/17 14:28	04/11/17 16:10	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146022-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-210290/2-A
Matrix: Solid
Analysis Batch: 210401

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210290

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	97.5	97.25		mg/Kg		99.7	69.2 - 145.6
Barium	306	280.8		mg/Kg		91.8	82.7 - 117.0
Boron	116	110.3		mg/Kg		95.1	73.0 - 127.6
Cadmium	76.6	78.26		mg/Kg		102.2	73.2 - 126.8
Calcium	5880	5754		mg/Kg		97.9	81.8 - 118.4
Chromium	103	91.50		mg/Kg		88.8	79.7 - 121.4
Cobalt	103	109.6		mg/Kg		106.4	83.3 - 116.5
Iron	14500	13480		mg/Kg		92.9	45.0 - 155.9
Lead	96.7	97.08		mg/Kg		100.4	81.7 - 117.9
Magnesium	2680	2508		mg/Kg		93.6	75.4 - 124.6
Manganese	400	355.2		mg/Kg		88.8	81.0 - 119.0
Molybdenum	94.9	94.17		mg/Kg		99.2	78.5 - 121.2
Nickel	153	160.9		mg/Kg		105.2	73.2 - 126.8
Potassium	2230	2034		mg/Kg		91.2	69.5 - 130.5
Selenium	161	162.1		mg/Kg		100.7	77.6 - 123.0
Sodium	370	331.9		mg/Kg		89.7	70.5 - 129.7

Lab Sample ID: LCSSRM 600-210290/2-A
Matrix: Solid
Analysis Batch: 210521

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210290

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	7590	6133		mg/Kg		80.8	34.9 - 151.5

Lab Sample ID: 600-146022-3 MS
Matrix: Solid
Analysis Batch: 210401

Client Sample ID: SJRP-MW12-16-17-03302017 DUP
Prep Type: Total/NA
Prep Batch: 210290

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.47		48.5	47.30		mg/Kg	☼	94	75 - 125
Barium	53.1	B	48.5	93.18		mg/Kg	☼	83	75 - 125
Boron	0.956	J F1	48.5	28.09	F1	mg/Kg	☼	56	75 - 125
Cadmium	0.0269	U	24.3	23.39		mg/Kg	☼	96	75 - 125
Calcium	4240	B	485	4632	4	mg/Kg	☼	80	75 - 125
Chromium	8.28	B	48.5	52.44		mg/Kg	☼	91	75 - 125
Cobalt	8.08		48.5	59.37		mg/Kg	☼	106	75 - 125

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146022-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-146022-3 MS — **Client Sample ID: SJRP-MW12-16-17-03302017 DUP**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 210401 — **Prep Batch: 210290**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	23200	B	485	24940	4	mg/Kg	☼	367	75 - 125
Lead	12.4		48.5	61.60		mg/Kg	☼	101	75 - 125
Magnesium	4200	B	485	4667	4	mg/Kg	☼	97	75 - 125
Manganese	124	B F1	48.5	211.7	F1	mg/Kg	☼	180	75 - 125
Molybdenum	0.410	J B	48.5	38.93		mg/Kg	☼	79	75 - 125
Nickel	13.6	B	48.5	65.39		mg/Kg	☼	107	75 - 125
Potassium	1350		485	1738		mg/Kg	☼	80	75 - 125
Selenium	0.272	U	48.5	44.22		mg/Kg	☼	91	75 - 125
Sodium	2980	B	485	3378	4	mg/Kg	☼	81	75 - 125

Lab Sample ID: 600-146022-3 MS — **Client Sample ID: SJRP-MW12-16-17-03302017 DUP**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 210521 — **Prep Batch: 210290**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	12300	B	485	14440	4	mg/Kg	☼	433	75 - 125

Lab Sample ID: 600-146022-3 DU — **Client Sample ID: SJRP-MW12-16-17-03302017 DUP**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 210401 — **Prep Batch: 210290**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	1.47		1.695		mg/Kg	☼	14	20
Barium	53.1	B	53.94		mg/Kg	☼	2	20
Boron	0.956	J F1	0.6678	J F5	mg/Kg	☼	35	20
Cadmium	0.0269	U	0.0287	U	mg/Kg	☼	NC	20
Calcium	4240	B	4308		mg/Kg	☼	2	20
Chromium	8.28	B	7.452		mg/Kg	☼	10	20
Cobalt	8.08		12.05	F3	mg/Kg	☼	40	20
Iron	23200	B	23520		mg/Kg	☼	2	20
Lead	12.4		12.24		mg/Kg	☼	1	20
Magnesium	4200	B	4186		mg/Kg	☼	0.2	20
Manganese	124	B F1	138.0		mg/Kg	☼	11	20
Molybdenum	0.410	J B	0.4097	J	mg/Kg	☼	0	20
Nickel	13.6	B	13.19		mg/Kg	☼	3	20
Potassium	1350		1327		mg/Kg	☼	2	20
Selenium	0.272	U	0.291	U	mg/Kg	☼	NC	20
Sodium	2980	B	3052		mg/Kg	☼	2	20

Lab Sample ID: 600-146022-3 DU — **Client Sample ID: SJRP-MW12-16-17-03302017 DUP**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 210521 — **Prep Batch: 210290**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	12300	B	12130		mg/Kg	☼	2	20

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146022-1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-209909/7-A
Matrix: Solid
Analysis Batch: 210015

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 209909

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00336	U	0.0159	0.00336	mg/Kg		04/04/17 09:06	04/05/17 08:26	1

Lab Sample ID: LCSSRM 600-209909/8-A ^100
Matrix: Solid
Analysis Batch: 210015

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 209909

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	20.2	24.37		mg/Kg		120.6	70.8 - 129.2

Method: 2540B - Percent Moisture

Lab Sample ID: 600-146022-1 DU
Matrix: Solid
Analysis Batch: 209873

Client Sample ID: SJRP-MW12-10-11-03302017
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	13.6		14.5		%			20
Percent Solids	86.4		85.5		%			20

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146022-1

GC/MS VOA

Prep Batch: 209861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146022-1	SJRP-MW12-10-11-03302017	Total/NA	Solid	5035	
600-146022-2	SJRP-MW12-16-17-03302017	Total/NA	Solid	5035	
600-146022-3	SJRP-MW12-16-17-03302017 DUP	Total/NA	Solid	5035	

Analysis Batch: 210118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146022-1	SJRP-MW12-10-11-03302017	Total/NA	Solid	8260B	209861
600-146022-2	SJRP-MW12-16-17-03302017	Total/NA	Solid	8260B	209861
600-146022-3	SJRP-MW12-16-17-03302017 DUP	Total/NA	Solid	8260B	209861
MB 600-210118/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-210118/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-210118/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 210159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146022-4	TRIP BLANK	Total/NA	Water	8260B	
MB 600-210159/6	Method Blank	Total/NA	Water	8260B	
LCS 600-210159/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-210159/4	Lab Control Sample Dup	Total/NA	Water	8260B	

GC VOA

Prep Batch: 420503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146022-1	SJRP-MW12-10-11-03302017	Total/NA	Solid	5030B	
600-146022-2	SJRP-MW12-16-17-03302017	Total/NA	Solid	5030B	
600-146022-3	SJRP-MW12-16-17-03302017 DUP	Total/NA	Solid	5030B	
MB 490-420503/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 490-420503/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 490-420503/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Prep Batch: 420919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-420919/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 490-420919/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 490-420919/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 421012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146022-1	SJRP-MW12-10-11-03302017	Total/NA	Solid	8015C	420503
600-146022-2	SJRP-MW12-16-17-03302017	Total/NA	Solid	8015C	420503
600-146022-3	SJRP-MW12-16-17-03302017 DUP	Total/NA	Solid	8015C	420503
MB 490-420503/1-A	Method Blank	Total/NA	Solid	8015C	420503
MB 490-420503/1-A	Method Blank	Total/NA	Solid	8015C	420503
MB 490-420919/1-A	Method Blank	Total/NA	Solid	8015C	420919
LCS 490-420503/2-A	Lab Control Sample	Total/NA	Solid	8015C	420503
LCS 490-420919/2-A	Lab Control Sample	Total/NA	Solid	8015C	420919
LCSD 490-420503/3-A	Lab Control Sample Dup	Total/NA	Solid	8015C	420503
LCSD 490-420919/3-A	Lab Control Sample Dup	Total/NA	Solid	8015C	420919

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146022-1

GC Semi VOA

Prep Batch: 420223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146022-1	SJRP-MW12-10-11-03302017	Total/NA	Solid	3550C	
600-146022-2	SJRP-MW12-16-17-03302017	Total/NA	Solid	3550C	
600-146022-3	SJRP-MW12-16-17-03302017 DUP	Total/NA	Solid	3550C	
MB 490-420223/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-420223/2-A	Lab Control Sample	Total/NA	Solid	3550C	
LCSD 490-420223/3-A	Lab Control Sample Dup	Total/NA	Solid	3550C	

Analysis Batch: 420477

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146022-1	SJRP-MW12-10-11-03302017	Total/NA	Solid	8015C	420223
600-146022-2	SJRP-MW12-16-17-03302017	Total/NA	Solid	8015C	420223
600-146022-3	SJRP-MW12-16-17-03302017 DUP	Total/NA	Solid	8015C	420223
MB 490-420223/1-A	Method Blank	Total/NA	Solid	8015C	420223
LCS 490-420223/2-A	Lab Control Sample	Total/NA	Solid	8015C	420223
LCSD 490-420223/3-A	Lab Control Sample Dup	Total/NA	Solid	8015C	420223

Metals

Prep Batch: 209909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146022-1	SJRP-MW12-10-11-03302017	Total/NA	Solid	7471A	
600-146022-2	SJRP-MW12-16-17-03302017	Total/NA	Solid	7471A	
600-146022-3	SJRP-MW12-16-17-03302017 DUP	Total/NA	Solid	7471A	
MB 600-209909/7-A	Method Blank	Total/NA	Solid	7471A	
LCSSRM 600-209909/8-A ^1	Lab Control Sample	Total/NA	Solid	7471A	

Analysis Batch: 210015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146022-1	SJRP-MW12-10-11-03302017	Total/NA	Solid	7471A	209909
600-146022-2	SJRP-MW12-16-17-03302017	Total/NA	Solid	7471A	209909
600-146022-3	SJRP-MW12-16-17-03302017 DUP	Total/NA	Solid	7471A	209909
MB 600-209909/7-A	Method Blank	Total/NA	Solid	7471A	209909
LCSSRM 600-209909/8-A ^1	Lab Control Sample	Total/NA	Solid	7471A	209909

Prep Batch: 210290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146022-1	SJRP-MW12-10-11-03302017	Total/NA	Solid	3050B	
600-146022-2	SJRP-MW12-16-17-03302017	Total/NA	Solid	3050B	
600-146022-3	SJRP-MW12-16-17-03302017 DUP	Total/NA	Solid	3050B	
MB 600-210290/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-210290/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-146022-3 MS	SJRP-MW12-16-17-03302017 DUP	Total/NA	Solid	3050B	
600-146022-3 DU	SJRP-MW12-16-17-03302017 DUP	Total/NA	Solid	3050B	

Analysis Batch: 210401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146022-1	SJRP-MW12-10-11-03302017	Total/NA	Solid	6010B	210290
600-146022-2	SJRP-MW12-16-17-03302017	Total/NA	Solid	6010B	210290
600-146022-3	SJRP-MW12-16-17-03302017 DUP	Total/NA	Solid	6010B	210290
MB 600-210290/1-A	Method Blank	Total/NA	Solid	6010B	210290

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146022-1

Metals (Continued)

Analysis Batch: 210401 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSSRM 600-210290/2-A	Lab Control Sample	Total/NA	Solid	6010B	210290
600-146022-3 MS	SJRP-MW12-16-17-03302017 DUP	Total/NA	Solid	6010B	210290
600-146022-3 DU	SJRP-MW12-16-17-03302017 DUP	Total/NA	Solid	6010B	210290

Analysis Batch: 210521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146022-1	SJRP-MW12-10-11-03302017	Total/NA	Solid	6010B	210290
600-146022-2	SJRP-MW12-16-17-03302017	Total/NA	Solid	6010B	210290
600-146022-3	SJRP-MW12-16-17-03302017 DUP	Total/NA	Solid	6010B	210290
MB 600-210290/1-A	Method Blank	Total/NA	Solid	6010B	210290
LCSSRM 600-210290/2-A	Lab Control Sample	Total/NA	Solid	6010B	210290
600-146022-3 MS	SJRP-MW12-16-17-03302017 DUP	Total/NA	Solid	6010B	210290
600-146022-3 DU	SJRP-MW12-16-17-03302017 DUP	Total/NA	Solid	6010B	210290

General Chemistry

Analysis Batch: 209873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146022-1	SJRP-MW12-10-11-03302017	Total/NA	Solid	2540B	
600-146022-2	SJRP-MW12-16-17-03302017	Total/NA	Solid	2540B	
600-146022-3	SJRP-MW12-16-17-03302017 DUP	Total/NA	Solid	2540B	
600-146022-1 DU	SJRP-MW12-10-11-03302017	Total/NA	Solid	2540B	

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146022-1

Client Sample ID: SJRP-MW12-10-11-03302017 — Lab Sample ID: 600-146022-1

Date Collected: 03/30/17 08:30 — **Matrix: Solid**
Date Received: 03/31/17 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.16 g	5.0 mL	420503	04/07/17 08:58	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421012	04/11/17 18:24	A1B	TAL NSH
Total/NA	Analysis	2540B		1			209873	04/03/17 15:53	B1K	TAL HOU

Client Sample ID: SJRP-MW12-10-11-03302017 — Lab Sample ID: 600-146022-1

Date Collected: 03/30/17 08:30 — **Matrix: Solid**
Date Received: 03/31/17 09:47 — **Percent Solids: 86.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.026 g	5 mL	209861	03/31/17 17:00	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210118	04/06/17 12:25	WS1	TAL HOU
Total/NA	Prep	3550C			25.41 g	1.0 mL	420223	04/06/17 10:25	MNM	TAL NSH
Total/NA	Analysis	8015C		1			420477	04/07/17 13:56	PRB	TAL NSH
Total/NA	Prep	3050B			1.11 g	50 mL	210290	04/07/17 14:28	JAH	TAL HOU
Total/NA	Analysis	6010B		1			210521	04/11/17 16:36	DCL	TAL HOU
Total/NA	Prep	3050B			1.11 g	50 mL	210290	04/07/17 14:28	JAH	TAL HOU
Total/NA	Analysis	6010B		1			210401	04/10/17 14:43	DCL	TAL HOU
Total/NA	Prep	7471A			.65 g	50 mL	209909	04/04/17 09:06	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210015	04/05/17 08:31	DDE	TAL HOU

Client Sample ID: SJRP-MW12-16-17-03302017 — Lab Sample ID: 600-146022-2

Date Collected: 03/30/17 08:45 — **Matrix: Solid**
Date Received: 03/31/17 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.11 g	5.0 mL	420503	04/07/17 08:58	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421012	04/11/17 18:55	A1B	TAL NSH
Total/NA	Analysis	2540B		1			209873	04/03/17 15:53	B1K	TAL HOU

Client Sample ID: SJRP-MW12-16-17-03302017 — Lab Sample ID: 600-146022-2

Date Collected: 03/30/17 08:45 — **Matrix: Solid**
Date Received: 03/31/17 09:47 — **Percent Solids: 86.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.26 g	5 mL	209861	03/31/17 17:00	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210118	04/06/17 12:49	WS1	TAL HOU
Total/NA	Prep	3550C			25.37 g	1.0 mL	420223	04/06/17 10:25	MNM	TAL NSH
Total/NA	Analysis	8015C		1			420477	04/07/17 14:13	PRB	TAL NSH
Total/NA	Prep	3050B			1.08 g	50 mL	210290	04/07/17 14:28	JAH	TAL HOU
Total/NA	Analysis	6010B		1			210521	04/11/17 16:38	DCL	TAL HOU
Total/NA	Prep	3050B			1.08 g	50 mL	210290	04/07/17 14:28	JAH	TAL HOU
Total/NA	Analysis	6010B		1			210401	04/10/17 14:45	DCL	TAL HOU
Total/NA	Prep	7471A			.64 g	50 mL	209909	04/04/17 09:06	DDE	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146022-1

Client Sample ID: SJRP-MW12-16-17-03302017
Date Collected: 03/30/17 08:45
Date Received: 03/31/17 09:47

Lab Sample ID: 600-146022-2
Matrix: Solid
Percent Solids: 86.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1			210015	04/05/17 08:33	DDE	TAL HOU

Client Sample ID: SJRP-MW12-16-17-03302017 DUP
Date Collected: 03/30/17 08:45
Date Received: 03/31/17 09:47

Lab Sample ID: 600-146022-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.08 g	5.0 mL	420503	04/07/17 08:58	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421012	04/11/17 19:25	A1B	TAL NSH
Total/NA	Analysis	2540B		1			209873	04/03/17 15:53	B1K	TAL HOU

Client Sample ID: SJRP-MW12-16-17-03302017 DUP
Date Collected: 03/30/17 08:45
Date Received: 03/31/17 09:47

Lab Sample ID: 600-146022-3
Matrix: Solid
Percent Solids: 87.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.529 g	5 mL	209861	03/31/17 17:00	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210118	04/06/17 13:14	WS1	TAL HOU
Total/NA	Prep	3550C			25.96 g	1.0 mL	420223	04/06/17 10:25	MNM	TAL NSH
Total/NA	Analysis	8015C		1			420477	04/07/17 14:30	PRB	TAL NSH
Total/NA	Prep	3050B			1.09 g	50 mL	210290	04/07/17 14:28	JAH	TAL HOU
Total/NA	Analysis	6010B		1			210521	04/11/17 16:40	DCL	TAL HOU
Total/NA	Prep	3050B			1.09 g	50 mL	210290	04/07/17 14:28	JAH	TAL HOU
Total/NA	Analysis	6010B		1			210401	04/10/17 14:47	DCL	TAL HOU
Total/NA	Prep	7471A			.60 g	50 mL	209909	04/04/17 09:06	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210015	04/05/17 08:35	DDE	TAL HOU

Client Sample ID: TRIP BLANK
Date Collected: 03/30/17 00:00
Date Received: 03/31/17 09:47

Lab Sample ID: 600-146022-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	210159	04/06/17 19:48	YX1	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc. TestAmerica Job ID: 600-146022-1
Project/Site: San Juan Site Characterization

Laboratory: TestAmerica Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	16-046-0	08-04-17
Louisiana	NELAP	6	01967	06-30-17
Oklahoma	State Program	6	2015-050	08-31-17
Texas	NELAP	6	T104704223-17-21	10-31-17
USDA	Federal		P330-14-00192	06-06-17

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	A2LA		NA: NELAP & A2LA	12-31-17
A2LA	ISO/IEC 17025		0453.07	12-31-17
Alaska (UST)	State Program	10	UST-087	09-01-17
Arizona	State Program	9	AZ0473	05-05-17
Arkansas DEQ	State Program	6	88-0737	04-25-17
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-17
Florida	NELAP	4	E87358	06-30-17
Georgia	State Program	4	N/A	12-31-17
Illinois	NELAP	5	200010	12-09-17
Iowa	State Program	7	131	04-01-18
Kansas	NELAP	7	E-10229	10-31-17
Kentucky (UST)	State Program	4	19	06-30-17
Kentucky (WW)	State Program	4	90038	12-31-17
Louisiana	NELAP	6	30613	06-30-17
Maine	State Program	1	TN00032	11-03-17
Maryland	State Program	3	316	03-31-18
Massachusetts	State Program	1	M-TN032	06-30-17
Minnesota	NELAP	5	047-999-345	12-31-17
Mississippi	State Program	4	N/A	06-30-17
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-17
New Hampshire	NELAP	1	2963	10-09-17
New Jersey	NELAP	2	TN965	06-30-17
New York	NELAP	2	11342	03-31-18
North Carolina (WW/SW)	State Program	4	387	12-31-17
North Dakota	State Program	8	R-146	06-30-17
Ohio VAP	State Program	5	CL0033	07-10-17
Oklahoma	State Program	6	9412	08-31-17
Oregon	NELAP	10	TN200001	04-27-17
Pennsylvania	NELAP	3	68-00585	06-30-17
Rhode Island	State Program	1	LAO00268	12-30-17
South Carolina	State Program	4	84009 (001)	02-18-17 *
South Carolina (Do Not Use - DW)	State Program	4	84009 (002)	12-16-17
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-17
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-17
Virginia	NELAP	3	460152	06-14-17
Washington	State Program	10	C789	07-19-17

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc. TestAmerica Job ID: 600-146022-1
Project/Site: San Juan Site Characterization

Laboratory: TestAmerica Nashville (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
West Virginia DEP	State Program	3	219	02-28-18
Wisconsin	State Program	5	998020430	08-31-17
Wyoming (UST)	A2LA	8	453.07	12-31-17

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica

Client Information	Sampler: Katherine Mostaki	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-52002-15345.10
Client Contact: Jeffrey Minchak	Phone: 9043586573	E-Mail: cathy.upton@testamericainc.com		Page: Page 10 of 10
Company: CH2M Hill, Inc.				Job #:
Address: 3721 Rutledge Rd. NE Suite B-1	Due Date Requested:			
City: Albuquerque	TAT Requested (days):			
State, Zip: NM, 87109				
Phone: 281-721-8546(Tel)	PO #: Purchase Order Requested			
Email: Jeffrey.Minchak@ch2m.com	WO #: WD225383			
Project Name: Kinder Morgan Bloomfield, NM San Juan	Project #: 60005961-Analysis group BTEX/GRO/DRO/Metals			
Site: San Juan Site Characterization	SSOW#:			

Analysis Requested — Dallas . Ft Worth

560501

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO - Diesel and Oil Range Organics	8015C_GRO - GRO Range (C6-C10)	6010B, 7471A - NMWQCC List Metals	8260B - 5035 BTEX	Moisture	Waters	6010B, 7470A - NMWQCC List Metals	8260B_LL - BTEX Only	8015C_GRO - GRO Range (C6-C10)	8015C_DRO - Diesel and Oil Range Organics	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N		D	A	A	N		
SJRP-MW12-10-11-03302017	3/30/2017	8:30	G	Solid	N	N	X	X	X	X	X							1 cooler
SJRP-MW12-16-17-03302017	3/30/2017	8:45	G	Solid	N	N	X	X	X	X	X							
SJRP-MW12-16-17-03302017	3/30/2017	8:45	G	Solid	N	N	X	X	X	X	X							
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Water														

600-146022 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		3/30/17 1400			3/31/17 947	
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston

Loc: 600
146022

Sample Rece t

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

'17 MAR 31 9:47

Date/Time Received: _____

JOB NUMBER: _____ CLIENT: CH2M

UNPACKED BY: _____ CARRIER/DRIVER: FED

Custody Seal Present: ☒ YES ☐ NO Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Them CF	Corrected Temp (°C)
BW	Y / N	Y / N	3.3	675	.2	3.1
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☒ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☐ YES ☐ NO

pH paper Lot #_____

VOA headspace acceptable (5-6mm): ☒ YES ☐ NO ☐ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?		

COMMENTS:

FedEx
TRK# 0221 6025 5771 6170

FRI – 31 MAR 10:30A
PRIORITY OVERNIGHT

77040
TX-US IAH

XH LKSA

HS-SA-WI-013

Page 237 of 1581

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-26303.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: cathy.upton@testamericainc.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):		Job #: 600-146022-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 4/12/2017			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: San Juan Site Characterization	Project #: 60005961			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO/3550C DRO/ORO	8015C_GRO/5030B_SolidNAC GRO Range (C6-C10)	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
SJRP-MW12-10-11-03302017 (600-146022-1)	3/30/17	08:30 Central		Solid			X	X	2	
SJRP-MW12-16-17-03302017 (600-146022-2)	3/30/17	08:45 Central		Solid			X	X	2	
SJRP-MW12-16-17-03302017 DUP (600-146022-3)	3/30/17	08:45 Central		Solid			X	X	2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 4/4/17 1700	Company	Received by:	Date/Time: 4-5-17 0940	Company TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 4.3

Received by OCD: 11/13/2025 11:14:36 AM

Released to Imaging: 11/14/2025 9:30:04 AM

Loc: 600
146022

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Cooler Received/Opened On 4/5/2017 @ 0940

Time Samples Removed From Cooler_____ Time Samples Placed In Storage_____ (2 Hour Window)

1. Tracking # 6150 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 31470368 pH Strip Lot_____ Chlorine Strip Lot_____

2. Temperature of rep. sample or temp blank when opened: 4.3 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO (NA)

4. Were custody seals on outside of cooler? YES..(NO)..NA

If yes, how many and where:_____

5. Were the seals intact, signed, and dated correctly? YES...NO...(NA)

6. Were custody papers inside cooler? (YES)...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) HG

7. Were custody seals on containers: YES (NO) and Intact YES...NO...(NA)

Were these signed and dated correctly? YES...NO...(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)..NO...NA

12. Did all container labels and tags agree with custody papers? (YES)..NO...NA

13a. Were VOA vials received? (YES)..NO...NA

b. Was there any observable headspace present in any VOA vial? YES..(NO)...NA

14. Was there a Trip Blank in this cooler? YES..(NO)..NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..(NA)

b. Did the bottle labels indicate that the correct preservatives were used (YES)..NO...NA

16. Was residual chlorine present? YES...NO...(NA)

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) DA

17. Were custody papers properly filled out (ink, signed, etc)? (YES)..NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)..NO...NA

19. Were correct containers used for the analysis requested? (YES)..NO...NA

20. Was sufficient amount of sample sent in each container? (YES)..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) DA

I certify that I attached a label with the unique LIMS number to each container (intial) DA

21. Were there Non-Conformance issues at login? YES..(NO) Was a NCM generated? YES..(NO)..#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 12/15/15

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc. Job Number: 600-146022-1

Login Number: 146022 **List Source: TestAmerica Houston**
List Number: 1
Creator: Crafton, Tommie S

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc. Job Number: 600-146022-1

Login Number: 146022
List Number: 2
Creator: Armstrong, Daniel

List Source: TestAmerica Nashville
List Creation: 04/05/17 04:19 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.3C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing America



ANALYTICAL REPORT

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-146026-1
Client Project/Site: Ssn Juan Site Characterization
Revision: 1

For:
CH2M Hill Constructors, Inc.
14701 St. Mary's Lane
Suite 300
Houston, Texas 77079-2923

Attn: Mr. John Ynfante

Authorized for release by:
12/7/2020 4:27:11 PM
Steve Stepanski, Project Mgmt. Assistant
(713)690-4444
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Designee for

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

Job ID: 600-146026-1

Job ID: 600-146026-1

Laboratory: TestAmerica Houston

Narrative

CASE NARRATIVE

Client: CH2M Hill Constructors, Inc.

Project: San Juan Site Characterization

Report Number: 600-146026-1

COMMENTS

This report was revised to a Level 2 deliverable per client's request.

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

Note: All samples that require thermal preservation are considered acceptable if the arrival temperature is within 2°C of the required temperature or method specified range. For samples with a specified temperature of 4°C, samples with a temperature ranging from just above freezing temperature of water to 6°C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

The samples were received on 04/01/2017; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.0º C, 1.3º C and 2.4º C.

Receipt Exceptions

The following sample was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): SJRP-EB-03302017 (600-146026-11), TRIP BLANK (600-146026-12) and (COC): SJRP-SB14-18-19-03312017 (600-146026-13). The samples were logged in based on the containers received and historical information.

VOLATILE ORGANIC COMPOUNDS (GC-MS)-Soil

Samples SJRP-SB19-1-2-03302017 (600-146026-1), SJRP-SB09-1-2-03302017 (600-146026-2), SJRP-SB11-17-18-03312017 (600-146026-3), SJRP-SB11-27-28-03312017 (600-146026-4), SJRP-SB11-29-30-03312017 (600-146026-5), SJRP-SB14-13-14-03312017 (600-146026-6), SJRP-SB14-31-32-03312017 (600-146026-7), SJRP-SB14-37-38-03312017 (600-146026-8), SJRP-MW11-29-30-03312017 (600-146026-9) and SJRP-SB14-18-19-03312017 (600-146026-13) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were prepared on 04/01/2017 and analyzed on 04/04/2017, 04/05/2017, 04/06/2017 and 04/10/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GC-MS)-Water

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-146026-1
Project/Site: San Juan Site Characterization

Job ID: 600-146026-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

Samples SJRP-EB-03312017 (600-146026-10), SJRP-EB-03302017 (600-146026-11) and TRIP BLANK (600-146026-12) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/06/2017 and 04/07/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GASOLINE RANGE ORGANICS (GRO)-Soil
Samples SJRP-SB19-1-2-03302017 (600-146026-1), SJRP-SB09-1-2-03302017 (600-146026-2), SJRP-SB11-17-18-03312017 (600-146026-3), SJRP-SB11-27-28-03312017 (600-146026-4), SJRP-SB11-29-30-03312017 (600-146026-5), SJRP-SB14-13-14-03312017 (600-146026-6), SJRP-SB14-31-32-03312017 (600-146026-7), SJRP-SB14-37-38-03312017 (600-146026-8), SJRP-MW11-29-30-03312017 (600-146026-9) and SJRP-SB14-18-19-03312017 (600-146026-13) were analyzed for gasoline range organics (GRO) in accordance with EPA SW-846 Method 8015C - GRO. The samples were analyzed on 04/12/2017 and 04/13/2017.

Gasoline Range Organics (GRO)-C6-C10 exceeded the RPD limit for the MSD of sample SJRP-SB19-1-2-03302017MSD (600-146026-1) in batch 490-421820.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GASOLINE RANGE ORGANICS (GRO)-Water
Samples SJRP-EB-03312017 (600-146026-10) and SJRP-EB-03302017 (600-146026-11) were analyzed for gasoline range organics (GRO) in accordance with 8015C GRO. The samples were analyzed on 04/08/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DIESEL RANGE ORGANICS (DRO)-Soil
Samples SJRP-SB19-1-2-03302017 (600-146026-1), SJRP-SB09-1-2-03302017 (600-146026-2), SJRP-SB11-17-18-03312017 (600-146026-3), SJRP-SB11-27-28-03312017 (600-146026-4), SJRP-SB11-29-30-03312017 (600-146026-5), SJRP-SB14-13-14-03312017 (600-146026-6), SJRP-SB14-31-32-03312017 (600-146026-7), SJRP-SB14-37-38-03312017 (600-146026-8), SJRP-MW11-29-30-03312017 (600-146026-9) and SJRP-SB14-18-19-03312017 (600-146026-13) were analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 04/06/2017 and analyzed on 04/07/2017.

Sample SJRP-SB11-17-18-03312017 (600-146026-3)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DIESEL RANGE ORGANICS (DRO)-Water
Samples SJRP-EB-03312017 (600-146026-10) and SJRP-EB-03302017 (600-146026-11) were analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared and analyzed on 04/06/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)-Soil
Samples SJRP-SB19-1-2-03302017 (600-146026-1), SJRP-SB09-1-2-03302017 (600-146026-2), SJRP-SB11-17-18-03312017 (600-146026-3), SJRP-SB11-27-28-03312017 (600-146026-4), SJRP-SB11-29-30-03312017 (600-146026-5), SJRP-SB14-13-14-03312017 (600-146026-6), SJRP-SB14-31-32-03312017 (600-146026-7), SJRP-SB14-37-38-03312017 (600-146026-8), SJRP-MW11-29-30-03312017 (600-146026-9) and SJRP-SB14-18-19-03312017 (600-146026-13) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 04/12/2017 and analyzed on 04/12/2017 and 04/13/2017.

Barium, Calcium, Magnesium, Manganese and Sodium were detected in method blank MB 600-210629/1-A at levels that were above the

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-146026-1
Project/Site: San Juan Site Characterization

Job ID: 600-146026-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

Due to the high concentration of target analytes, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 600-210629 and analytical batch 600-210632 could not be evaluated for accuracy. The associated laboratory control sample (LCS) met acceptance criteria.

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

Samples SJRP-SB11-17-18-03312017 (600-146026-3)[5X] and SJRP-SB14-18-19-03312017 (600-146026-13)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)-Water

Samples SJRP-EB-03312017 (600-146026-10) and SJRP-EB-03302017 (600-146026-11) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 04/10/2017 and analyzed on 04/11/2017.

Sodium was detected in method blank MB 600-210368/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY-Soil

Samples SJRP-SB19-1-2-03302017 (600-146026-1), SJRP-SB09-1-2-03302017 (600-146026-2), SJRP-SB11-17-18-03312017 (600-146026-3), SJRP-SB11-27-28-03312017 (600-146026-4), SJRP-SB11-29-30-03312017 (600-146026-5), SJRP-SB14-13-14-03312017 (600-146026-6), SJRP-SB14-31-32-03312017 (600-146026-7), SJRP-SB14-37-38-03312017 (600-146026-8), SJRP-MW11-29-30-03312017 (600-146026-9) and SJRP-SB14-18-19-03312017 (600-146026-13) were analyzed for total mercury in accordance with EPA SW-846 Method 7471A. The samples were prepared on 04/04/2017 and analyzed on 04/05/2017.

Due to the high concentration of mercury, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 600-209909 and analytical batch 600-210015 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Refer to the QC report for details.

Mercury exceeded the RPD limit for the duplicate of sample SJRP-SB14-18-19-03312017DU (600-146026-13).

Mercury exceeded the RPD limit for the duplicate of sample SJRP-SB19-1-2-03302017DU (600-146026-1).

Refer to the QC report for details.

The post digestion spike % recovery for mercury associated with batch 210015 was outside of control limits. Sample matrix interference is suspected.

The serial dilution performed for the following sample(s) associated with batch 210015 was outside control limits for mercury: (600-146026-1SD).

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-146026-1
Project/Site: San Juan Site Characterization

Job ID: 600-146026-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY-Water

Samples SJRP-EB-03312017 (600-146026-10) and SJRP-EB-03302017 (600-146026-11) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 04/03/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PERCENT SOLIDS

Samples SJRP-SB19-1-2-03302017 (600-146026-1), SJRP-SB09-1-2-03302017 (600-146026-2), SJRP-SB11-17-18-03312017 (600-146026-3), SJRP-SB11-27-28-03312017 (600-146026-4), SJRP-SB11-29-30-03312017 (600-146026-5), SJRP-SB14-13-14-03312017 (600-146026-6), SJRP-SB14-31-32-03312017 (600-146026-7), SJRP-SB14-37-38-03312017 (600-146026-8), SJRP-MW11-29-30-03312017 (600-146026-9) and SJRP-SB14-18-19-03312017 (600-146026-13) were analyzed for percent solids in accordance with EPA SW846 Method 3550C. The samples were analyzed on 04/03/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep

Method(s) 5030B: Prepped from parent sample vial.

SJRP-SB19-1-2-03302017 (600-146026-1[MS]) and SJRP-SB19-1-2-03302017 (600-146026-1[MSD])

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL NSH
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL NSH
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU

Protocol References:

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-146026-1	SJRP-SB19-1-2-03302017	Solid	03/30/17 11:30	04/01/17 10:28
600-146026-2	SJRP-SB09-1-2-03302017	Solid	03/30/17 16:45	04/01/17 10:28
600-146026-3	SJRP-SB11-17-18-03312017	Solid	03/31/17 13:15	04/01/17 10:28
600-146026-4	SJRP-SB11-27-28-03312017	Solid	03/31/17 13:45	04/01/17 10:28
600-146026-5	SJRP-SB11-29-30-03312017	Solid	03/31/17 14:00	04/01/17 10:28
600-146026-6	SJRP-SB14-13-14-03312017	Solid	03/31/17 10:15	04/01/17 10:28
600-146026-7	SJRP-SB14-31-32-03312017	Solid	03/31/17 10:55	04/01/17 10:28
600-146026-8	SJRP-SB14-37-38-03312017	Solid	03/31/17 11:05	04/01/17 10:28
600-146026-9	SJRP-MW11-29-30-03312017	Solid	03/31/17 15:45	04/01/17 10:28
600-146026-10	SJRP-EB-03312017	Water	03/31/17 15:40	04/01/17 10:28
600-146026-11	SJRP-EB-03302017	Water	03/30/17 14:10	04/01/17 10:28
600-146026-12	TRIP BLANK	Water	03/30/17 00:00	04/01/17 10:28
600-146026-13	SJRP-SB14-18-19-03312017	Solid	03/31/17 10:30	04/01/17 10:28

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Client Sample ID: SJRP-SB19-1-2-03302017
Date Collected: 03/30/17 11:30
Date Received: 04/01/17 10:28

Lab Sample ID: 600-146026-1
Matrix: Solid
Percent Solids: 91.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000752	U	0.00597	0.000752	mg/Kg	☼	04/01/17 09:00	04/05/17 14:18	1
Ethylbenzene	0.00122	U	0.00597	0.00122	mg/Kg	☼	04/01/17 09:00	04/05/17 14:18	1
Toluene	0.00165	U	0.00597	0.00165	mg/Kg	☼	04/01/17 09:00	04/05/17 14:18	1
Xylenes, Total	0.00135	U	0.00597	0.00135	mg/Kg	☼	04/01/17 09:00	04/05/17 14:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*61 - 130*	*04/01/17 09:00*	*04/05/17 14:18*	*1*
Dibromofluoromethane	*87*		*68 - 140*	*04/01/17 09:00*	*04/05/17 14:18*	*1*
Toluene-d8 (Surr)	*98*		*50 - 130*	*04/01/17 09:00*	*04/05/17 14:18*	*1*
4-Bromofluorobenzene	*101*		*57 - 140*	*04/01/17 09:00*	*04/05/17 14:18*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.35	U F2	4.70	2.35	mg/Kg		04/06/17 11:20	04/12/17 23:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*69*		*50 - 150*	*04/06/17 11:20*	*04/12/17 23:54*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**6.74**		5.34	2.67	mg/Kg	☼	04/06/17 10:25	04/07/17 14:48	1
ORO C24-C40	**17.1**		5.34	2.67	mg/Kg	☼	04/06/17 10:25	04/07/17 14:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*86*		*50 - 150*	*04/06/17 10:25*	*04/07/17 14:48*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**11300**		27.1	0.325	mg/Kg	☼	04/12/17 14:34	04/12/17 17:57	1
Arsenic	**4.25**		1.08	0.236	mg/Kg	☼	04/12/17 14:34	04/12/17 17:57	1
Barium	**186**	**B**	1.08	0.0325	mg/Kg	☼	04/12/17 14:34	04/12/17 17:57	1
Boron	**4.88**	**J**	21.7	0.418	mg/Kg	☼	04/12/17 14:34	04/12/17 17:57	1
Cadmium	**0.201**	**J**	0.271	0.0278	mg/Kg	☼	04/12/17 14:34	04/12/17 17:57	1
Calcium	**25700**	**B**	108	0.937	mg/Kg	☼	04/12/17 14:34	04/12/17 17:57	1
Chromium	**9.05**		0.542	0.0549	mg/Kg	☼	04/12/17 14:34	04/12/17 17:57	1
Cobalt	**6.28**		0.542	0.0733	mg/Kg	☼	04/12/17 14:34	04/12/17 17:57	1
Iron	**14200**		21.7	2.74	mg/Kg	☼	04/12/17 14:34	04/12/17 17:57	1
Lead	**11.8**		0.542	0.114	mg/Kg	☼	04/12/17 14:34	04/12/17 17:57	1
Magnesium	**3410**	**B**	108	2.08	mg/Kg	☼	04/12/17 14:34	04/12/17 17:57	1
Manganese	**324**	**B**	1.63	0.0413	mg/Kg	☼	04/12/17 14:34	04/12/17 17:57	1
Molybdenum	**1.05**		0.542	0.147	mg/Kg	☼	04/12/17 14:34	04/12/17 17:57	1
Nickel	**11.5**		1.08	0.127	mg/Kg	☼	04/12/17 14:34	04/12/17 17:57	1
Potassium	**1200**		108	11.9	mg/Kg	☼	04/12/17 14:34	04/12/17 17:57	1
Selenium	0.281	U	2.17	0.281	mg/Kg	☼	04/12/17 14:34	04/12/17 17:57	1
Sodium	**1240**	**B**	108	0.960	mg/Kg	☼	04/12/17 14:34	04/12/17 17:57	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.402**	**F2 F1**	0.0172	0.00362	mg/Kg	☼	04/04/17 09:06	04/05/17 08:37	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Client Sample ID: SJRP-SB19-1-2-03302017

Lab Sample ID: 600-146026-1
Date Collected: 03/30/17 11:30
Matrix: Solid
Date Received: 04/01/17 10:28
Percent Solids: 91.3

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	8.7		1.0	1.0	%			04/03/17 15:53	1
Percent Solids	91.3		1.0	1.0	%			04/03/17 15:53	1

Client Sample ID: SJRP-SB09-1-2-03302017

Lab Sample ID: 600-146026-2
Date Collected: 03/30/17 16:45
Matrix: Solid
Date Received: 04/01/17 10:28
Percent Solids: 79.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000673	U	0.00534	0.000673	mg/Kg	☼	04/01/17 09:00	04/05/17 19:09	1
Ethylbenzene	0.00109	U	0.00534	0.00109	mg/Kg	☼	04/01/17 09:00	04/05/17 19:09	1
Toluene	0.00147	U	0.00534	0.00147	mg/Kg	☼	04/01/17 09:00	04/05/17 19:09	1
Xylenes, Total	0.00121	U	0.00534	0.00121	mg/Kg	☼	04/01/17 09:00	04/05/17 19:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*61 - 130*	*04/01/17 09:00*	*04/05/17 19:09*	*1*
Dibromofluoromethane	*93*		*68 - 140*	*04/01/17 09:00*	*04/05/17 19:09*	*1*
Toluene-d8 (Surr)	*91*		*50 - 130*	*04/01/17 09:00*	*04/05/17 19:09*	*1*
4-Bromofluorobenzene	*102*		*57 - 140*	*04/01/17 09:00*	*04/05/17 19:09*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.37	U	4.74	2.37	mg/Kg		04/07/17 08:45	04/13/17 00:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*69*		*50 - 150*	*04/07/17 08:45*	*04/13/17 00:24*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	4.84	J	6.13	3.06	mg/Kg	☼	04/06/17 10:25	04/07/17 15:40	1
ORO C24-C40	4.74	J	6.13	3.06	mg/Kg	☼	04/06/17 10:25	04/07/17 15:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*101*		*50 - 150*	*04/06/17 10:25*	*04/07/17 15:40*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	10300		27.2	0.327	mg/Kg	☼	04/12/17 14:34	04/12/17 18:03	1
Arsenic	2.66		1.09	0.238	mg/Kg	☼	04/12/17 14:34	04/12/17 18:03	1
Barium	78.9	B	1.09	0.0327	mg/Kg	☼	04/12/17 14:34	04/12/17 18:03	1
Boron	1.47	J	21.8	0.421	mg/Kg	☼	04/12/17 14:34	04/12/17 18:03	1
Cadmium	0.899		0.272	0.0279	mg/Kg	☼	04/12/17 14:34	04/12/17 18:03	1
Calcium	3910	B	109	0.941	mg/Kg	☼	04/12/17 14:34	04/12/17 18:03	1
Chromium	4.59		0.545	0.0551	mg/Kg	☼	04/12/17 14:34	04/12/17 18:03	1
Cobalt	6.59		0.545	0.0736	mg/Kg	☼	04/12/17 14:34	04/12/17 18:03	1
Iron	14600		21.8	2.76	mg/Kg	☼	04/12/17 14:34	04/12/17 18:03	1
Lead	10.8		0.545	0.114	mg/Kg	☼	04/12/17 14:34	04/12/17 18:03	1
Magnesium	3360	B	109	2.09	mg/Kg	☼	04/12/17 14:34	04/12/17 18:03	1
Manganese	292	B	1.63	0.0415	mg/Kg	☼	04/12/17 14:34	04/12/17 18:03	1
Molybdenum	0.468	J	0.545	0.148	mg/Kg	☼	04/12/17 14:34	04/12/17 18:03	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Client Sample ID: SJRP-SB09-1-2-03302017

Lab Sample ID: 600-146026-2
Date Collected: 03/30/17 16:45
Matrix: Solid
Date Received: 04/01/17 10:28
Percent Solids: 79.8

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	15.9		1.09	0.127	mg/Kg	☼	04/12/17 14:34	04/12/17 18:03	1
Potassium	1420		109	12.0	mg/Kg	☼	04/12/17 14:34	04/12/17 18:03	1
Selenium	0.305	J	2.18	0.282	mg/Kg	☼	04/12/17 14:34	04/12/17 18:03	1
Sodium	9510	B	109	0.965	mg/Kg	☼	04/12/17 14:34	04/12/17 18:03	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0157	J	0.0213	0.00449	mg/Kg	☼	04/04/17 09:06	04/05/17 08:50	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20.2		1.0	1.0	%			04/03/17 15:53	1
Percent Solids	79.8		1.0	1.0	%			04/03/17 15:53	1

Client Sample ID: SJRP-SB11-17-18-03312017

Lab Sample ID: 600-146026-3
Date Collected: 03/31/17 13:15
Matrix: Solid
Date Received: 04/01/17 10:28
Percent Solids: 80.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	13.4		2.41	0.304	mg/Kg		04/01/17 09:00	04/04/17 19:32	10
Ethylbenzene	39.6		2.41	0.492	mg/Kg		04/01/17 09:00	04/04/17 19:32	10
Toluene	0.665	U	2.41	0.665	mg/Kg		04/01/17 09:00	04/04/17 19:32	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*61 - 130*	*04/01/17 09:00*	*04/04/17 19:32*	*10*
Dibromofluoromethane	*102*		*68 - 140*	*04/01/17 09:00*	*04/04/17 19:32*	*10*
Toluene-d8 (Surr)	*92*		*50 - 130*	*04/01/17 09:00*	*04/04/17 19:32*	*10*
4-Bromofluorobenzene	*80*		*57 - 140*	*04/01/17 09:00*	*04/04/17 19:32*	*10*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	199		24.1	5.45	mg/Kg		04/01/17 09:00	04/04/17 20:00	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*61 - 130*	*04/01/17 09:00*	*04/04/17 20:00*	*100*
Dibromofluoromethane	*102*		*68 - 140*	*04/01/17 09:00*	*04/04/17 20:00*	*100*
Toluene-d8 (Surr)	*95*		*50 - 130*	*04/01/17 09:00*	*04/04/17 20:00*	*100*
4-Bromofluorobenzene	*85*		*57 - 140*	*04/01/17 09:00*	*04/04/17 20:00*	*100*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	1890		4.95	2.48	mg/Kg		04/06/17 11:20	04/13/17 00:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*69*		*50 - 150*	*04/06/17 11:20*	*04/13/17 00:55*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	565		120	60.2	mg/Kg	☼	04/06/17 10:25	04/07/17 18:18	20
ORO C24-C40	9.20		6.02	3.01	mg/Kg	☼	04/06/17 10:25	04/07/17 15:58	1

TestAmerica Houston

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Client Sample ID: SJRP-SB11-17-18-03312017

Lab Sample ID: 600-146026-3
Date Collected: 03/31/17 13:15
Matrix: Solid
Date Received: 04/01/17 10:28
Percent Solids: 80.4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	82		50 - 150	04/06/17 10:25	04/07/17 15:58	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8280		28.0	0.336	mg/Kg	☼	04/12/17 14:34	04/12/17 18:05	1
Arsenic	5.43		1.12	0.244	mg/Kg	☼	04/12/17 14:34	04/12/17 18:05	1
Barium	294	B	5.60	0.168	mg/Kg	☼	04/12/17 14:34	04/13/17 12:14	5
Boron	2.38	J	22.4	0.432	mg/Kg	☼	04/12/17 14:34	04/12/17 18:05	1
Cadmium	0.319		0.280	0.0287	mg/Kg	☼	04/12/17 14:34	04/12/17 18:05	1
Calcium	3890	B	112	0.968	mg/Kg	☼	04/12/17 14:34	04/12/17 18:05	1
Chromium	3.04		0.560	0.0567	mg/Kg	☼	04/12/17 14:34	04/12/17 18:05	1
Cobalt	8.68		0.560	0.0757	mg/Kg	☼	04/12/17 14:34	04/12/17 18:05	1
Iron	17600		22.4	2.83	mg/Kg	☼	04/12/17 14:34	04/12/17 18:05	1
Lead	16.8		0.560	0.118	mg/Kg	☼	04/12/17 14:34	04/12/17 18:05	1
Magnesium	1840	B	112	2.15	mg/Kg	☼	04/12/17 14:34	04/12/17 18:05	1
Manganese	77.1	B	1.68	0.0427	mg/Kg	☼	04/12/17 14:34	04/12/17 18:05	1
Molybdenum	3.04		0.560	0.152	mg/Kg	☼	04/12/17 14:34	04/12/17 18:05	1
Nickel	16.3		1.12	0.131	mg/Kg	☼	04/12/17 14:34	04/12/17 18:05	1
Potassium	1100		112	12.3	mg/Kg	☼	04/12/17 14:34	04/12/17 18:05	1
Selenium	0.936	J	2.24	0.290	mg/Kg	☼	04/12/17 14:34	04/12/17 18:05	1
Sodium	2910	B	112	0.993	mg/Kg	☼	04/12/17 14:34	04/12/17 18:05	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0830		0.0208	0.00438	mg/Kg	☼	04/04/17 09:06	04/05/17 08:52	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19.6		1.0	1.0	%			04/03/17 15:53	1
Percent Solids	80.4		1.0	1.0	%			04/03/17 15:53	1

Client Sample ID: SJRP-SB11-27-28-03312017

Lab Sample ID: 600-146026-4
Date Collected: 03/31/17 13:45
Matrix: Solid
Date Received: 04/01/17 10:28
Percent Solids: 84.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.34		0.222	0.0279	mg/Kg		04/01/17 09:00	04/04/17 17:10	1
Ethylbenzene	1.41		0.222	0.0452	mg/Kg		04/01/17 09:00	04/04/17 17:10	1
Toluene	0.0612	U	0.222	0.0612	mg/Kg		04/01/17 09:00	04/04/17 17:10	1
Xylenes, Total	5.48		0.222	0.0501	mg/Kg		04/01/17 09:00	04/04/17 17:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		61 - 130	04/01/17 09:00	04/04/17 17:10	1
Dibromofluoromethane	98		68 - 140	04/01/17 09:00	04/04/17 17:10	1
Toluene-d8 (Surr)	93		50 - 130	04/01/17 09:00	04/04/17 17:10	1
4-Bromofluorobenzene	77		57 - 140	04/01/17 09:00	04/04/17 17:10	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.22	U	4.44	2.22	mg/Kg		04/06/17 11:20	04/13/17 01:25	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	69		50 - 150	04/06/17 11:20	04/13/17 01:25	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	44.3		5.82	2.91	mg/Kg	☼	04/06/17 10:25	04/07/17 16:15	1
ORO C24-C40	8.94		5.82	2.91	mg/Kg	☼	04/06/17 10:25	04/07/17 16:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	93		50 - 150	04/06/17 10:25	04/07/17 16:15	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	12000		27.4	0.328	mg/Kg	☼	04/12/17 14:34	04/12/17 18:07	1
Arsenic	1.53		1.09	0.239	mg/Kg	☼	04/12/17 14:34	04/12/17 18:07	1
Barium	116	B	1.09	0.0328	mg/Kg	☼	04/12/17 14:34	04/12/17 18:07	1
Boron	1.69	J	21.9	0.423	mg/Kg	☼	04/12/17 14:34	04/12/17 18:07	1
Cadmium	0.367		0.274	0.0280	mg/Kg	☼	04/12/17 14:34	04/12/17 18:07	1
Calcium	12300	B	109	0.946	mg/Kg	☼	04/12/17 14:34	04/12/17 18:07	1
Chromium	4.34		0.547	0.0554	mg/Kg	☼	04/12/17 14:34	04/12/17 18:07	1
Cobalt	10.7		0.547	0.0740	mg/Kg	☼	04/12/17 14:34	04/12/17 18:07	1
Iron	13400		21.9	2.77	mg/Kg	☼	04/12/17 14:34	04/12/17 18:07	1
Lead	14.4		0.547	0.115	mg/Kg	☼	04/12/17 14:34	04/12/17 18:07	1
Magnesium	3470	B	109	2.10	mg/Kg	☼	04/12/17 14:34	04/12/17 18:07	1
Manganese	341	B	1.64	0.0417	mg/Kg	☼	04/12/17 14:34	04/12/17 18:07	1
Molybdenum	0.149	U	0.547	0.149	mg/Kg	☼	04/12/17 14:34	04/12/17 18:07	1
Nickel	13.9		1.09	0.128	mg/Kg	☼	04/12/17 14:34	04/12/17 18:07	1
Potassium	1280		109	12.0	mg/Kg	☼	04/12/17 14:34	04/12/17 18:07	1
Selenium	0.284	U	2.19	0.284	mg/Kg	☼	04/12/17 14:34	04/12/17 18:07	1
Sodium	5750	B	109	0.970	mg/Kg	☼	04/12/17 14:34	04/12/17 18:07	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0216		0.0201	0.00423	mg/Kg	☼	04/04/17 09:06	04/05/17 08:54	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.4		1.0	1.0	%			04/03/17 15:53	1
Percent Solids	84.6		1.0	1.0	%			04/03/17 15:53	1

Client Sample ID: SJRP-SB11-29-30-03312017 — **Lab Sample ID: 600-146026-5**
Date Collected: 03/31/17 14:00 — **Matrix: Solid**
Date Received: 04/01/17 10:28 — **Percent Solids: 86.5**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2.53		0.317	0.0399	mg/Kg		04/01/17 09:00	04/04/17 17:38	1
Ethylbenzene	0.617		0.317	0.0646	mg/Kg		04/01/17 09:00	04/04/17 17:38	1
Toluene	0.145	J	0.317	0.0874	mg/Kg		04/01/17 09:00	04/04/17 17:38	1
Xylenes, Total	5.98		0.317	0.0715	mg/Kg		04/01/17 09:00	04/04/17 17:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		61 - 130	04/01/17 09:00	04/04/17 17:38	1
Dibromofluoromethane	103		68 - 140	04/01/17 09:00	04/04/17 17:38	1
Toluene-d8 (Surr)	99		50 - 130	04/01/17 09:00	04/04/17 17:38	1
4-Bromofluorobenzene	83		57 - 140	04/01/17 09:00	04/04/17 17:38	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Client Sample ID: SJRP-SB11-29-30-03312017

Lab Sample ID: 600-146026-5
Date Collected: 03/31/17 14:00
Matrix: Solid
Date Received: 04/01/17 10:28
Percent Solids: 86.5

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.47	U	4.93	2.47	mg/Kg		04/06/17 11:20	04/13/17 01:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*67*		*50 - 150*	*04/06/17 11:20*	*04/13/17 01:55*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**36.0**		5.75	2.87	mg/Kg	☼	04/06/17 10:25	04/07/17 16:33	1
ORO C24-C40	**9.95**		5.75	2.87	mg/Kg	☼	04/06/17 10:25	04/07/17 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*101*		*50 - 150*	*04/06/17 10:25*	*04/07/17 16:33*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**10000**		27.3	0.327	mg/Kg	☼	04/12/17 14:34	04/12/17 18:09	1
Arsenic	**2.35**		1.09	0.238	mg/Kg	☼	04/12/17 14:34	04/12/17 18:09	1
Barium	**56.7**	**B**	1.09	0.0327	mg/Kg	☼	04/12/17 14:34	04/12/17 18:09	1
Boron	**1.63**	**J**	21.8	0.421	mg/Kg	☼	04/12/17 14:34	04/12/17 18:09	1
Cadmium	**0.256**	**J**	0.273	0.0279	mg/Kg	☼	04/12/17 14:34	04/12/17 18:09	1
Calcium	**6880**	**B**	109	0.943	mg/Kg	☼	04/12/17 14:34	04/12/17 18:09	1
Chromium	**4.10**		0.546	0.0552	mg/Kg	☼	04/12/17 14:34	04/12/17 18:09	1
Cobalt	**8.93**		0.546	0.0738	mg/Kg	☼	04/12/17 14:34	04/12/17 18:09	1
Iron	**16800**		21.8	2.76	mg/Kg	☼	04/12/17 14:34	04/12/17 18:09	1
Lead	**13.7**		0.546	0.115	mg/Kg	☼	04/12/17 14:34	04/12/17 18:09	1
Magnesium	**3620**	**B**	109	2.09	mg/Kg	☼	04/12/17 14:34	04/12/17 18:09	1
Manganese	**144**	**B**	1.64	0.0416	mg/Kg	☼	04/12/17 14:34	04/12/17 18:09	1
Molybdenum	**0.660**		0.546	0.148	mg/Kg	☼	04/12/17 14:34	04/12/17 18:09	1
Nickel	**11.2**		1.09	0.128	mg/Kg	☼	04/12/17 14:34	04/12/17 18:09	1
Potassium	**1230**		109	12.0	mg/Kg	☼	04/12/17 14:34	04/12/17 18:09	1
Selenium	0.283	U	2.18	0.283	mg/Kg	☼	04/12/17 14:34	04/12/17 18:09	1
Sodium	**7630**	**B**	109	0.967	mg/Kg	☼	04/12/17 14:34	04/12/17 18:09	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00521**	**J**	0.0179	0.00376	mg/Kg	☼	04/04/17 09:06	04/05/17 08:56	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**13.5**		1.0	1.0	%			04/03/17 15:53	1
Percent Solids	**86.5**		1.0	1.0	%			04/03/17 15:53	1

Client Sample ID: SJRP-SB14-13-14-03312017

Lab Sample ID: 600-146026-6
Date Collected: 03/31/17 10:15
Matrix: Solid
Date Received: 04/01/17 10:28
Percent Solids: 85.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00109**	**J**	0.00524	0.000660	mg/Kg	☼	04/01/17 09:00	04/10/17 14:22	1
Ethylbenzene	**0.0192**		0.00524	0.00107	mg/Kg	☼	04/01/17 09:00	04/10/17 14:22	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Client Sample ID: SJRP-SB14-13-14-03312017
Date Collected: 03/31/17 10:15
Date Received: 04/01/17 10:28

Lab Sample ID: 600-146026-6
Matrix: Solid
Percent Solids: 85.9

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.00145	U	0.00524	0.00145	mg/Kg	☼	04/01/17 09:00	04/10/17 14:22	1
Xylenes, Total	**0.0872**		0.00524	0.00118	mg/Kg	☼	04/01/17 09:00	04/10/17 14:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*61 - 130*	*04/01/17 09:00*	*04/10/17 14:22*	*1*
Dibromofluoromethane	*86*		*68 - 140*	*04/01/17 09:00*	*04/10/17 14:22*	*1*
Toluene-d8 (Surr)	*90*		*50 - 130*	*04/01/17 09:00*	*04/10/17 14:22*	*1*
4-Bromofluorobenzene	*89*		*57 - 140*	*04/01/17 09:00*	*04/10/17 14:22*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.43	U	4.86	2.43	mg/Kg		04/06/17 11:20	04/13/17 02:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*69*		*50 - 150*	*04/06/17 11:20*	*04/13/17 02:26*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**5.08**	**J**	5.81	2.90	mg/Kg	☼	04/06/17 10:25	04/07/17 16:50	1
ORO C24-C40	**4.90**	**J**	5.81	2.90	mg/Kg	☼	04/06/17 10:25	04/07/17 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*95*		*50 - 150*	*04/06/17 10:25*	*04/07/17 16:50*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**14000**		26.7	0.321	mg/Kg	☼	04/12/17 14:34	04/12/17 18:11	1
Arsenic	**4.10**		1.07	0.233	mg/Kg	☼	04/12/17 14:34	04/12/17 18:11	1
Barium	**113**	**B**	1.07	0.0321	mg/Kg	☼	04/12/17 14:34	04/12/17 18:11	1
Boron	**2.35**	**J**	21.4	0.412	mg/Kg	☼	04/12/17 14:34	04/12/17 18:11	1
Cadmium	**0.176**	**J**	0.267	0.0274	mg/Kg	☼	04/12/17 14:34	04/12/17 18:11	1
Calcium	**3400**	**B**	107	0.923	mg/Kg	☼	04/12/17 14:34	04/12/17 18:11	1
Chromium	**10.4**		0.534	0.0541	mg/Kg	☼	04/12/17 14:34	04/12/17 18:11	1
Cobalt	**7.59**		0.534	0.0722	mg/Kg	☼	04/12/17 14:34	04/12/17 18:11	1
Iron	**24800**		21.4	2.70	mg/Kg	☼	04/12/17 14:34	04/12/17 18:11	1
Lead	**15.5**		0.534	0.112	mg/Kg	☼	04/12/17 14:34	04/12/17 18:11	1
Magnesium	**4260**	**B**	107	2.05	mg/Kg	☼	04/12/17 14:34	04/12/17 18:11	1
Manganese	**117**	**B**	1.60	0.0407	mg/Kg	☼	04/12/17 14:34	04/12/17 18:11	1
Molybdenum	**1.82**		0.534	0.145	mg/Kg	☼	04/12/17 14:34	04/12/17 18:11	1
Nickel	**10.3**		1.07	0.125	mg/Kg	☼	04/12/17 14:34	04/12/17 18:11	1
Potassium	**1530**		107	11.8	mg/Kg	☼	04/12/17 14:34	04/12/17 18:11	1
Selenium	0.277	U	2.14	0.277	mg/Kg	☼	04/12/17 14:34	04/12/17 18:11	1
Sodium	**3130**	**B**	107	0.947	mg/Kg	☼	04/12/17 14:34	04/12/17 18:11	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0234**		0.0180	0.00379	mg/Kg	☼	04/04/17 09:06	04/05/17 08:58	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**14.1**		1.0	1.0	%			04/03/17 15:53	1

TestAmerica Houston

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Client Sample ID: SJRP-SB14-13-14-03312017

Lab Sample ID: 600-146026-6
Date Collected: 03/31/17 10:15
Matrix: Solid
Date Received: 04/01/17 10:28
Percent Solids: 85.9

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85.9		1.0	1.0	%			04/03/17 15:53	1

Client Sample ID: SJRP-SB14-31-32-03312017

Lab Sample ID: 600-146026-7
Date Collected: 03/31/17 10:55
Matrix: Solid
Date Received: 04/01/17 10:28
Percent Solids: 86.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2.82		0.246	0.0310	mg/Kg		04/01/17 09:00	04/04/17 18:35	1
Ethylbenzene	1.85		0.246	0.0502	mg/Kg		04/01/17 09:00	04/04/17 18:35	1
Toluene	0.0679	U	0.246	0.0679	mg/Kg		04/01/17 09:00	04/04/17 18:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*61 - 130*	*04/01/17 09:00*	*04/04/17 18:35*	*1*
Dibromofluoromethane	*107*		*68 - 140*	*04/01/17 09:00*	*04/04/17 18:35*	*1*
Toluene-d8 (Surr)	*100*		*50 - 130*	*04/01/17 09:00*	*04/04/17 18:35*	*1*
4-Bromofluorobenzene	*88*		*57 - 140*	*04/01/17 09:00*	*04/04/17 18:35*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	15.0		1.23	0.278	mg/Kg		04/01/17 09:00	04/04/17 19:03	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*61 - 130*	*04/01/17 09:00*	*04/04/17 19:03*	*5*
Dibromofluoromethane	*106*		*68 - 140*	*04/01/17 09:00*	*04/04/17 19:03*	*5*
Toluene-d8 (Surr)	*97*		*50 - 130*	*04/01/17 09:00*	*04/04/17 19:03*	*5*
4-Bromofluorobenzene	*81*		*57 - 140*	*04/01/17 09:00*	*04/04/17 19:03*	*5*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.25	U	4.50	2.25	mg/Kg		04/06/17 11:20	04/13/17 02:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*68*		*50 - 150*	*04/06/17 11:20*	*04/13/17 02:56*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	16.5		5.67	2.84	mg/Kg	☼	04/06/17 10:25	04/07/17 17:08	1
ORO C24-C40	2.84	U	5.67	2.84	mg/Kg	☼	04/06/17 10:25	04/07/17 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*76*		*50 - 150*	*04/06/17 10:25*	*04/07/17 17:08*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11800		29.0	0.348	mg/Kg	☼	04/12/17 14:34	04/12/17 18:13	1
Arsenic	1.49		1.16	0.253	mg/Kg	☼	04/12/17 14:34	04/12/17 18:13	1
Barium	32.1	B	1.16	0.0348	mg/Kg	☼	04/12/17 14:34	04/12/17 18:13	1
Boron	1.86	J	23.2	0.448	mg/Kg	☼	04/12/17 14:34	04/12/17 18:13	1
Cadmium	0.221	J	0.290	0.0297	mg/Kg	☼	04/12/17 14:34	04/12/17 18:13	1
Calcium	1970	B	116	1.00	mg/Kg	☼	04/12/17 14:34	04/12/17 18:13	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Client Sample ID: SJRP-SB14-31-32-03312017

Lab Sample ID: 600-146026-7
Date Collected: 03/31/17 10:55
Matrix: Solid
Date Received: 04/01/17 10:28
Percent Solids: 86.1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	4.30		0.580	0.0587	mg/Kg	☼	04/12/17 14:34	04/12/17 18:13	1
Cobalt	5.64		0.580	0.0785	mg/Kg	☼	04/12/17 14:34	04/12/17 18:13	1
Iron	16300		23.2	2.94	mg/Kg	☼	04/12/17 14:34	04/12/17 18:13	1
Lead	13.1		0.580	0.122	mg/Kg	☼	04/12/17 14:34	04/12/17 18:13	1
Magnesium	4330	B	116	2.23	mg/Kg	☼	04/12/17 14:34	04/12/17 18:13	1
Manganese	205	B	1.74	0.0442	mg/Kg	☼	04/12/17 14:34	04/12/17 18:13	1
Molybdenum	0.406	J	0.580	0.158	mg/Kg	☼	04/12/17 14:34	04/12/17 18:13	1
Nickel	8.48		1.16	0.136	mg/Kg	☼	04/12/17 14:34	04/12/17 18:13	1
Potassium	1350		116	12.8	mg/Kg	☼	04/12/17 14:34	04/12/17 18:13	1
Selenium	0.301	U	2.32	0.301	mg/Kg	☼	04/12/17 14:34	04/12/17 18:13	1
Sodium	7080	B	116	1.03	mg/Kg	☼	04/12/17 14:34	04/12/17 18:13	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0219		0.0188	0.00396	mg/Kg	☼	04/04/17 09:06	04/05/17 08:59	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	13.9		1.0	1.0	%			04/03/17 15:53	1
Percent Solids	86.1		1.0	1.0	%			04/03/17 15:53	1

Client Sample ID: SJRP-SB14-37-38-03312017

Lab Sample ID: 600-146026-8
Date Collected: 03/31/17 11:05
Matrix: Solid
Date Received: 04/01/17 10:28
Percent Solids: 87.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0161		0.00939	0.00118	mg/Kg	☼	04/01/17 09:00	04/10/17 14:47	1
Ethylbenzene	0.0338		0.00939	0.00192	mg/Kg	☼	04/01/17 09:00	04/10/17 14:47	1
Toluene	0.0140		0.00939	0.00259	mg/Kg	☼	04/01/17 09:00	04/10/17 14:47	1
Xylenes, Total	0.263		0.00939	0.00212	mg/Kg	☼	04/01/17 09:00	04/10/17 14:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*76*		*61 - 130*	*04/01/17 09:00*	*04/10/17 14:47*	*1*
Dibromofluoromethane	*76*		*68 - 140*	*04/01/17 09:00*	*04/10/17 14:47*	*1*
Toluene-d8 (Surr)	*90*		*50 - 130*	*04/01/17 09:00*	*04/10/17 14:47*	*1*
4-Bromofluorobenzene	*97*		*57 - 140*	*04/01/17 09:00*	*04/10/17 14:47*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.32	U	4.64	2.32	mg/Kg		04/06/17 11:20	04/13/17 03:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*65*		*50 - 150*	*04/06/17 11:20*	*04/13/17 03:26*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	12.6		5.67	2.84	mg/Kg	☼	04/06/17 10:25	04/07/17 17:25	1
ORO C24-C40	12.2		5.67	2.84	mg/Kg	☼	04/06/17 10:25	04/07/17 17:25	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Client Sample ID: SJRP-SB14-37-38-03312017

Lab Sample ID: 600-146026-8
Date Collected: 03/31/17 11:05
Matrix: Solid
Date Received: 04/01/17 10:28
Percent Solids: 87.2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	77		50 - 150	04/06/17 10:25	04/07/17 17:25	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	12800		27.8	0.334	mg/Kg	☼	04/12/17 14:34	04/12/17 18:15	1
Arsenic	3.55		1.11	0.243	mg/Kg	☼	04/12/17 14:34	04/12/17 18:15	1
Barium	70.5	B	1.11	0.0334	mg/Kg	☼	04/12/17 14:34	04/12/17 18:15	1
Boron	2.42	J	22.3	0.430	mg/Kg	☼	04/12/17 14:34	04/12/17 18:15	1
Cadmium	0.290		0.278	0.0285	mg/Kg	☼	04/12/17 14:34	04/12/17 18:15	1
Calcium	3200	B	111	0.962	mg/Kg	☼	04/12/17 14:34	04/12/17 18:15	1
Chromium	4.15		0.557	0.0564	mg/Kg	☼	04/12/17 14:34	04/12/17 18:15	1
Cobalt	10.3		0.557	0.0753	mg/Kg	☼	04/12/17 14:34	04/12/17 18:15	1
Iron	18500		22.3	2.82	mg/Kg	☼	04/12/17 14:34	04/12/17 18:15	1
Lead	14.4		0.557	0.117	mg/Kg	☼	04/12/17 14:34	04/12/17 18:15	1
Magnesium	3380	B	111	2.14	mg/Kg	☼	04/12/17 14:34	04/12/17 18:15	1
Manganese	131	B	1.67	0.0424	mg/Kg	☼	04/12/17 14:34	04/12/17 18:15	1
Molybdenum	2.60		0.557	0.151	mg/Kg	☼	04/12/17 14:34	04/12/17 18:15	1
Nickel	13.3		1.11	0.130	mg/Kg	☼	04/12/17 14:34	04/12/17 18:15	1
Potassium	1280		111	12.3	mg/Kg	☼	04/12/17 14:34	04/12/17 18:15	1
Selenium	0.288	U	2.23	0.288	mg/Kg	☼	04/12/17 14:34	04/12/17 18:15	1
Sodium	9120	B	111	0.987	mg/Kg	☼	04/12/17 14:34	04/12/17 18:15	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0230		0.0177	0.00373	mg/Kg	☼	04/04/17 09:06	04/05/17 09:01	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.8		1.0	1.0	%			04/03/17 15:53	1
Percent Solids	87.2		1.0	1.0	%			04/03/17 15:53	1

Client Sample ID: SJRP-MW11-29-30-03312017

Lab Sample ID: 600-146026-9
Date Collected: 03/31/17 15:45
Matrix: Solid
Date Received: 04/01/17 10:28
Percent Solids: 90.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000776	U	0.00616	0.000776	mg/Kg	☼	04/01/17 09:00	04/06/17 13:38	1
Ethylbenzene	0.00126	U	0.00616	0.00126	mg/Kg	☼	04/01/17 09:00	04/06/17 13:38	1
Toluene	0.00170	U	0.00616	0.00170	mg/Kg	☼	04/01/17 09:00	04/06/17 13:38	1
Xylenes, Total	0.00400	J	0.00616	0.00139	mg/Kg	☼	04/01/17 09:00	04/06/17 13:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		61 - 130	04/01/17 09:00	04/06/17 13:38	1
Dibromofluoromethane	91		68 - 140	04/01/17 09:00	04/06/17 13:38	1
Toluene-d8 (Surr)	97		50 - 130	04/01/17 09:00	04/06/17 13:38	1
4-Bromofluorobenzene	102		57 - 140	04/01/17 09:00	04/06/17 13:38	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.38	U	4.75	2.38	mg/Kg		04/06/17 11:20	04/13/17 03:57	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	68		50 - 150	04/06/17 11:20	04/13/17 03:57	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	6.47		5.49	2.74	mg/Kg	☼	04/06/17 10:27	04/07/17 17:43	1
ORO C24-C40	8.63		5.49	2.74	mg/Kg	☼	04/06/17 10:27	04/07/17 17:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	115		50 - 150	04/06/17 10:27	04/07/17 17:43	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7690		24.6	0.295	mg/Kg	☼	04/12/17 14:34	04/12/17 18:24	1
Arsenic	2.62		0.983	0.214	mg/Kg	☼	04/12/17 14:34	04/12/17 18:24	1
Barium	118	B	0.983	0.0295	mg/Kg	☼	04/12/17 14:34	04/12/17 18:24	1
Boron	0.664	J	19.7	0.380	mg/Kg	☼	04/12/17 14:34	04/12/17 18:24	1
Cadmium	0.138	J	0.246	0.0252	mg/Kg	☼	04/12/17 14:34	04/12/17 18:24	1
Calcium	3480	B	98.3	0.850	mg/Kg	☼	04/12/17 14:34	04/12/17 18:24	1
Chromium	4.78		0.492	0.0498	mg/Kg	☼	04/12/17 14:34	04/12/17 18:24	1
Cobalt	11.0		0.492	0.0665	mg/Kg	☼	04/12/17 14:34	04/12/17 18:24	1
Iron	17100		19.7	2.49	mg/Kg	☼	04/12/17 14:34	04/12/17 18:24	1
Lead	8.53		0.492	0.103	mg/Kg	☼	04/12/17 14:34	04/12/17 18:24	1
Magnesium	2560	B	98.3	1.89	mg/Kg	☼	04/12/17 14:34	04/12/17 18:24	1
Manganese	211	B	1.48	0.0375	mg/Kg	☼	04/12/17 14:34	04/12/17 18:24	1
Molybdenum	0.752		0.492	0.134	mg/Kg	☼	04/12/17 14:34	04/12/17 18:24	1
Nickel	11.0		0.983	0.115	mg/Kg	☼	04/12/17 14:34	04/12/17 18:24	1
Potassium	576		98.3	10.8	mg/Kg	☼	04/12/17 14:34	04/12/17 18:24	1
Selenium	0.255	U	1.97	0.255	mg/Kg	☼	04/12/17 14:34	04/12/17 18:24	1
Sodium	501	B	98.3	0.871	mg/Kg	☼	04/12/17 14:34	04/12/17 18:24	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00530	J	0.0180	0.00379	mg/Kg	☼	04/04/17 09:06	04/05/17 09:03	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.0		1.0	1.0	%			04/03/17 15:53	1
Percent Solids	90.0		1.0	1.0	%			04/03/17 15:53	1

Client Sample ID: SJRP-EB-03312017 — **Lab Sample ID: 600-146026-10**
Date Collected: 03/31/17 15:40 — **Matrix: Water**
Date Received: 04/01/17 10:28

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/06/17 17:45	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/06/17 17:45	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/06/17 17:45	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/06/17 17:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		50 - 134		04/06/17 17:45	1
Dibromofluoromethane	100		62 - 130		04/06/17 17:45	1
Toluene-d8 (Surr)	109		70 - 130		04/06/17 17:45	1
4-Bromofluorobenzene	104		67 - 139		04/06/17 17:45	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Client Sample ID: SJRP-EB-03312017

Lab Sample ID: 600-146026-10
Date Collected: 03/31/17 15:40
Matrix: Water
Date Received: 04/01/17 10:28

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			04/08/17 01:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*116*		*50 - 150*		*04/08/17 01:09*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0892	U	0.0980	0.0892	mg/L		04/06/17 09:56	04/06/17 16:54	1
ORO C24-C40	0.0892	U	0.0980	0.0892	mg/L		04/06/17 09:56	04/06/17 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*84*		*50 - 150*	*04/06/17 09:56*	*04/06/17 16:54*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		04/10/17 10:45	04/11/17 14:49	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		04/10/17 10:45	04/11/17 14:49	1
Barium	**0.00571**	**J**	0.0200	0.000530	mg/L		04/10/17 10:45	04/11/17 14:49	1
Boron	0.0116	U	0.200	0.0116	mg/L		04/10/17 10:45	04/11/17 14:49	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		04/10/17 10:45	04/11/17 14:49	1
Calcium	**0.128**	**J**	1.00	0.0240	mg/L		04/10/17 10:45	04/11/17 14:49	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/10/17 10:45	04/11/17 14:49	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		04/10/17 10:45	04/11/17 14:49	1
Iron	**0.0840**	**J**	0.400	0.0270	mg/L		04/10/17 10:45	04/11/17 14:49	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/10/17 10:45	04/11/17 14:49	1
Magnesium	0.0555	U	1.00	0.0555	mg/L		04/10/17 10:45	04/11/17 14:49	1
Manganese	**0.00186**	**J**	0.0100	0.000360	mg/L		04/10/17 10:45	04/11/17 14:49	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		04/10/17 10:45	04/11/17 14:49	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		04/10/17 10:45	04/11/17 14:49	1
Potassium	0.0374	U	1.00	0.0374	mg/L		04/10/17 10:45	04/11/17 14:49	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/10/17 10:45	04/11/17 14:49	1
Sodium	**0.507**	**J B**	1.00	0.0214	mg/L		04/10/17 10:45	04/11/17 14:49	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000820	U	0.000200	0.0000820	mg/L		04/03/17 09:19	04/03/17 14:12	1

Client Sample ID: SJRP-EB-03302017

Lab Sample ID: 600-146026-11
Date Collected: 03/30/17 14:10
Matrix: Water
Date Received: 04/01/17 10:28

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/06/17 18:09	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/06/17 18:09	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/06/17 18:09	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/06/17 18:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*50 - 134*		*04/06/17 18:09*	*1*

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Client Sample ID: SJRP-EB-03302017

Lab Sample ID: 600-146026-11
Date Collected: 03/30/17 14:10
Matrix: Water
Date Received: 04/01/17 10:28

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*101*		*62 - 130*		*04/06/17 18:09*	*1*
Toluene-d8 (Surr)	*107*		*70 - 130*		*04/06/17 18:09*	*1*
4-Bromofluorobenzene	*104*		*67 - 139*		*04/06/17 18:09*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			04/08/17 01:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*118*		*50 - 150*		*04/08/17 01:39*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0989	U	0.109	0.0989	mg/L		04/06/17 09:56	04/06/17 17:10	1
ORO C24-C40	0.0989	U	0.109	0.0989	mg/L		04/06/17 09:56	04/06/17 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*69*		*50 - 150*	*04/06/17 09:56*	*04/06/17 17:10*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		04/10/17 10:45	04/11/17 14:51	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		04/10/17 10:45	04/11/17 14:51	1
Barium	**0.00589**	**J**	0.0200	0.000530	mg/L		04/10/17 10:45	04/11/17 14:51	1
Boron	0.0116	U	0.200	0.0116	mg/L		04/10/17 10:45	04/11/17 14:51	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		04/10/17 10:45	04/11/17 14:51	1
Calcium	**0.102**	**J**	1.00	0.0240	mg/L		04/10/17 10:45	04/11/17 14:51	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/10/17 10:45	04/11/17 14:51	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		04/10/17 10:45	04/11/17 14:51	1
Iron	0.0270	U	0.400	0.0270	mg/L		04/10/17 10:45	04/11/17 14:51	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/10/17 10:45	04/11/17 14:51	1
Magnesium	0.0555	U	1.00	0.0555	mg/L		04/10/17 10:45	04/11/17 14:51	1
Manganese	0.000360	U	0.0100	0.000360	mg/L		04/10/17 10:45	04/11/17 14:51	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		04/10/17 10:45	04/11/17 14:51	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		04/10/17 10:45	04/11/17 14:51	1
Potassium	0.0374	U	1.00	0.0374	mg/L		04/10/17 10:45	04/11/17 14:51	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/10/17 10:45	04/11/17 14:51	1
Sodium	**0.391**	**J B**	1.00	0.0214	mg/L		04/10/17 10:45	04/11/17 14:51	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000820	U	0.000200	0.0000820	mg/L		04/03/17 09:19	04/03/17 14:06	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 600-146026-12
Date Collected: 03/30/17 00:00
Matrix: Water
Date Received: 04/01/17 10:28

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/07/17 13:52	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 600-146026-12
Date Collected: 03/30/17 00:00
Matrix: Water
Date Received: 04/01/17 10:28

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/07/17 13:52	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/07/17 13:52	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/07/17 13:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*50 - 134*		*04/07/17 13:52*	*1*
Dibromofluoromethane	*101*		*62 - 130*		*04/07/17 13:52*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*04/07/17 13:52*	*1*
4-Bromofluorobenzene	*102*		*67 - 139*		*04/07/17 13:52*	*1*

Client Sample ID: SJRP-SB14-18-19-03312017

Lab Sample ID: 600-146026-13
Date Collected: 03/31/17 10:30
Matrix: Solid
Date Received: 04/01/17 10:28
Percent Solids: 85.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.358**		0.248	0.0313	mg/Kg		04/01/17 09:00	04/04/17 18:07	1
Ethylbenzene	**2.40**		0.248	0.0506	mg/Kg		04/01/17 09:00	04/04/17 18:07	1
Toluene	0.0685	U	0.248	0.0685	mg/Kg		04/01/17 09:00	04/04/17 18:07	1
Xylenes, Total	**1.68**		0.248	0.0561	mg/Kg		04/01/17 09:00	04/04/17 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*61 - 130*	*04/01/17 09:00*	*04/04/17 18:07*	*1*
Dibromofluoromethane	*97*		*68 - 140*	*04/01/17 09:00*	*04/04/17 18:07*	*1*
Toluene-d8 (Surr)	*93*		*50 - 130*	*04/01/17 09:00*	*04/04/17 18:07*	*1*
4-Bromofluorobenzene	*69*		*57 - 140*	*04/01/17 09:00*	*04/04/17 18:07*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	**21.3**		4.34	2.17	mg/Kg		04/06/17 11:20	04/13/17 04:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*67*		*50 - 150*	*04/06/17 11:20*	*04/13/17 04:27*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**35.1**		5.85	2.92	mg/Kg	☼	04/06/17 10:27	04/07/17 18:00	1
ORO C24-C40	**4.30**	**J**	5.85	2.92	mg/Kg	☼	04/06/17 10:27	04/07/17 18:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*84*		*50 - 150*	*04/06/17 10:27*	*04/07/17 18:00*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**10500**		25.3	0.304	mg/Kg	☼	04/12/17 14:34	04/12/17 18:26	1
Arsenic	**42.9**		1.01	0.221	mg/Kg	☼	04/12/17 14:34	04/12/17 18:26	1
Barium	**254**	**B**	5.06	0.152	mg/Kg	☼	04/12/17 14:34	04/13/17 12:16	5
Boron	**1.36**	**J**	20.3	0.391	mg/Kg	☼	04/12/17 14:34	04/12/17 18:26	1
Cadmium	**0.557**		0.253	0.0259	mg/Kg	☼	04/12/17 14:34	04/12/17 18:26	1
Calcium	**4080**	**B**	101	0.875	mg/Kg	☼	04/12/17 14:34	04/12/17 18:26	1
Chromium	**7.55**		0.506	0.0512	mg/Kg	☼	04/12/17 14:34	04/12/17 18:26	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Client Sample ID: SJRP-SB14-18-19-03312017
Date Collected: 03/31/17 10:30
Date Received: 04/01/17 10:28

Lab Sample ID: 600-146026-13
Matrix: Solid
Percent Solids: 85.1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	9.90		0.506	0.0684	mg/Kg	☼	04/12/17 14:34	04/12/17 18:26	1
Iron	45700		20.3	2.56	mg/Kg	☼	04/12/17 14:34	04/12/17 18:26	1
Lead	20.2		0.506	0.106	mg/Kg	☼	04/12/17 14:34	04/12/17 18:26	1
Magnesium	2630	B	101	1.94	mg/Kg	☼	04/12/17 14:34	04/12/17 18:26	1
Manganese	97.1	B	1.52	0.0386	mg/Kg	☼	04/12/17 14:34	04/12/17 18:26	1
Molybdenum	14.3		0.506	0.138	mg/Kg	☼	04/12/17 14:34	04/12/17 18:26	1
Nickel	13.6		1.01	0.118	mg/Kg	☼	04/12/17 14:34	04/12/17 18:26	1
Potassium	1600		101	11.1	mg/Kg	☼	04/12/17 14:34	04/12/17 18:26	1
Selenium	3.98		2.03	0.262	mg/Kg	☼	04/12/17 14:34	04/12/17 18:26	1
Sodium	3040	B	101	0.897	mg/Kg	☼	04/12/17 14:34	04/12/17 18:26	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0233		0.0196	0.00414	mg/Kg	☼	04/04/17 09:06	04/05/17 09:05	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14.9		1.0	1.0	%			04/03/17 15:53	1
Percent Solids	85.1		1.0	1.0	%			04/03/17 15:53	1

Definitions/Glossary

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.
F3	Duplicate RPD exceeds the control limit
E	Result exceeded calibration range.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(61-130)	(68-140)	(50-130)	(57-140)
600-146026-1	SJRP-SB19-1-2-03302017	80	87	98	101
600-146026-1 MS	SJRP-SB19-1-2-03302017	98	95	100	106
600-146026-1 MSD	SJRP-SB19-1-2-03302017	99	100	103	104
600-146026-2	SJRP-SB09-1-2-03302017	101	93	91	102
600-146026-3	SJRP-SB11-17-18-03312017	113	102	92	80
600-146026-3 - DL	SJRP-SB11-17-18-03312017	105	102	95	85
600-146026-4	SJRP-SB11-27-28-03312017	97	98	93	77
600-146026-5	SJRP-SB11-29-30-03312017	100	103	99	83
600-146026-6	SJRP-SB14-13-14-03312017	98	86	90	89
600-146026-7	SJRP-SB14-31-32-03312017	107	107	100	88
600-146026-7 - DL	SJRP-SB14-31-32-03312017	109	106	97	81
600-146026-8	SJRP-SB14-37-38-03312017	76	76	90	97
600-146026-9	SJRP-MW11-29-30-03312017	97	91	97	102
600-146026-13	SJRP-SB14-18-19-03312017	105	97	93	69
LCS 600-209848/1-A	Lab Control Sample	121	120	107	87
LCS 600-210004/3	Lab Control Sample	79	96	110	107
LCS 600-210118/3	Lab Control Sample	97	100	104	111
LCS 600-210347/3	Lab Control Sample	87	92	99	107
LCSD 600-209848/2-A	Lab Control Sample Dup	116	113	116	95
LCSD 600-210004/4	Lab Control Sample Dup	78	95	106	104
LCSD 600-210118/4	Lab Control Sample Dup	90	100	106	113
LCSD 600-210347/4	Lab Control Sample Dup	93	91	98	107
MB 600-209848/3-A	Method Blank	94	97	107	75
MB 600-210004/6	Method Blank	85	86	98	99
MB 600-210118/6	Method Blank	107	96	97	102
MB 600-210347/6	Method Blank	91	87	88	100

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(50-134)	(62-130)	(70-130)	(67-139)
600-146026-10	SJRP-EB-03312017	100	100	109	104
600-146026-11	SJRP-EB-03302017	99	101	107	104
600-146026-12	TRIP BLANK	105	101	102	102
LCS 600-210119/3	Lab Control Sample	107	109	110	112
LCS 600-210233/3	Lab Control Sample	104	107	104	109
LCSD 600-210119/4	Lab Control Sample Dup	108	109	109	111
LCSD 600-210233/4	Lab Control Sample Dup	107	108	102	104
MB 600-210119/6	Method Blank	104	102	110	105
MB 600-210233/6	Method Blank	101	96	104	101

Surrogate Legend

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	TFT2 (50-150)
600-146026-1	SJRP-SB19-1-2-03302017	69
600-146026-1 MS	SJRP-SB19-1-2-03302017	76
600-146026-1 MSD	SJRP-SB19-1-2-03302017	85
600-146026-2	SJRP-SB09-1-2-03302017	69
600-146026-3	SJRP-SB11-17-18-03312017	69
600-146026-4	SJRP-SB11-27-28-03312017	69
600-146026-5	SJRP-SB11-29-30-03312017	67
600-146026-6	SJRP-SB14-13-14-03312017	69
600-146026-7	SJRP-SB14-31-32-03312017	68
600-146026-8	SJRP-SB14-37-38-03312017	65
600-146026-9	SJRP-MW11-29-30-03312017	68
600-146026-13	SJRP-SB14-18-19-03312017	67
LCS 490-420272/2-A	Lab Control Sample	87
LCSD 490-420272/3-A	Lab Control Sample Dup	86
MB 490-420272/1-A	Method Blank	64
MB 490-420678/1-A	Method Blank	61

Surrogate Legend
TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	TFT2 (50-150)
600-146026-10	SJRP-EB-03312017	116
600-146026-11	SJRP-EB-03302017	118
LCS 490-420456/4	Lab Control Sample	116
LCSD 490-420456/5	Lab Control Sample Dup	99
MB 490-420456/24	Method Blank	116

Surrogate Legend
TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	OTPH1 (50-150)
600-146026-1	SJRP-SB19-1-2-03302017	86
600-146026-1 MS	SJRP-SB19-1-2-03302017	82
600-146026-1 MSD	SJRP-SB19-1-2-03302017	69
600-146026-2	SJRP-SB09-1-2-03302017	101

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	OTPH1 (50-150)
600-146026-3	SJRP-SB11-17-18-03312017	82
600-146026-4	SJRP-SB11-27-28-03312017	93
600-146026-5	SJRP-SB11-29-30-03312017	101
600-146026-6	SJRP-SB14-13-14-03312017	95
600-146026-7	SJRP-SB14-31-32-03312017	76
600-146026-8	SJRP-SB14-37-38-03312017	77
600-146026-9	SJRP-MW11-29-30-03312017	115
600-146026-13	SJRP-SB14-18-19-03312017	84
LCS 490-420223/2-A	Lab Control Sample	99
LCSD 490-420223/3-A	Lab Control Sample Dup	99
MB 490-420223/1-A	Method Blank	93

Surrogate Legend

OTPH = o-Terphenyl (Surr)

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	OTPH1 (50-150)
600-146026-10	SJRP-EB-03312017	84
600-146026-11	SJRP-EB-03302017	69
LCS 490-420208/2-A	Lab Control Sample	93
LCSD 490-420208/3-A	Lab Control Sample Dup	85
MB 490-420208/1-A	Method Blank	79

Surrogate Legend

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-209848/3-A
Matrix: Solid
Analysis Batch: 209850

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 209848

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0788	U	0.625	0.0788	mg/Kg		04/03/17 11:00	04/03/17 20:41	1
Ethylbenzene	0.128	U	0.625	0.128	mg/Kg		04/03/17 11:00	04/03/17 20:41	1
Toluene	0.173	U	0.625	0.173	mg/Kg		04/03/17 11:00	04/03/17 20:41	1
Xylenes, Total	0.141	U	0.625	0.141	mg/Kg		04/03/17 11:00	04/03/17 20:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*61 - 130*	*04/03/17 11:00*	*04/03/17 20:41*	*1*
Dibromofluoromethane	*97*		*68 - 140*	*04/03/17 11:00*	*04/03/17 20:41*	*1*
Toluene-d8 (Surr)	*107*		*50 - 130*	*04/03/17 11:00*	*04/03/17 20:41*	*1*
4-Bromofluorobenzene	*75*		*57 - 140*	*04/03/17 11:00*	*04/03/17 20:41*	*1*

Lab Sample ID: LCS 600-209848/1-A
Matrix: Solid
Analysis Batch: 209850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 209848

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			6.25	5.449		mg/Kg		87	70 - 131		
Ethylbenzene			6.25	5.241		mg/Kg		84	66 - 130		
Toluene			6.25	4.731		mg/Kg		76	67 - 130		
Xylenes, Total			12.5	9.466		mg/Kg		76	63 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*121*		*61 - 130*
Dibromofluoromethane	*120*		*68 - 140*
Toluene-d8 (Surr)	*107*		*50 - 130*
4-Bromofluorobenzene	*87*		*57 - 140*

Lab Sample ID: LCSD 600-209848/2-A
Matrix: Solid
Analysis Batch: 209850

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 209848

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			6.25	5.883		mg/Kg		94	70 - 131	8	30
Ethylbenzene			6.25	6.053		mg/Kg		97	66 - 130	14	30
Toluene			6.25	5.789		mg/Kg		93	67 - 130	20	30
Xylenes, Total			12.5	11.80		mg/Kg		94	63 - 130	22	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*116*		*61 - 130*
Dibromofluoromethane	*113*		*68 - 140*
Toluene-d8 (Surr)	*116*		*50 - 130*
4-Bromofluorobenzene	*95*		*57 - 140*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 600-146026-1 MS
Matrix: Solid
Analysis Batch: 210118

Client Sample ID: SJRP-SB19-1-2-03302017
Prep Type: Total/NA
Prep Batch: 209863

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.000752	U	0.0569	0.04537		mg/Kg	☼	80	70 - 131
Ethylbenzene	0.00122	U	0.0569	0.04247		mg/Kg	☼	75	66 - 130
Toluene	0.00165	U	0.0569	0.04367		mg/Kg	☼	77	67 - 130
Xylenes, Total	0.00135	U	0.114	0.08833		mg/Kg	☼	78	63 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*61 - 130*
Dibromofluoromethane	*95*		*68 - 140*
Toluene-d8 (Surr)	*100*		*50 - 130*
4-Bromofluorobenzene	*106*		*57 - 140*

Lab Sample ID: 600-146026-1 MSD
Matrix: Solid
Analysis Batch: 210118

Client Sample ID: SJRP-SB19-1-2-03302017
Prep Type: Total/NA
Prep Batch: 209863

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.000752	U	0.0499	0.03724		mg/Kg	☼	75	70 - 131	20	30
Ethylbenzene	0.00122	U	0.0499	0.03452		mg/Kg	☼	69	66 - 130	21	30
Toluene	0.00165	U	0.0499	0.03748		mg/Kg	☼	75	67 - 130	15	30
Xylenes, Total	0.00135	U	0.0997	0.06914		mg/Kg	☼	69	63 - 130	24	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*61 - 130*
Dibromofluoromethane	*100*		*68 - 140*
Toluene-d8 (Surr)	*103*		*50 - 130*
4-Bromofluorobenzene	*104*		*57 - 140*

Lab Sample ID: MB 600-210004/6
Matrix: Solid
Analysis Batch: 210004

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			04/05/17 13:21	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			04/05/17 13:21	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			04/05/17 13:21	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			04/05/17 13:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*61 - 130*		*04/05/17 13:21*	*1*
Dibromofluoromethane	*86*		*68 - 140*		*04/05/17 13:21*	*1*
Toluene-d8 (Surr)	*98*		*50 - 130*		*04/05/17 13:21*	*1*
4-Bromofluorobenzene	*99*		*57 - 140*		*04/05/17 13:21*	*1*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-210004/3
Matrix: Solid
Analysis Batch: 210004

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.05336		mg/Kg		107	70 - 131		
Ethylbenzene			0.0500	0.05479		mg/Kg		110	66 - 130		
Toluene			0.0500	0.05576		mg/Kg		112	67 - 130		
Xylenes, Total			0.100	0.1088		mg/Kg		109	63 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*79*		*61 - 130*
Dibromofluoromethane	*96*		*68 - 140*
Toluene-d8 (Surr)	*110*		*50 - 130*
4-Bromofluorobenzene	*107*		*57 - 140*

Lab Sample ID: LCSD 600-210004/4
Matrix: Solid
Analysis Batch: 210004

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.04940		mg/Kg		99	70 - 131	8	30
Ethylbenzene			0.0500	0.04789		mg/Kg		96	66 - 130	13	30
Toluene			0.0500	0.04972		mg/Kg		99	67 - 130	11	30
Xylenes, Total			0.100	0.09442		mg/Kg		94	63 - 130	14	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*78*		*61 - 130*
Dibromofluoromethane	*95*		*68 - 140*
Toluene-d8 (Surr)	*106*		*50 - 130*
4-Bromofluorobenzene	*104*		*57 - 140*

Lab Sample ID: MB 600-210118/6
Matrix: Solid
Analysis Batch: 210118

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			04/06/17 11:09	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			04/06/17 11:09	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			04/06/17 11:09	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			04/06/17 11:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*61 - 130*		*04/06/17 11:09*	*1*
Dibromofluoromethane	*96*		*68 - 140*		*04/06/17 11:09*	*1*
Toluene-d8 (Surr)	*97*		*50 - 130*		*04/06/17 11:09*	*1*
4-Bromofluorobenzene	*102*		*57 - 140*		*04/06/17 11:09*	*1*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-210118/3
Matrix: Solid
Analysis Batch: 210118

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.04274		mg/Kg		85	70 - 131		
Ethylbenzene			0.0500	0.04203		mg/Kg		84	66 - 130		
Toluene			0.0500	0.04177		mg/Kg		84	67 - 130		
Xylenes, Total			0.100	0.08287		mg/Kg		83	63 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*61 - 130*
Dibromofluoromethane	*100*		*68 - 140*
Toluene-d8 (Surr)	*104*		*50 - 130*
4-Bromofluorobenzene	*111*		*57 - 140*

Lab Sample ID: LCSD 600-210118/4
Matrix: Solid
Analysis Batch: 210118

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.04799		mg/Kg		96	70 - 131	12	30
Ethylbenzene			0.0500	0.04933		mg/Kg		99	66 - 130	16	30
Toluene			0.0500	0.05014		mg/Kg		100	67 - 130	18	30
Xylenes, Total			0.100	0.09876		mg/Kg		99	63 - 130	17	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*61 - 130*
Dibromofluoromethane	*100*		*68 - 140*
Toluene-d8 (Surr)	*106*		*50 - 130*
4-Bromofluorobenzene	*113*		*57 - 140*

Lab Sample ID: MB 600-210119/6
Matrix: Water
Analysis Batch: 210119

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/06/17 11:45	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/06/17 11:45	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/06/17 11:45	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/06/17 11:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*50 - 134*		*04/06/17 11:45*	*1*
Dibromofluoromethane	*102*		*62 - 130*		*04/06/17 11:45*	*1*
Toluene-d8 (Surr)	*110*		*70 - 130*		*04/06/17 11:45*	*1*
4-Bromofluorobenzene	*105*		*67 - 139*		*04/06/17 11:45*	*1*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-210119/3
Matrix: Water
Analysis Batch: 210119

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0100	0.009343		mg/L		93	70 - 130		
Ethylbenzene			0.0100	0.009771		mg/L		98	70 - 130		
Toluene			0.0100	0.009232		mg/L		92	70 - 130		
Xylenes, Total			0.0200	0.01979		mg/L		99	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*50 - 134*
Dibromofluoromethane	*109*		*62 - 130*
Toluene-d8 (Surr)	*110*		*70 - 130*
4-Bromofluorobenzene	*112*		*67 - 139*

Lab Sample ID: LCSD 600-210119/4
Matrix: Water
Analysis Batch: 210119

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0100	0.009383		mg/L		94	70 - 130	0	20
Ethylbenzene			0.0100	0.009705		mg/L		97	70 - 130	1	20
Toluene			0.0100	0.009210		mg/L		92	70 - 130	0	20
Xylenes, Total			0.0200	0.01971		mg/L		99	70 - 130	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*50 - 134*
Dibromofluoromethane	*109*		*62 - 130*
Toluene-d8 (Surr)	*109*		*70 - 130*
4-Bromofluorobenzene	*111*		*67 - 139*

Lab Sample ID: MB 600-210233/6
Matrix: Water
Analysis Batch: 210233

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/07/17 10:58	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/07/17 10:58	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/07/17 10:58	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/07/17 10:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*50 - 134*		*04/07/17 10:58*	*1*
Dibromofluoromethane	*96*		*62 - 130*		*04/07/17 10:58*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*04/07/17 10:58*	*1*
4-Bromofluorobenzene	*101*		*67 - 139*		*04/07/17 10:58*	*1*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-210233/3
Matrix: Water
Analysis Batch: 210233

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0100	0.009146		mg/L		91	70 - 130
Ethylbenzene	0.0100	0.009548		mg/L		95	70 - 130
Toluene	0.0100	0.009176		mg/L		92	70 - 130
Xylenes, Total	0.0200	0.01957		mg/L		98	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*50 - 134*
Dibromofluoromethane	*107*		*62 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*
4-Bromofluorobenzene	*109*		*67 - 139*

Lab Sample ID: LCSD 600-210233/4
Matrix: Water
Analysis Batch: 210233

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0100	0.009605		mg/L		96	70 - 130	5	20
Ethylbenzene	0.0100	0.009663		mg/L		97	70 - 130	1	20
Toluene	0.0100	0.009161		mg/L		92	70 - 130	0	20
Xylenes, Total	0.0200	0.01978		mg/L		99	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*50 - 134*
Dibromofluoromethane	*108*		*62 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*
4-Bromofluorobenzene	*104*		*67 - 139*

Lab Sample ID: MB 600-210347/6
Matrix: Solid
Analysis Batch: 210347

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			04/10/17 11:27	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			04/10/17 11:27	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			04/10/17 11:27	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			04/10/17 11:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*61 - 130*		*04/10/17 11:27*	*1*
Dibromofluoromethane	*87*		*68 - 140*		*04/10/17 11:27*	*1*
Toluene-d8 (Surr)	*88*		*50 - 130*		*04/10/17 11:27*	*1*
4-Bromofluorobenzene	*100*		*57 - 140*		*04/10/17 11:27*	*1*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-210347/3
Matrix: Solid
Analysis Batch: 210347

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.05257		mg/Kg		105	70 - 131		
Ethylbenzene			0.0500	0.04931		mg/Kg		99	66 - 130		
Toluene			0.0500	0.05074		mg/Kg		101	67 - 130		
Xylenes, Total			0.100	0.09999		mg/Kg		100	63 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*61 - 130*
Dibromofluoromethane	*92*		*68 - 140*
Toluene-d8 (Surr)	*99*		*50 - 130*
4-Bromofluorobenzene	*107*		*57 - 140*

Lab Sample ID: LCSD 600-210347/4
Matrix: Solid
Analysis Batch: 210347

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.04363		mg/Kg		87	70 - 131	19	30
Ethylbenzene			0.0500	0.04080		mg/Kg		82	66 - 130	19	30
Toluene			0.0500	0.04259		mg/Kg		85	67 - 130	17	30
Xylenes, Total			0.100	0.08142		mg/Kg		81	63 - 130	20	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*61 - 130*
Dibromofluoromethane	*91*		*68 - 140*
Toluene-d8 (Surr)	*98*		*50 - 130*
4-Bromofluorobenzene	*107*		*57 - 140*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 490-420272/1-A
Matrix: Solid
Analysis Batch: 421820

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 420272

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		04/06/17 11:20	04/12/17 22:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*64*		*50 - 150*	*04/06/17 11:20*	*04/12/17 22:53*	*1*

Lab Sample ID: LCS 490-420272/2-A
Matrix: Solid
Analysis Batch: 421820

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 420272

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C6-C10			500	518.9		mg/Kg		104	70 - 130		

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: LCS 490-420272/2-A
Matrix: Solid
Analysis Batch: 421820

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 420272

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	87		50 - 150

Lab Sample ID: LCSD 490-420272/3-A
Matrix: Solid
Analysis Batch: 421820

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 420272

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10			500	530.1		mg/Kg		106	70 - 130	2	21

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	86		50 - 150

Lab Sample ID: 600-146026-1 MS
Matrix: Solid
Analysis Batch: 421820

Client Sample ID: SJRP-SB19-1-2-03302017
Prep Type: Total/NA
Prep Batch: 420272

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C6-C10	2.35	U F2	470	297.1		mg/Kg		63	56 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene	76		50 - 150

Lab Sample ID: 600-146026-1 MSD
Matrix: Solid
Analysis Batch: 421820

Client Sample ID: SJRP-SB19-1-2-03302017
Prep Type: Total/NA
Prep Batch: 420272

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	2.35	U F2	470	466.0	F2	mg/Kg		99	56 - 130	44	21

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene	85		50 - 150

Lab Sample ID: MB 490-420456/24
Matrix: Water
Analysis Batch: 420456

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			04/07/17 20:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	116		50 - 150		04/07/17 20:42	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: LCS 490-420456/4
Matrix: Water
Analysis Batch: 420456

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C6-C10			1.00	1.060		mg/L		106	66 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*116*		*50 - 150*

Lab Sample ID: LCSD 490-420456/5
Matrix: Water
Analysis Batch: 420456

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10			1.00	1.033		mg/L		103	66 - 140	3	42

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*99*		*50 - 150*

Lab Sample ID: MB 490-420678/1-A
Matrix: Solid
Analysis Batch: 421820

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 420678

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		04/07/17 14:57	04/12/17 23:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*61*		*50 - 150*	*04/07/17 14:57*	*04/12/17 23:23*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Lab Sample ID: MB 490-420208/1-A
Matrix: Water
Analysis Batch: 420146

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 420208

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0910	U	0.100	0.0910	mg/L		04/06/17 09:56	04/06/17 14:18	1
ORO C24-C40	0.0910	U	0.100	0.0910	mg/L		04/06/17 09:56	04/06/17 14:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*79*		*50 - 150*	*04/06/17 09:56*	*04/06/17 14:18*	*1*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Lab Sample ID: LCS 490-420208/2-A
Matrix: Water
Analysis Batch: 420146

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 420208

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			0.800	0.7933		mg/L		99	46 - 132		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*93*		*50 - 150*

Lab Sample ID: LCSD 490-420208/3-A
Matrix: Water
Analysis Batch: 420146

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 420208

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			0.800	0.7339		mg/L		92	46 - 132	8	31

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl (Surr)	*85*		*50 - 150*

Lab Sample ID: MB 490-420223/1-A
Matrix: Solid
Analysis Batch: 420477

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 420223

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.50	U	5.00	2.50	mg/Kg		04/06/17 10:25	04/07/17 10:04	1
ORO C24-C40	2.50	U	5.00	2.50	mg/Kg		04/06/17 10:25	04/07/17 10:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*93*		*50 - 150*	*04/06/17 10:25*	*04/07/17 10:04*	*1*

Lab Sample ID: LCS 490-420223/2-A
Matrix: Solid
Analysis Batch: 420477

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 420223

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			40.0	33.41		mg/Kg		84	54 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*99*		*50 - 150*

Lab Sample ID: LCSD 490-420223/3-A
Matrix: Solid
Analysis Batch: 420477

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 420223

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			40.0	33.20		mg/Kg		83	54 - 130	1	47

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Lab Sample ID: LCSD 490-420223/3-A
Matrix: Solid
Analysis Batch: 420477

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 420223

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o-Terphenyl (Surr)	99		50 - 150

Lab Sample ID: 600-146026-1 MS
Matrix: Solid
Analysis Batch: 420477

Client Sample ID: SJRP-SB19-1-2-03302017
Prep Type: Total/NA
Prep Batch: 420223

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	6.74		43.4	38.00		mg/Kg	☼	72	10 - 142

Surrogate	MS %Recovery	MS Qualifier	Limits
o-Terphenyl (Surr)	82		50 - 150

Lab Sample ID: 600-146026-1 MSD
Matrix: Solid
Analysis Batch: 420477

Client Sample ID: SJRP-SB19-1-2-03302017
Prep Type: Total/NA
Prep Batch: 420223

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	6.74		42.5	30.81		mg/Kg	☼	57	10 - 142	21	47

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl (Surr)	69		50 - 150

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-210368/1-A
Matrix: Water
Analysis Batch: 210521

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210368

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		04/10/17 10:45	04/11/17 14:03	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		04/10/17 10:45	04/11/17 14:03	1
Barium	0.000530	U	0.0200	0.000530	mg/L		04/10/17 10:45	04/11/17 14:03	1
Boron	0.0116	U	0.200	0.0116	mg/L		04/10/17 10:45	04/11/17 14:03	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		04/10/17 10:45	04/11/17 14:03	1
Calcium	0.0240	U	1.00	0.0240	mg/L		04/10/17 10:45	04/11/17 14:03	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/10/17 10:45	04/11/17 14:03	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		04/10/17 10:45	04/11/17 14:03	1
Iron	0.0270	U	0.400	0.0270	mg/L		04/10/17 10:45	04/11/17 14:03	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/10/17 10:45	04/11/17 14:03	1
Magnesium	0.0555	U	1.00	0.0555	mg/L		04/10/17 10:45	04/11/17 14:03	1
Manganese	0.000360	U	0.0100	0.000360	mg/L		04/10/17 10:45	04/11/17 14:03	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		04/10/17 10:45	04/11/17 14:03	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		04/10/17 10:45	04/11/17 14:03	1
Potassium	0.0374	U	1.00	0.0374	mg/L		04/10/17 10:45	04/11/17 14:03	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: MB 600-210368/1-A
Matrix: Water
Analysis Batch: 210521

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210368

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/10/17 10:45	04/11/17 14:03	1
Sodium	0.02522	J	1.00	0.0214	mg/L		04/10/17 10:45	04/11/17 14:03	1

Lab Sample ID: LCS 600-210368/2-A
Matrix: Water
Analysis Batch: 210521

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210368

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	10.38		mg/L		104	80 - 120
Arsenic	1.00	1.052		mg/L		105	80 - 120
Barium	1.00	1.029		mg/L		103	80 - 120
Boron	1.00	1.043		mg/L		104	80 - 120
Cadmium	0.500	0.5152		mg/L		103	80 - 120
Calcium	10.0	10.39		mg/L		104	80 - 120
Chromium	1.00	1.030		mg/L		103	80 - 120
Cobalt	1.00	1.038		mg/L		104	80 - 120
Iron	10.0	10.53		mg/L		105	80 - 120
Lead	1.00	1.058		mg/L		106	80 - 120
Magnesium	10.0	10.42		mg/L		104	80 - 120
Manganese	1.00	1.054		mg/L		105	80 - 120
Molybdenum	1.00	1.024		mg/L		102	80 - 120
Nickel	1.00	1.045		mg/L		105	80 - 120
Potassium	10.0	10.60		mg/L		106	80 - 120
Selenium	1.00	1.055		mg/L		106	80 - 120
Sodium	10.0	10.31		mg/L		103	80 - 120

Lab Sample ID: MB 600-210629/1-A
Matrix: Solid
Analysis Batch: 210632

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210629

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.300	U	25.0	0.300	mg/Kg		04/12/17 14:34	04/12/17 17:12	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		04/12/17 14:34	04/12/17 17:12	1
Barium	0.04000	J	1.00	0.0300	mg/Kg		04/12/17 14:34	04/12/17 17:12	1
Boron	0.386	U	20.0	0.386	mg/Kg		04/12/17 14:34	04/12/17 17:12	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		04/12/17 14:34	04/12/17 17:12	1
Calcium	4.100	J	100	0.864	mg/Kg		04/12/17 14:34	04/12/17 17:12	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		04/12/17 14:34	04/12/17 17:12	1
Cobalt	0.0676	U	0.500	0.0676	mg/Kg		04/12/17 14:34	04/12/17 17:12	1
Iron	2.53	U	20.0	2.53	mg/Kg		04/12/17 14:34	04/12/17 17:12	1
Lead	0.105	U	0.500	0.105	mg/Kg		04/12/17 14:34	04/12/17 17:12	1
Magnesium	3.170	J	100	1.92	mg/Kg		04/12/17 14:34	04/12/17 17:12	1
Manganese	0.05000	J	1.50	0.0381	mg/Kg		04/12/17 14:34	04/12/17 17:12	1
Molybdenum	0.136	U	0.500	0.136	mg/Kg		04/12/17 14:34	04/12/17 17:12	1
Nickel	0.117	U	1.00	0.117	mg/Kg		04/12/17 14:34	04/12/17 17:12	1
Potassium	11.0	U	100	11.0	mg/Kg		04/12/17 14:34	04/12/17 17:12	1
Selenium	0.259	U	2.00	0.259	mg/Kg		04/12/17 14:34	04/12/17 17:12	1
Sodium	15.25	J	100	0.886	mg/Kg		04/12/17 14:34	04/12/17 17:12	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-210629/2-A
Matrix: Solid
Analysis Batch: 210632

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210629

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	7590	6294		mg/Kg		82.9	34.9 - 151.5
Arsenic	97.5	91.98		mg/Kg		94.3	69.2 - 145.6
Barium	306	264.8		mg/Kg		86.5	82.7 - 117.0
Boron	116	109.9		mg/Kg		94.7	73.0 - 127.6
Cadmium	76.6	70.73		mg/Kg		92.3	73.2 - 126.8
Calcium	5880	5168		mg/Kg		87.9	81.8 - 118.4
Chromium	103	88.81		mg/Kg		86.2	79.7 - 121.4
Cobalt	103	101.0		mg/Kg		98.1	83.3 - 116.5
Iron	14500	13450		mg/Kg		92.8	45.0 - 155.9
Lead	96.7	92.65		mg/Kg		95.8	81.7 - 117.9
Magnesium	2680	2367		mg/Kg		88.3	75.4 - 124.6
Manganese	400	346.5		mg/Kg		86.6	81.0 - 119.0
Molybdenum	94.9	92.54		mg/Kg		97.5	78.5 - 121.2
Nickel	153	148.0		mg/Kg		96.7	73.2 - 126.8
Potassium	2230	1980		mg/Kg		88.8	69.5 - 130.5
Selenium	161	155.2		mg/Kg		96.4	77.6 - 123.0
Sodium	370	313.1		mg/Kg		84.6	70.5 - 129.7

Lab Sample ID: 600-146026-1 MS
Matrix: Solid
Analysis Batch: 210632

Client Sample ID: SJRP-SB19-1-2-03302017
Prep Type: Total/NA
Prep Batch: 210629

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	11300		537	13300	4	mg/Kg	☼	372	75 - 125
Arsenic	4.25		53.7	55.77		mg/Kg	☼	96	75 - 125
Boron	4.88	J	53.7	45.56		mg/Kg	☼	76	75 - 125
Cadmium	0.201	J	26.8	26.65		mg/Kg	☼	99	75 - 125
Calcium	25700	B	537	25290	4	mg/Kg	☼	-83	75 - 125
Chromium	9.05		53.7	58.93		mg/Kg	☼	93	75 - 125
Cobalt	6.28		53.7	61.62		mg/Kg	☼	103	75 - 125
Iron	14200		537	16760	4	mg/Kg	☼	474	75 - 125
Lead	11.8		53.7	66.45		mg/Kg	☼	102	75 - 125
Magnesium	3410	B	537	4030	4	mg/Kg	☼	116	75 - 125
Manganese	324	B	53.7	410.1	4	mg/Kg	☼	160	75 - 125
Molybdenum	1.05		53.7	49.56		mg/Kg	☼	90	75 - 125

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-146026-1 MS
Matrix: Solid
Analysis Batch: 210632

Client Sample ID: SJRP-SB19-1-2-03302017
Prep Type: Total/NA
Prep Batch: 210629

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nickel	11.5		53.7	65.21		mg/Kg	☼	100	75 - 125
Potassium	1200		537	1792		mg/Kg	☼	110	75 - 125
Selenium	0.281	U	53.7	48.35		mg/Kg	☼	90	75 - 125
Sodium	1240	B	537	1780		mg/Kg	☼	101	75 - 125

Lab Sample ID: 600-146026-1 MS
Matrix: Solid
Analysis Batch: 210725

Client Sample ID: SJRP-SB19-1-2-03302017
Prep Type: Total/NA
Prep Batch: 210629

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	212	F1 B	53.7	231.3	F1	mg/Kg	☼	36	75 - 125

Lab Sample ID: 600-146026-1 MSD
Matrix: Solid
Analysis Batch: 210725

Client Sample ID: SJRP-SB19-1-2-03302017
Prep Type: Total/NA
Prep Batch: 210629

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	11300		512	14440	4	mg/Kg	☼	613	75 - 125	8	20
Arsenic	4.25		51.2	52.65		mg/Kg	☼	95	75 - 125	6	20
Boron	4.88	J	51.2	43.29		mg/Kg	☼	75	75 - 125	5	20
Cadmium	0.201	J	25.6	24.97		mg/Kg	☼	97	75 - 125	7	20
Calcium	25700	B	512	24870	4	mg/Kg	☼	-169	75 - 125	2	20
Chromium	9.05		51.2	57.10		mg/Kg	☼	94	75 - 125	3	20
Cobalt	6.28		51.2	57.97		mg/Kg	☼	101	75 - 125	6	20
Iron	14200		512	15580	4	mg/Kg	☼	267	75 - 125	7	20
Lead	11.8		51.2	62.01		mg/Kg	☼	98	75 - 125	7	20
Magnesium	3410	B	512	3867	4	mg/Kg	☼	90	75 - 125	4	20
Manganese	324	B	51.2	398.0	4	mg/Kg	☼	144	75 - 125	3	20
Molybdenum	1.05		51.2	46.23		mg/Kg	☼	88	75 - 125	7	20
Nickel	11.5		51.2	63.19		mg/Kg	☼	101	75 - 125	3	20
Potassium	1200		512	1794		mg/Kg	☼	116	75 - 125	0	20
Selenium	0.281	U	51.2	47.01		mg/Kg	☼	92	75 - 125	3	20
Sodium	1240	B	512	1633		mg/Kg	☼	77	75 - 125	9	20

Lab Sample ID: 600-146026-1 MSD
Matrix: Solid
Analysis Batch: 210725

Client Sample ID: SJRP-SB19-1-2-03302017
Prep Type: Total/NA
Prep Batch: 210629

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Barium	212	F1 B	51.2	236.1	4	mg/Kg	☼	47	75 - 125	2	20

Lab Sample ID: 600-146026-1 DU
Matrix: Solid
Analysis Batch: 210632

Client Sample ID: SJRP-SB19-1-2-03302017
Prep Type: Total/NA
Prep Batch: 210629

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	11300		10870		mg/Kg	☼	4	20
Arsenic	4.25		3.897		mg/Kg	☼	9	20
Boron	4.88	J	4.489	J	mg/Kg	☼	8	20

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-146026-1 DU — **Client Sample ID: SJRP-SB19-1-2-03302017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 210632 — **Prep Batch: 210629**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cadmium	0.201	J	0.1991	J	mg/Kg	☼	0.7	20
Calcium	25700	B	25580		mg/Kg	☼	0.6	20
Chromium	9.05		9.312		mg/Kg	☼	3	20
Cobalt	6.28		6.425		mg/Kg	☼	2	20
Iron	14200		13810		mg/Kg	☼	3	20
Lead	11.8		11.99		mg/Kg	☼	1	20
Magnesium	3410	B	3371		mg/Kg	☼	1	20
Manganese	324	B	325.6		mg/Kg	☼	0.4	20
Molybdenum	1.05		0.9904		mg/Kg	☼	5	20
Nickel	11.5		10.84		mg/Kg	☼	6	20
Potassium	1200		1136		mg/Kg	☼	6	20
Selenium	0.281	U	0.258	U	mg/Kg	☼	NC	20
Sodium	1240	B	1235		mg/Kg	☼	0.3	20

Lab Sample ID: 600-146026-1 DU — **Client Sample ID: SJRP-SB19-1-2-03302017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 210725 — **Prep Batch: 210629**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Barium	212	F1 B	200.3		mg/Kg	☼	6	20

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-209814/7-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 209866 — **Prep Batch: 209814**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000820	U	0.000200	0.0000820	mg/L		04/03/17 09:19	04/03/17 13:58	1

Lab Sample ID: LCS 600-209814/8-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 209866 — **Prep Batch: 209814**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00300	0.003097		mg/L		103	70 - 130

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-209909/7-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 210015 — **Prep Batch: 209909**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00336	U	0.0159	0.00336	mg/Kg		04/04/17 09:06	04/05/17 08:26	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) (Continued)

Lab Sample ID: LCSSRM 600-209909/8-A ^100
Matrix: Solid
Analysis Batch: 210015

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 209909

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	20.2	24.37		mg/Kg		120.6	70.8 - 129.2

Lab Sample ID: 600-146026-1 MS
Matrix: Solid
Analysis Batch: 210015

Client Sample ID: SJRP-SB19-1-2-03302017
Prep Type: Total/NA
Prep Batch: 209909

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.402	F2 F1	0.265	0.9335	E F1	mg/Kg	☼	201	75 - 125

Lab Sample ID: 600-146026-1 MSD
Matrix: Solid
Analysis Batch: 210015

Client Sample ID: SJRP-SB19-1-2-03302017
Prep Type: Total/NA
Prep Batch: 209909

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.402	F2 F1	0.261	0.5361	F1 F2	mg/Kg	☼	52	75 - 125	54	20

Lab Sample ID: 600-146026-13 MS
Matrix: Solid
Analysis Batch: 210015

Client Sample ID: SJRP-SB14-18-19-03312017
Prep Type: Total/NA
Prep Batch: 209909

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0233		0.289	0.3722		mg/Kg	☼	121	75 - 125

Lab Sample ID: 600-146026-1 DU
Matrix: Solid
Analysis Batch: 210015

Client Sample ID: SJRP-SB19-1-2-03302017
Prep Type: Total/NA
Prep Batch: 209909

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.402	F2 F1	0.6097	F3	mg/Kg	☼	41	20

Lab Sample ID: 600-146026-13 DU
Matrix: Solid
Analysis Batch: 210015

Client Sample ID: SJRP-SB14-18-19-03312017
Prep Type: Total/NA
Prep Batch: 209909

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.0233		0.04209	F5	mg/Kg	☼	57	20

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

GC/MS VOA

Prep Batch: 209848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-209848/3-A	Method Blank	Total/NA	Solid	5030B	
LCS 600-209848/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 600-209848/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 209850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-209848/3-A	Method Blank	Total/NA	Solid	8260B	209848
LCS 600-209848/1-A	Lab Control Sample	Total/NA	Solid	8260B	209848
LCSD 600-209848/2-A	Lab Control Sample Dup	Total/NA	Solid	8260B	209848

Prep Batch: 209863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146026-1	SJRP-SB19-1-2-03302017	Total/NA	Solid	5035	
600-146026-2	SJRP-SB09-1-2-03302017	Total/NA	Solid	5035	
600-146026-6	SJRP-SB14-13-14-03312017	Total/NA	Solid	5035	
600-146026-8	SJRP-SB14-37-38-03312017	Total/NA	Solid	5035	
600-146026-9	SJRP-MW11-29-30-03312017	Total/NA	Solid	5035	
600-146026-1 MS	SJRP-SB19-1-2-03302017	Total/NA	Solid	5035	
600-146026-1 MSD	SJRP-SB19-1-2-03302017	Total/NA	Solid	5035	

Prep Batch: 209864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146026-3 - DL	SJRP-SB11-17-18-03312017	Total/NA	Solid	5035	
600-146026-3	SJRP-SB11-17-18-03312017	Total/NA	Solid	5035	
600-146026-4	SJRP-SB11-27-28-03312017	Total/NA	Solid	5035	
600-146026-5	SJRP-SB11-29-30-03312017	Total/NA	Solid	5035	
600-146026-7	SJRP-SB14-31-32-03312017	Total/NA	Solid	5035	
600-146026-7 - DL	SJRP-SB14-31-32-03312017	Total/NA	Solid	5035	
600-146026-13	SJRP-SB14-18-19-03312017	Total/NA	Solid	5035	

Analysis Batch: 209944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146026-3	SJRP-SB11-17-18-03312017	Total/NA	Solid	8260B	209864
600-146026-3 - DL	SJRP-SB11-17-18-03312017	Total/NA	Solid	8260B	209864
600-146026-4	SJRP-SB11-27-28-03312017	Total/NA	Solid	8260B	209864
600-146026-5	SJRP-SB11-29-30-03312017	Total/NA	Solid	8260B	209864
600-146026-7	SJRP-SB14-31-32-03312017	Total/NA	Solid	8260B	209864
600-146026-7 - DL	SJRP-SB14-31-32-03312017	Total/NA	Solid	8260B	209864
600-146026-13	SJRP-SB14-18-19-03312017	Total/NA	Solid	8260B	209864

Analysis Batch: 210004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146026-1	SJRP-SB19-1-2-03302017	Total/NA	Solid	8260B	209863
600-146026-2	SJRP-SB09-1-2-03302017	Total/NA	Solid	8260B	209863
MB 600-210004/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-210004/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-210004/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 210118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146026-9	SJRP-MW11-29-30-03312017	Total/NA	Solid	8260B	209863

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

GC/MS VOA (Continued)

Analysis Batch: 210118 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-210118/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-210118/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-210118/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
600-146026-1 MS	SJRP-SB19-1-2-03302017	Total/NA	Solid	8260B	209863
600-146026-1 MSD	SJRP-SB19-1-2-03302017	Total/NA	Solid	8260B	209863

Analysis Batch: 210119

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146026-10	SJRP-EB-03312017	Total/NA	Water	8260B	
600-146026-11	SJRP-EB-03302017	Total/NA	Water	8260B	
MB 600-210119/6	Method Blank	Total/NA	Water	8260B	
LCS 600-210119/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-210119/4	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 210233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146026-12	TRIP BLANK	Total/NA	Water	8260B	
MB 600-210233/6	Method Blank	Total/NA	Water	8260B	
LCS 600-210233/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-210233/4	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 210347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146026-6	SJRP-SB14-13-14-03312017	Total/NA	Solid	8260B	209863
600-146026-8	SJRP-SB14-37-38-03312017	Total/NA	Solid	8260B	209863
MB 600-210347/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-210347/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-210347/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

GC VOA

Prep Batch: 420272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146026-1	SJRP-SB19-1-2-03302017	Total/NA	Solid	5030B	
600-146026-3	SJRP-SB11-17-18-03312017	Total/NA	Solid	5030B	
600-146026-4	SJRP-SB11-27-28-03312017	Total/NA	Solid	5030B	
600-146026-5	SJRP-SB11-29-30-03312017	Total/NA	Solid	5030B	
600-146026-6	SJRP-SB14-13-14-03312017	Total/NA	Solid	5030B	
600-146026-7	SJRP-SB14-31-32-03312017	Total/NA	Solid	5030B	
600-146026-8	SJRP-SB14-37-38-03312017	Total/NA	Solid	5030B	
600-146026-9	SJRP-MW11-29-30-03312017	Total/NA	Solid	5030B	
600-146026-13	SJRP-SB14-18-19-03312017	Total/NA	Solid	5030B	
MB 490-420272/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 490-420272/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 490-420272/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
600-146026-1 MS	SJRP-SB19-1-2-03302017	Total/NA	Solid	5030B	
600-146026-1 MSD	SJRP-SB19-1-2-03302017	Total/NA	Solid	5030B	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

GC VOA (Continued)

Analysis Batch: 420456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146026-10	SJRP-EB-03312017	Total/NA	Water	8015C	
600-146026-11	SJRP-EB-03302017	Total/NA	Water	8015C	
MB 490-420456/24	Method Blank	Total/NA	Water	8015C	
LCS 490-420456/4	Lab Control Sample	Total/NA	Water	8015C	
LCSD 490-420456/5	Lab Control Sample Dup	Total/NA	Water	8015C	

Prep Batch: 420503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146026-2	SJRP-SB09-1-2-03302017	Total/NA	Solid	5030B	

Prep Batch: 420678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-420678/1-A	Method Blank	Total/NA	Solid	5030B	

Analysis Batch: 421820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146026-1	SJRP-SB19-1-2-03302017	Total/NA	Solid	8015C	420272
600-146026-2	SJRP-SB09-1-2-03302017	Total/NA	Solid	8015C	420503
600-146026-3	SJRP-SB11-17-18-03312017	Total/NA	Solid	8015C	420272
600-146026-4	SJRP-SB11-27-28-03312017	Total/NA	Solid	8015C	420272
600-146026-5	SJRP-SB11-29-30-03312017	Total/NA	Solid	8015C	420272
600-146026-6	SJRP-SB14-13-14-03312017	Total/NA	Solid	8015C	420272
600-146026-7	SJRP-SB14-31-32-03312017	Total/NA	Solid	8015C	420272
600-146026-8	SJRP-SB14-37-38-03312017	Total/NA	Solid	8015C	420272
600-146026-9	SJRP-MW11-29-30-03312017	Total/NA	Solid	8015C	420272
600-146026-13	SJRP-SB14-18-19-03312017	Total/NA	Solid	8015C	420272
MB 490-420272/1-A	Method Blank	Total/NA	Solid	8015C	420272
MB 490-420678/1-A	Method Blank	Total/NA	Solid	8015C	420678
LCS 490-420272/2-A	Lab Control Sample	Total/NA	Solid	8015C	420272
LCSD 490-420272/3-A	Lab Control Sample Dup	Total/NA	Solid	8015C	420272
600-146026-1 MS	SJRP-SB19-1-2-03302017	Total/NA	Solid	8015C	420272
600-146026-1 MSD	SJRP-SB19-1-2-03302017	Total/NA	Solid	8015C	420272

GC Semi VOA

Analysis Batch: 420146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146026-10	SJRP-EB-03312017	Total/NA	Water	8015C	420208
600-146026-11	SJRP-EB-03302017	Total/NA	Water	8015C	420208
MB 490-420208/1-A	Method Blank	Total/NA	Water	8015C	420208
LCS 490-420208/2-A	Lab Control Sample	Total/NA	Water	8015C	420208
LCSD 490-420208/3-A	Lab Control Sample Dup	Total/NA	Water	8015C	420208

Prep Batch: 420208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146026-10	SJRP-EB-03312017	Total/NA	Water	3510C	
600-146026-11	SJRP-EB-03302017	Total/NA	Water	3510C	
MB 490-420208/1-A	Method Blank	Total/NA	Water	3510C	
LCS 490-420208/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 490-420208/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

GC Semi VOA (Continued)

Prep Batch: 420223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146026-1	SJRP-SB19-1-2-03302017	Total/NA	Solid	3550C	
600-146026-2	SJRP-SB09-1-2-03302017	Total/NA	Solid	3550C	
600-146026-3	SJRP-SB11-17-18-03312017	Total/NA	Solid	3550C	
600-146026-4	SJRP-SB11-27-28-03312017	Total/NA	Solid	3550C	
600-146026-5	SJRP-SB11-29-30-03312017	Total/NA	Solid	3550C	
600-146026-6	SJRP-SB14-13-14-03312017	Total/NA	Solid	3550C	
600-146026-7	SJRP-SB14-31-32-03312017	Total/NA	Solid	3550C	
600-146026-8	SJRP-SB14-37-38-03312017	Total/NA	Solid	3550C	
600-146026-9	SJRP-MW11-29-30-03312017	Total/NA	Solid	3550C	
600-146026-13	SJRP-SB14-18-19-03312017	Total/NA	Solid	3550C	
MB 490-420223/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-420223/2-A	Lab Control Sample	Total/NA	Solid	3550C	
LCSD 490-420223/3-A	Lab Control Sample Dup	Total/NA	Solid	3550C	
600-146026-1 MS	SJRP-SB19-1-2-03302017	Total/NA	Solid	3550C	
600-146026-1 MSD	SJRP-SB19-1-2-03302017	Total/NA	Solid	3550C	

Analysis Batch: 420477

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146026-1	SJRP-SB19-1-2-03302017	Total/NA	Solid	8015C	420223
600-146026-2	SJRP-SB09-1-2-03302017	Total/NA	Solid	8015C	420223
600-146026-3	SJRP-SB11-17-18-03312017	Total/NA	Solid	8015C	420223
600-146026-3	SJRP-SB11-17-18-03312017	Total/NA	Solid	8015C	420223
600-146026-4	SJRP-SB11-27-28-03312017	Total/NA	Solid	8015C	420223
600-146026-5	SJRP-SB11-29-30-03312017	Total/NA	Solid	8015C	420223
600-146026-6	SJRP-SB14-13-14-03312017	Total/NA	Solid	8015C	420223
600-146026-7	SJRP-SB14-31-32-03312017	Total/NA	Solid	8015C	420223
600-146026-8	SJRP-SB14-37-38-03312017	Total/NA	Solid	8015C	420223
600-146026-9	SJRP-MW11-29-30-03312017	Total/NA	Solid	8015C	420223
600-146026-13	SJRP-SB14-18-19-03312017	Total/NA	Solid	8015C	420223
MB 490-420223/1-A	Method Blank	Total/NA	Solid	8015C	420223
LCS 490-420223/2-A	Lab Control Sample	Total/NA	Solid	8015C	420223
LCSD 490-420223/3-A	Lab Control Sample Dup	Total/NA	Solid	8015C	420223
600-146026-1 MS	SJRP-SB19-1-2-03302017	Total/NA	Solid	8015C	420223
600-146026-1 MSD	SJRP-SB19-1-2-03302017	Total/NA	Solid	8015C	420223

Metals

Prep Batch: 209814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146026-10	SJRP-EB-03312017	Total/NA	Water	7470A	
600-146026-11	SJRP-EB-03302017	Total/NA	Water	7470A	
MB 600-209814/7-A	Method Blank	Total/NA	Water	7470A	
LCS 600-209814/8-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 209866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146026-10	SJRP-EB-03312017	Total/NA	Water	7470A	209814
600-146026-11	SJRP-EB-03302017	Total/NA	Water	7470A	209814
MB 600-209814/7-A	Method Blank	Total/NA	Water	7470A	209814
LCS 600-209814/8-A	Lab Control Sample	Total/NA	Water	7470A	209814

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Metals (Continued)

Prep Batch: 209909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146026-1	SJRP-SB19-1-2-03302017	Total/NA	Solid	7471A	
600-146026-2	SJRP-SB09-1-2-03302017	Total/NA	Solid	7471A	
600-146026-3	SJRP-SB11-17-18-03312017	Total/NA	Solid	7471A	
600-146026-4	SJRP-SB11-27-28-03312017	Total/NA	Solid	7471A	
600-146026-5	SJRP-SB11-29-30-03312017	Total/NA	Solid	7471A	
600-146026-6	SJRP-SB14-13-14-03312017	Total/NA	Solid	7471A	
600-146026-7	SJRP-SB14-31-32-03312017	Total/NA	Solid	7471A	
600-146026-8	SJRP-SB14-37-38-03312017	Total/NA	Solid	7471A	
600-146026-9	SJRP-MW11-29-30-03312017	Total/NA	Solid	7471A	
600-146026-13	SJRP-SB14-18-19-03312017	Total/NA	Solid	7471A	
MB 600-209909/7-A	Method Blank	Total/NA	Solid	7471A	
LCSSRM 600-209909/8-A ^1	Lab Control Sample	Total/NA	Solid	7471A	
600-146026-1 MS	SJRP-SB19-1-2-03302017	Total/NA	Solid	7471A	
600-146026-1 MSD	SJRP-SB19-1-2-03302017	Total/NA	Solid	7471A	
600-146026-13 MS	SJRP-SB14-18-19-03312017	Total/NA	Solid	7471A	
600-146026-1 DU	SJRP-SB19-1-2-03302017	Total/NA	Solid	7471A	
600-146026-13 DU	SJRP-SB14-18-19-03312017	Total/NA	Solid	7471A	

Analysis Batch: 210015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146026-1	SJRP-SB19-1-2-03302017	Total/NA	Solid	7471A	209909
600-146026-2	SJRP-SB09-1-2-03302017	Total/NA	Solid	7471A	209909
600-146026-3	SJRP-SB11-17-18-03312017	Total/NA	Solid	7471A	209909
600-146026-4	SJRP-SB11-27-28-03312017	Total/NA	Solid	7471A	209909
600-146026-5	SJRP-SB11-29-30-03312017	Total/NA	Solid	7471A	209909
600-146026-6	SJRP-SB14-13-14-03312017	Total/NA	Solid	7471A	209909
600-146026-7	SJRP-SB14-31-32-03312017	Total/NA	Solid	7471A	209909
600-146026-8	SJRP-SB14-37-38-03312017	Total/NA	Solid	7471A	209909
600-146026-9	SJRP-MW11-29-30-03312017	Total/NA	Solid	7471A	209909
600-146026-13	SJRP-SB14-18-19-03312017	Total/NA	Solid	7471A	209909
MB 600-209909/7-A	Method Blank	Total/NA	Solid	7471A	209909
LCSSRM 600-209909/8-A ^1	Lab Control Sample	Total/NA	Solid	7471A	209909
600-146026-1 MS	SJRP-SB19-1-2-03302017	Total/NA	Solid	7471A	209909
600-146026-1 MSD	SJRP-SB19-1-2-03302017	Total/NA	Solid	7471A	209909
600-146026-13 MS	SJRP-SB14-18-19-03312017	Total/NA	Solid	7471A	209909
600-146026-1 DU	SJRP-SB19-1-2-03302017	Total/NA	Solid	7471A	209909
600-146026-13 DU	SJRP-SB14-18-19-03312017	Total/NA	Solid	7471A	209909

Prep Batch: 210368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146026-10	SJRP-EB-03312017	Total/NA	Water	3010A	
600-146026-11	SJRP-EB-03302017	Total/NA	Water	3010A	
MB 600-210368/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-210368/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 210521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146026-10	SJRP-EB-03312017	Total/NA	Water	6010B	210368
600-146026-11	SJRP-EB-03302017	Total/NA	Water	6010B	210368
MB 600-210368/1-A	Method Blank	Total/NA	Water	6010B	210368
LCS 600-210368/2-A	Lab Control Sample	Total/NA	Water	6010B	210368

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Prep Batch: 210629

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146026-1	SJRP-SB19-1-2-03302017	Total/NA	Solid	3050B	
600-146026-2	SJRP-SB09-1-2-03302017	Total/NA	Solid	3050B	
600-146026-3	SJRP-SB11-17-18-03312017	Total/NA	Solid	3050B	
600-146026-4	SJRP-SB11-27-28-03312017	Total/NA	Solid	3050B	
600-146026-5	SJRP-SB11-29-30-03312017	Total/NA	Solid	3050B	
600-146026-6	SJRP-SB14-13-14-03312017	Total/NA	Solid	3050B	
600-146026-7	SJRP-SB14-31-32-03312017	Total/NA	Solid	3050B	
600-146026-8	SJRP-SB14-37-38-03312017	Total/NA	Solid	3050B	
600-146026-9	SJRP-MW11-29-30-03312017	Total/NA	Solid	3050B	
600-146026-13	SJRP-SB14-18-19-03312017	Total/NA	Solid	3050B	
MB 600-210629/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-210629/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-146026-1 MS	SJRP-SB19-1-2-03302017	Total/NA	Solid	3050B	
600-146026-1 MSD	SJRP-SB19-1-2-03302017	Total/NA	Solid	3050B	
600-146026-1 DU	SJRP-SB19-1-2-03302017	Total/NA	Solid	3050B	

Analysis Batch: 210632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146026-1	SJRP-SB19-1-2-03302017	Total/NA	Solid	6010B	210629
600-146026-2	SJRP-SB09-1-2-03302017	Total/NA	Solid	6010B	210629
600-146026-3	SJRP-SB11-17-18-03312017	Total/NA	Solid	6010B	210629
600-146026-4	SJRP-SB11-27-28-03312017	Total/NA	Solid	6010B	210629
600-146026-5	SJRP-SB11-29-30-03312017	Total/NA	Solid	6010B	210629
600-146026-6	SJRP-SB14-13-14-03312017	Total/NA	Solid	6010B	210629
600-146026-7	SJRP-SB14-31-32-03312017	Total/NA	Solid	6010B	210629
600-146026-8	SJRP-SB14-37-38-03312017	Total/NA	Solid	6010B	210629
600-146026-9	SJRP-MW11-29-30-03312017	Total/NA	Solid	6010B	210629
600-146026-13	SJRP-SB14-18-19-03312017	Total/NA	Solid	6010B	210629
MB 600-210629/1-A	Method Blank	Total/NA	Solid	6010B	210629
LCSSRM 600-210629/2-A	Lab Control Sample	Total/NA	Solid	6010B	210629
600-146026-1 MS	SJRP-SB19-1-2-03302017	Total/NA	Solid	6010B	210629
600-146026-1 DU	SJRP-SB19-1-2-03302017	Total/NA	Solid	6010B	210629

Analysis Batch: 210725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146026-3	SJRP-SB11-17-18-03312017	Total/NA	Solid	6010B	210629
600-146026-13	SJRP-SB14-18-19-03312017	Total/NA	Solid	6010B	210629
600-146026-1 MS	SJRP-SB19-1-2-03302017	Total/NA	Solid	6010B	210629
600-146026-1 MSD	SJRP-SB19-1-2-03302017	Total/NA	Solid	6010B	210629
600-146026-1 MSD	SJRP-SB19-1-2-03302017	Total/NA	Solid	6010B	210629
600-146026-1 DU	SJRP-SB19-1-2-03302017	Total/NA	Solid	6010B	210629

General Chemistry

Analysis Batch: 209873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146026-1	SJRP-SB19-1-2-03302017	Total/NA	Solid	2540B	
600-146026-2	SJRP-SB09-1-2-03302017	Total/NA	Solid	2540B	
600-146026-3	SJRP-SB11-17-18-03312017	Total/NA	Solid	2540B	
600-146026-4	SJRP-SB11-27-28-03312017	Total/NA	Solid	2540B	
600-146026-5	SJRP-SB11-29-30-03312017	Total/NA	Solid	2540B	
600-146026-6	SJRP-SB14-13-14-03312017	Total/NA	Solid	2540B	
600-146026-7	SJRP-SB14-31-32-03312017	Total/NA	Solid	2540B	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

General Chemistry (Continued)

Analysis Batch: 209873 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146026-8	SJRP-SB14-37-38-03312017	Total/NA	Solid	2540B	
600-146026-9	SJRP-MW11-29-30-03312017	Total/NA	Solid	2540B	
600-146026-13	SJRP-SB14-18-19-03312017	Total/NA	Solid	2540B	
600-146026-1 MS	SJRP-SB19-1-2-03302017	Total/NA	Solid	2540B	
600-146026-1 MSD	SJRP-SB19-1-2-03302017	Total/NA	Solid	2540B	

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Client Sample ID: SJRP-SB19-1-2-03302017 — Lab Sample ID: 600-146026-1

Date Collected: 03/30/17 11:30 — **Matrix: Solid**
Date Received: 04/01/17 10:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.32 g	5.0 mL	420272	04/06/17 11:20	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421820	04/12/17 23:54	FKG	TAL NSH
Total/NA	Analysis	2540B		1			209873	04/03/17 15:53	B1K	TAL HOU

Client Sample ID: SJRP-SB19-1-2-03302017 — Lab Sample ID: 600-146026-1

Date Collected: 03/30/17 11:30 — **Matrix: Solid**
Date Received: 04/01/17 10:28 — **Percent Solids: 91.3**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.587 g	5 mL	209863	04/01/17 09:00	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210004	04/05/17 14:18	WS1	TAL HOU
Total/NA	Prep	3550C			25.62 g	1.0 mL	420223	04/06/17 10:25	MNM	TAL NSH
Total/NA	Analysis	8015C		1			420477	04/07/17 14:48	PRB	TAL NSH
Total/NA	Prep	3050B			1.01 g	50 mL	210629	04/12/17 14:34	JAH	TAL HOU
Total/NA	Analysis	6010B		1			210632	04/12/17 17:57	DCL	TAL HOU
Total/NA	Prep	7471A			.65 g	50 mL	209909	04/04/17 09:06	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210015	04/05/17 08:37	DDE	TAL HOU

Client Sample ID: SJRP-SB09-1-2-03302017 — Lab Sample ID: 600-146026-2

Date Collected: 03/30/17 16:45 — **Matrix: Solid**
Date Received: 04/01/17 10:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.27 g	5.0 mL	420503	04/07/17 08:45	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421820	04/13/17 00:24	FKG	TAL NSH
Total/NA	Analysis	2540B		1			209873	04/03/17 15:53	B1K	TAL HOU

Client Sample ID: SJRP-SB09-1-2-03302017 — Lab Sample ID: 600-146026-2

Date Collected: 03/30/17 16:45 — **Matrix: Solid**
Date Received: 04/01/17 10:28 — **Percent Solids: 79.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.867 g	5 mL	209863	04/01/17 09:00	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210004	04/05/17 19:09	WS1	TAL HOU
Total/NA	Prep	3550C			25.56 g	1.0 mL	420223	04/06/17 10:25	MNM	TAL NSH
Total/NA	Analysis	8015C		1			420477	04/07/17 15:40	PRB	TAL NSH
Total/NA	Prep	3050B			1.15 g	50 mL	210629	04/12/17 14:34	JAH	TAL HOU
Total/NA	Analysis	6010B		1			210632	04/12/17 18:03	DCL	TAL HOU
Total/NA	Prep	7471A			.60 g	50 mL	209909	04/04/17 09:06	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210015	04/05/17 08:50	DDE	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Client Sample ID: SJRP-SB11-17-18-03312017 — Lab Sample ID: 600-146026-3

Date Collected: 03/31/17 13:15 — **Matrix: Solid**
Date Received: 04/01/17 10:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.187 g	5 mL	209864	04/01/17 09:00	KLV	TAL HOU
Total/NA	Analysis	8260B		10	100 uL	5 mL	209944	04/04/17 19:32	KLV	TAL HOU
Total/NA	Prep	5035	DL		5.187 g	5 mL	209864	04/01/17 09:00	KLV	TAL HOU
Total/NA	Analysis	8260B	DL	100	100 uL	5 mL	209944	04/04/17 20:00	KLV	TAL HOU
Total/NA	Prep	5030B			5.05 g	5.0 mL	420272	04/06/17 11:20	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421820	04/13/17 00:55	FKG	TAL NSH
Total/NA	Analysis	2540B		1			209873	04/03/17 15:53	B1K	TAL HOU

Client Sample ID: SJRP-SB11-17-18-03312017 — Lab Sample ID: 600-146026-3

Date Collected: 03/31/17 13:15 — **Matrix: Solid**
Date Received: 04/01/17 10:28 — **Percent Solids: 80.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			25.84 g	1.0 mL	420223	04/06/17 10:25	MNM	TAL NSH
Total/NA	Analysis	8015C		1			420477	04/07/17 15:58	PRB	TAL NSH
Total/NA	Prep	3550C			25.84 g	1.0 mL	420223	04/06/17 10:25	MNM	TAL NSH
Total/NA	Analysis	8015C		20			420477	04/07/17 18:18	PRB	TAL NSH
Total/NA	Prep	3050B			1.11 g	50 mL	210629	04/12/17 14:34	JAH	TAL HOU
Total/NA	Analysis	6010B		1			210632	04/12/17 18:05	DCL	TAL HOU
Total/NA	Prep	3050B			1.11 g	50 mL	210629	04/12/17 14:34	JAH	TAL HOU
Total/NA	Analysis	6010B		5			210725	04/13/17 12:14	DCL	TAL HOU
Total/NA	Prep	7471A			.61 g	50 mL	209909	04/04/17 09:06	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210015	04/05/17 08:52	DDE	TAL HOU

Client Sample ID: SJRP-SB11-27-28-03312017 — Lab Sample ID: 600-146026-4

Date Collected: 03/31/17 13:45 — **Matrix: Solid**
Date Received: 04/01/17 10:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.638 g	5 mL	209864	04/01/17 09:00	KLV	TAL HOU
Total/NA	Analysis	8260B		1	100 uL	5 mL	209944	04/04/17 17:10	KLV	TAL HOU
Total/NA	Prep	5030B			5.63 g	5.0 mL	420272	04/06/17 11:20	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421820	04/13/17 01:25	FKG	TAL NSH
Total/NA	Analysis	2540B		1			209873	04/03/17 15:53	B1K	TAL HOU

Client Sample ID: SJRP-SB11-27-28-03312017 — Lab Sample ID: 600-146026-4

Date Collected: 03/31/17 13:45 — **Matrix: Solid**
Date Received: 04/01/17 10:28 — **Percent Solids: 84.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			25.37 g	1.0 mL	420223	04/06/17 10:25	MNM	TAL NSH
Total/NA	Analysis	8015C		1			420477	04/07/17 16:15	PRB	TAL NSH
Total/NA	Prep	3050B			1.08 g	50 mL	210629	04/12/17 14:34	JAH	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Client Sample ID: SJRP-SB11-27-28-03312017 — Lab Sample ID: 600-146026-4

Date Collected: 03/31/17 13:45 — **Matrix: Solid**
Date Received: 04/01/17 10:28 — **Percent Solids: 84.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		1			210632	04/12/17 18:07	DCL	TAL HOU
Total/NA	Prep	7471A			.60 g	50 mL	209909	04/04/17 09:06	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210015	04/05/17 08:54	DDE	TAL HOU

Client Sample ID: SJRP-SB11-29-30-03312017 — Lab Sample ID: 600-146026-5

Date Collected: 03/31/17 14:00 — **Matrix: Solid**
Date Received: 04/01/17 10:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3.949 g	5 mL	209864	04/01/17 09:00	KLV	TAL HOU
Total/NA	Analysis	8260B		1	100 uL	5 mL	209944	04/04/17 17:38	KLV	TAL HOU
Total/NA	Prep	5030B			5.07 g	5.0 mL	420272	04/06/17 11:20	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421820	04/13/17 01:55	FKG	TAL NSH
Total/NA	Analysis	2540B		1			209873	04/03/17 15:53	B1K	TAL HOU

Client Sample ID: SJRP-SB11-29-30-03312017 — Lab Sample ID: 600-146026-5

Date Collected: 03/31/17 14:00 — **Matrix: Solid**
Date Received: 04/01/17 10:28 — **Percent Solids: 86.5**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			25.16 g	1.0 mL	420223	04/06/17 10:25	MNM	TAL NSH
Total/NA	Analysis	8015C		1			420477	04/07/17 16:33	PRB	TAL NSH
Total/NA	Prep	3050B			1.06 g	50 mL	210629	04/12/17 14:34	JAH	TAL HOU
Total/NA	Analysis	6010B		1			210632	04/12/17 18:09	DCL	TAL HOU
Total/NA	Prep	7471A			.66 g	50 mL	209909	04/04/17 09:06	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210015	04/05/17 08:56	DDE	TAL HOU

Client Sample ID: SJRP-SB14-13-14-03312017 — Lab Sample ID: 600-146026-6

Date Collected: 03/31/17 10:15 — **Matrix: Solid**
Date Received: 04/01/17 10:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.14 g	5.0 mL	420272	04/06/17 11:20	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421820	04/13/17 02:26	FKG	TAL NSH
Total/NA	Analysis	2540B		1			209873	04/03/17 15:53	B1K	TAL HOU

Client Sample ID: SJRP-SB14-13-14-03312017 — Lab Sample ID: 600-146026-6

Date Collected: 03/31/17 10:15 — **Matrix: Solid**
Date Received: 04/01/17 10:28 — **Percent Solids: 85.9**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.558 g	5 mL	209863	04/01/17 09:00	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210347	04/10/17 14:22	WS1	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			25.08 g	1.0 mL	420223	04/06/17 10:25	MNM	TAL NSH
Total/NA	Analysis	8015C		1			420477	04/07/17 16:50	PRB	TAL NSH
Total/NA	Prep	3050B			1.09 g	50 mL	210629	04/12/17 14:34	JAH	TAL HOU
Total/NA	Analysis	6010B		1			210632	04/12/17 18:11	DCL	TAL HOU
Total/NA	Prep	7471A			.66 g	50 mL	209909	04/04/17 09:06	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210015	04/05/17 08:58	DDE	TAL HOU

Client Sample ID: SJRP-SB14-31-32-03312017
Lab Sample ID: 600-146026-7
Date Collected: 03/31/17 10:55
Matrix: Solid
Date Received: 04/01/17 10:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.079 g	5 mL	209864	04/01/17 09:00	KLV	TAL HOU
Total/NA	Analysis	8260B		1	100 uL	5 mL	209944	04/04/17 18:35	KLV	TAL HOU
Total/NA	Prep	5035	DL		5.079 g	5 mL	209864	04/01/17 09:00	KLV	TAL HOU
Total/NA	Analysis	8260B	DL	5	100 uL	5 mL	209944	04/04/17 19:03	KLV	TAL HOU
Total/NA	Prep	5030B			5.55 g	5.0 mL	420272	04/06/17 11:20	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421820	04/13/17 02:56	FKG	TAL NSH
Total/NA	Analysis	2540B		1			209873	04/03/17 15:53	B1K	TAL HOU

Client Sample ID: SJRP-SB14-31-32-03312017
Lab Sample ID: 600-146026-7
Date Collected: 03/31/17 10:55
Matrix: Solid
Date Received: 04/01/17 10:28
Percent Solids: 86.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			25.59 g	1.0 mL	420223	04/06/17 10:25	MNM	TAL NSH
Total/NA	Analysis	8015C		1			420477	04/07/17 17:08	PRB	TAL NSH
Total/NA	Prep	3050B			1.00 g	50 mL	210629	04/12/17 14:34	JAH	TAL HOU
Total/NA	Analysis	6010B		1			210632	04/12/17 18:13	DCL	TAL HOU
Total/NA	Prep	7471A			.63 g	50 mL	209909	04/04/17 09:06	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210015	04/05/17 08:59	DDE	TAL HOU

Client Sample ID: SJRP-SB14-37-38-03312017
Lab Sample ID: 600-146026-8
Date Collected: 03/31/17 11:05
Matrix: Solid
Date Received: 04/01/17 10:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.39 g	5.0 mL	420272	04/06/17 11:20	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421820	04/13/17 03:26	FKG	TAL NSH
Total/NA	Analysis	2540B		1			209873	04/03/17 15:53	B1K	TAL HOU

Client Sample ID: SJRP-SB14-37-38-03312017
Lab Sample ID: 600-146026-8
Date Collected: 03/31/17 11:05
Matrix: Solid
Date Received: 04/01/17 10:28
Percent Solids: 87.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3.055 g	5 mL	209863	04/01/17 09:00	WS1	TAL HOU

TestAmerica Houston

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Client Sample ID: SJRP-SB14-37-38-03312017

Lab Sample ID: 600-146026-8
Date Collected: 03/31/17 11:05
Matrix: Solid
Date Received: 04/01/17 10:28
Percent Solids: 87.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 g	5 g	210347	04/10/17 14:47	WS1	TAL HOU
Total/NA	Prep	3550C			25.27 g	1.0 mL	420223	04/06/17 10:25	MNM	TAL NSH
Total/NA	Analysis	8015C		1			420477	04/07/17 17:25	PRB	TAL NSH
Total/NA	Prep	3050B			1.03 g	50 mL	210629	04/12/17 14:34	JAH	TAL HOU
Total/NA	Analysis	6010B		1			210632	04/12/17 18:15	DCL	TAL HOU
Total/NA	Prep	7471A			.66 g	50 mL	209909	04/04/17 09:06	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210015	04/05/17 09:01	DDE	TAL HOU

Client Sample ID: SJRP-MW11-29-30-03312017

Lab Sample ID: 600-146026-9
Date Collected: 03/31/17 15:45
Matrix: Solid
Date Received: 04/01/17 10:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.26 g	5.0 mL	420272	04/06/17 11:20	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421820	04/13/17 03:57	FKG	TAL NSH
Total/NA	Analysis	2540B		1			209873	04/03/17 15:53	B1K	TAL HOU

Client Sample ID: SJRP-MW11-29-30-03312017

Lab Sample ID: 600-146026-9
Date Collected: 03/31/17 15:45
Matrix: Solid
Date Received: 04/01/17 10:28
Percent Solids: 90.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.511 g	5 mL	209863	04/01/17 09:00	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210118	04/06/17 13:38	WS1	TAL HOU
Total/NA	Prep	3550C			25.31 g	1.0 mL	420223	04/06/17 10:27	MNM	TAL NSH
Total/NA	Analysis	8015C		1			420477	04/07/17 17:43	PRB	TAL NSH
Total/NA	Prep	3050B			1.13 g	50 mL	210629	04/12/17 14:34	JAH	TAL HOU
Total/NA	Analysis	6010B		1			210632	04/12/17 18:24	DCL	TAL HOU
Total/NA	Prep	7471A			.63 g	50 mL	209909	04/04/17 09:06	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210015	04/05/17 09:03	DDE	TAL HOU

Client Sample ID: SJRP-EB-03312017

Lab Sample ID: 600-146026-10
Date Collected: 03/31/17 15:40
Matrix: Water
Date Received: 04/01/17 10:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	210119	04/06/17 17:45	WS1	TAL HOU
Total/NA	Analysis	8015C		1	5 mL	5 mL	420456	04/08/17 01:09	GWM	TAL NSH
Total/NA	Prep	3510C			255 mL	1 mL	420208	04/06/17 09:56	KB	TAL NSH
Total/NA	Analysis	8015C		1			420146	04/06/17 16:54	AK1	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	210368	04/10/17 10:45	JAH	TAL HOU
Total/NA	Analysis	6010B		1			210521	04/11/17 14:49	DCL	TAL HOU
Total/NA	Prep	7470A			40 mL	40 mL	209814	04/03/17 09:19	DDE	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Client Sample ID: SJRP-EB-03312017 — Lab Sample ID: 600-146026-10

Date Collected: 03/31/17 15:40 — **Matrix: Water**
Date Received: 04/01/17 10:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7470A		1			209866	04/03/17 14:12	DDE	TAL HOU

Client Sample ID: SJRP-EB-03302017 — Lab Sample ID: 600-146026-11

Date Collected: 03/30/17 14:10 — **Matrix: Water**
Date Received: 04/01/17 10:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	210119	04/06/17 18:09	WS1	TAL HOU
Total/NA	Analysis	8015C		1	5 mL	5 mL	420456	04/08/17 01:39	GWM	TAL NSH
Total/NA	Prep	3510C			230 mL	1 mL	420208	04/06/17 09:56	KB	TAL NSH
Total/NA	Analysis	8015C		1			420146	04/06/17 17:10	AK1	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	210368	04/10/17 10:45	JAH	TAL HOU
Total/NA	Analysis	6010B		1			210521	04/11/17 14:51	DCL	TAL HOU
Total/NA	Prep	7470A			40 mL	40 mL	209814	04/03/17 09:19	DDE	TAL HOU
Total/NA	Analysis	7470A		1			209866	04/03/17 14:06	DDE	TAL HOU

Client Sample ID: TRIP BLANK — Lab Sample ID: 600-146026-12

Date Collected: 03/30/17 00:00 — **Matrix: Water**
Date Received: 04/01/17 10:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	210233	04/07/17 13:52	WS1	TAL HOU

Client Sample ID: SJRP-SB14-18-19-03312017 — Lab Sample ID: 600-146026-13

Date Collected: 03/31/17 10:30 — **Matrix: Solid**
Date Received: 04/01/17 10:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.038 g	5 mL	209864	04/01/17 09:00	KLV	TAL HOU
Total/NA	Analysis	8260B		1	100 uL	5 mL	209944	04/04/17 18:07	KLV	TAL HOU
Total/NA	Prep	5030B			5.76 g	5.0 mL	420272	04/06/17 11:20	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421820	04/13/17 04:27	FKG	TAL NSH
Total/NA	Analysis	2540B		1			209873	04/03/17 15:53	B1K	TAL HOU

Client Sample ID: SJRP-SB14-18-19-03312017 — Lab Sample ID: 600-146026-13

Date Collected: 03/31/17 10:30 — **Matrix: Solid**
Date Received: 04/01/17 10:28 — **Percent Solids: 85.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			25.11 g	1.0 mL	420223	04/06/17 10:27	MNM	TAL NSH
Total/NA	Analysis	8015C		1			420477	04/07/17 18:00	PRB	TAL NSH
Total/NA	Prep	3050B			1.16 g	50 mL	210629	04/12/17 14:34	JAH	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: Ssn Juan Site Characterization

TestAmerica Job ID: 600-146026-1

Client Sample ID: SJRP-SB14-18-19-03312017 **Lab Sample ID: 600-146026-13**
Date Collected: 03/31/17 10:30 **Matrix: Solid**
Date Received: 04/01/17 10:28 **Percent Solids: 85.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		1			210632	04/12/17 18:26	DCL	TAL HOU
Total/NA	Prep	3050B			1.16 g	50 mL	210629	04/12/17 14:34	JAH	TAL HOU
Total/NA	Analysis	6010B		5			210725	04/13/17 12:16	DCL	TAL HOU
Total/NA	Prep	7471A			.61 g	50 mL	209909	04/04/17 09:06	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210015	04/05/17 09:05	DDE	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc. TestAmerica Job ID: 600-146026-1
Project/Site: Ssn Juan Site Characterization

Laboratory: TestAmerica Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	16-046-0	08-04-17
Louisiana	NELAP	6	01967	06-30-17
Oklahoma	State Program	6	2015-050	08-31-17
Texas	NELAP	6	T104704223-17-21	10-31-17
USDA	Federal		P330-14-00192	06-06-17

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	A2LA		NA: NELAP & A2LA	12-31-17
A2LA	ISO/IEC 17025		0453.07	12-31-17
Alaska (UST)	State Program	10	UST-087	09-01-17
Arizona	State Program	9	AZ0473	05-05-17
Arkansas DEQ	State Program	6	88-0737	04-25-17
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-17
Florida	NELAP	4	E87358	06-30-17
Georgia	State Program	4	N/A	12-31-17
Illinois	NELAP	5	200010	12-09-17
Iowa	State Program	7	131	04-01-18
Kansas	NELAP	7	E-10229	10-31-17
Kentucky (UST)	State Program	4	19	06-30-17
Kentucky (WW)	State Program	4	90038	12-31-17
Louisiana	NELAP	6	30613	06-30-17
Maine	State Program	1	TN00032	11-03-17
Maryland	State Program	3	316	03-31-18
Massachusetts	State Program	1	M-TN032	06-30-17
Minnesota	NELAP	5	047-999-345	12-31-17
Mississippi	State Program	4	N/A	06-30-17
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-17
New Hampshire	NELAP	1	2963	10-09-17
New Jersey	NELAP	2	TN965	06-30-17
New York	NELAP	2	11342	03-31-18
North Carolina (WW/SW)	State Program	4	387	12-31-17
North Dakota	State Program	8	R-146	06-30-17
Ohio VAP	State Program	5	CL0033	07-10-17
Oklahoma	State Program	6	9412	08-31-17
Oregon	NELAP	10	TN200001	04-27-17
Pennsylvania	NELAP	3	68-00585	06-30-17
Rhode Island	State Program	1	LAO00268	12-30-17
South Carolina	State Program	4	84009 (001)	02-18-17 *
South Carolina (Do Not Use - DW)	State Program	4	84009 (002)	12-16-17
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-17
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-17
Virginia	NELAP	3	460152	06-14-17
Washington	State Program	10	C789	07-19-17

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc. TestAmerica Job ID: 600-146026-1
Project/Site: Ssn Juan Site Characterization

Laboratory: TestAmerica Nashville (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
West Virginia DEP	State Program	3	219	02-28-18
Wisconsin	State Program	5	998020430	08-31-17
Wyoming (UST)	A2LA	8	453.07	12-31-17

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica

Client Information	Sampler: Katharine Mavrakis	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-52002-15345.10
Client Contact: Jeffrey Minchak	Phone: 9043560-6573	E-Mail: cathy.upton@testamericainc.com		Page: Page 10 of 10
Company: CH2M Hill, Inc.				Job #:
Address: 3721 Rutledge Rd. NE Suite B-1	Due Date Requested:			
City: Albuquerque	TAT Requested (days):			
State, Zip: NM, 87109				
Phone: 281-721-8546(Tel)	PO #: Purchase Order Requested			
Email: Jeffrey.Minchak@ch2m.com	WO #: WD225383			
Project Name: Kinder Morgan Bloomfield, NM San Juan	Project #: 60005961-Analysis group BTEX/GRO/DRO/Metals			
Site: San Juan Site Characterization	SSOW#:			

Analysis Requested — Dallas . Ft Worth

560501

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO - Diesel and Oil Range Organics	8015C_GRO - GRO Range (C6-C10)	6010B, 7471A - NMWQCC List Metals	8260B - 5035 BTEX	Moisture	Waters	6010B, 7470A - NMWQCC List Metals	8260B_LL - BTEX Only	8015C_GRO - GRO Range (C6-C10)	8015C_DRO - Diesel and Oil Range Organics	Total Number of containers	Special Ins
Preservation Code:							N	N	N	N	N		D	A	A	N		
SJRP-SB19-1-2-03302017	3/30/17	11:30	G	Solid			X	X	X	X	X							
SJRP-SB19-1-2-0330-2017MS	3/30/17	11:30	G	Solid			X	X	X	X	X							
SJRP-SB19-1-2-0330201 7MSD	3/30/17	11:30	G	Solid			X	X	X	X	X							
SJRP-SB09-1-2-03302017	3/30/17	1645	G	Solid			X	X	X	X	X							
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Water														

600-146026 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	3/31/17 1700			4-1-17 1028	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica

Client Information	Sampler: Katherine Mourzenko	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-52002-15345.10
Client Contact: Jeffrey Minchak	Phone: 9043816573	E-Mail: cathy.upton@testamericainc.com		Page: Page 10 of 10
Company: CH2M Hill, Inc.				Job #:
Address: 3721 Rutledge Rd. NE Suite B-1	Due Date Requested:			
City: Albuquerque	TAT Requested (days):			
State, Zip: NM, 87109				
Phone: 281-721-8546(Tel)	PO #: Purchase Order Requested			
Email: Jeffrey.Minchak@ch2m.com	WO #: WD225383			
Project Name: Kinder Morgan Bloomfield, NM San Juan	Project #: 60005961-Analysis group BTEX/GRO/DRO/Metals			
Site: San Juan Site Characterization	SSOW#:			

Analysis Requested — Dallas . Ft Worth

560501

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO - Diesel and Oil Range Organics	8015C_GRO - GRO Range (C6-C10)	6010B, 7471A - NMWQCC List Metals	8260B - 5035 BTEX	Moisture	Waters	6010B, 7470A - NMWQCC List Metals	8260B_LL - BTEX Only	8015C_GRO - GRO Range (C6-C10)	8015C_DRO - Diesel and Oil Range Organics	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N		D	A	A	N		
SJRP-SB11-17-18-03312017	3/31/17	1315	G	Solid	N	N	X	X	X	X	X							3 coolers - 1 cooler has all of the VOAs. No
SJRP-SB11-27-28-03312017	3/31/17	1345	G	Solid	N	N	X	X	X	X	X							
SJRP-SB11-29-30-03312017	3/31/17	1400	G	Solid	N	N	X	X	X	X	X							
SJRP-SB14-13-14-03312017	3/31/17	1015	G	Solid	N	N	X	X	X	X	X							
SJRP-SB14-31-32-03312017	3/31/17	1055	G	Solid	N	N	X	X	X	X	X							
SJRP-SB14-37-38-03312017	3/31/17	1105	G	Solid	N	N	X	X	X	X	X							
SJRP-MW11-29-30-03312017	3/31/17	1545	G	Solid	N	N	X	X	X	X	X							
			G	Solid														
			G	Solid														
			G	Solid														
SJRP-EB-03312017	3/31/17	1540	G	Water									X	X	X	X		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Katy Mourzenko	3/31/17/16:40	CH2M		4-1-17 1028	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

TestAmerica
THE LEADER IN ENVIRON

1 of 3
TRK# 0201 7860 9949 5939
MASTER
XO LKSA
77040
TX-US IAH
SATURDAY 9:30A
FIRST OVERNIGHT

2 of 3
MPS# 0263 7860 9949 5940
Mstr# 7860 9949 5939 0201
XO LKSA
77040
TX-US IAH
SATURDAY 9:30A
FIRST OVERNIGHT

3 of 3
MPS# 0263 7860 9949 5950
Mstr# 7860 9949 5939 0201
XO LKSA
77040
TX-US IAH
SATURDAY 9:30A
FIRST OVERNIGHT

TestAmerica Houston

Loc: 600
146026

Sample Receipt

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Date/Time Received: _____

JOB NUMBER: _____ CLIENT: CHZM

UNPACKED BY: _____ CARRIER/DRIVER: FB Fed '17APR 1 10:28

Custody Seal Present: ☐ YES ☐ NO Number of Coolers Received: 3

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
W	Y / N	Y / N	2.4	675	-.2	2.4
BW	Y / N	Y / N	1.5			1.3
BW	Y / N	Y / N	1.2			1.0
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☐ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☐ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☐ YES ☐ NO

pH paper Lot #_____

VOA headspace acceptable (5-6mm): ☐ YES ☐ NO ☐ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?		

COMMENTS:

4117

HS-SA-WI-013 Rev. 3; 07/01/2014

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TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-26303.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: cathy.upton@testamericainc.com	State of Origin: New Mexico	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):		Job #: 600-146026-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 4/13/2017			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: Ssn Juan Site3 Characterization	Project #: 60005961			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8016C_DRO/3550C DRO/ORO	8015C_GRO/5030B_SolidNAC GRO Range (C6-C10)	8016C_DRO/3510C_LVI DRO/ORO	8016C_GRO/6030B GRO Range (C6-C10)	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
SJRP-SB19-1-2-03302017 (600-146026-1)	3/30/17	11:30 Mountain		Solid			X	X			2	
SJRP-SB19-1-2-03302017 (600-146026-1MSD)	3/30/17	11:30 Mountain	MSD	Solid			X	X			1	
SJRP-SB09-1-2-03302017 (600-146026-2)	3/30/17	16:45 Mountain		Solid			X	X			2	
SJRP-SB11-17-18-03312017 (600-146026-3)	3/31/17	13:15 Mountain		Solid			X	X			2	
SJRP-SB11-27-28-03312017 (600-146026-4)	3/31/17	13:45 Mountain		Solid			X	X			2	
SJRP-SB11-29-30-03312017 (600-146026-5)	3/31/17	14:00 Mountain		Solid			X	X			2	
SJRP-SB14-13-14-03312017 (600-146026-6)	3/31/17	10:15 Mountain		Solid			X	X			2	
SJRP-SB14-31-32-03312017 (600-146026-7)	3/31/17	10:55 Mountain		Solid			X	X			2	
SJRP-SB14-37-38-03312017 (600-146026-8)	3/31/17	11:05 Mountain		Solid			X	X			2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 4-4-17 1700	Company	Received by:	Date/Time: 4-5-17 0940	Company TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 4.3

Received by OCD: 11/13/2025 11:14:36 AM

12/7/2020 (Rev. 1)

Released to Imaging: 11/14/2025 9:30:04 AM

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TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-26303.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: cathy.upton@testamericainc.com	State of Origin: New Mexico	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):		Job #: 600-146026-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 4/13/2017			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: Ssn Juan Site3 Characterization	Project #: 60005961			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO/3550C DRO/ORO	8015C_GRO/5030B_SolidNAC GRO Range (C6-C10)	8015C_DRO/3510C_LVI DRO/ORO	8015C_GRO/5030B GRO Range (C6-C10)	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
SJRP-MW11-29-30-03312017 (600-146026-9)	3/31/17	15:45 Mountain		Solid			X	X			2	
SJRP-EB-03312017 (600-146026-10)	3/31/17	15:40 Mountain		Water					X	X	2	
SJRP-EB-03302017 (600-146026-11)	3/30/17	14:10 Mountain		Water					X	X	2	
SJRP-SB14-18-19-03312017 (600-146026-13)	3/31/17	10:30 Mountain		Solid			X	X			2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. I

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		4/4/17 1700			4-5-17 0940	TAN
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 4.3

Received by OCD: 11/13/2025 11:14:36 AM

Released to Imaging: 11/14/2025 9:30:04 AM

Page 306 of 1581

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Upton, Cathy L	COC No: 600-26304.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: cathy.upton@testamericainc.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):	Job #: 600-146026-1
Address: 2960 Foster Creighton Drive,	Due Date Requested: 4/13/2017		
City: Nashville	TAT Requested (days):		
State, Zip: TN, 37204			
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:		
Email:	WO #:		
Project Name: Ssn Juan Site3 Characterization	Project #: 60005961		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO/3550C DRO/ORO	8015C_GRO/5030B_SolidNAC GRO Range (C6-C10)	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
SJRP-SB19-1-2-03302017 (600-146026-1MS)	3/30/17	11:30 Mountain	MS	Solid			X	X	2	
SJRP-SB19-1-2-03302017 (600-146026-1MSD)	3/30/17	11:30 Mountain	MSD	Solid			X	X	2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 4/4/17 1100	Company	Received by:	Date/Time: 4-5-17 0940	Company TAN	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 4.3

Received by OCD: 11/13/2025 11:14:36 AM

Released to Imaging: 11/14/2025 9:30:04 AM

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

Loc: 600
146026

COOLER RECEIPT FORM

Cooler Received/Opened On 4/5/2017 @ 0940

Time Samples Removed From Cooler_____ Time Samples Placed In Storage_____ (2 Hour Window)

1. Tracking # 6150 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 31470368 pH Strip Lot_____ Chlorine Strip Lot_____

2. Temperature of rep. sample or temp blank when opened: 4.3 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where:_____

5. Were the seals intact, signed, and dated correctly? YES NO NA

6. Were custody papers inside cooler? YES NO NA

I certify that I opened the cooler and answered questions 1-6 (intial) HG

7. Were custody seals on containers: YES NO and Intact YES NO NA

Were these signed and dated correctly? YES NO NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES NO NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES NO NA

12. Did all container labels and tags agree with custody papers? YES NO NA

13a. Were VOA vials received? YES NO NA

b. Was there any observable headspace present in any VOA vial? YES NO NA

14. Was there a Trip Blank in this cooler? YES NO NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES NO NA

b. Did the bottle labels indicate that the correct preservatives were used YES NO NA

16. Was residual chlorine present? YES NO NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) DA

17. Were custody papers properly filled out (ink, signed, etc)? YES NO NA

18. Did you sign the custody papers in the appropriate place? YES NO NA

19. Were correct containers used for the analysis requested? YES NO NA

20. Was sufficient amount of sample sent in each container? YES NO NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) DA

I certify that I attached a label with the unique LIMS number to each container (intial) DA

21. Were there Non-Conformance issues at login? YES NO Was a NCM generated? YES NO #_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 12/15/15

12/7/2020 (Rev. 1)

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc. Job Number: 600-146026-1

Login Number: 146026 **List Source: TestAmerica Houston**
List Number: 1
Creator: Crafton, Tommie S

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.4 1.3 1.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Received extra samples not listed on COC.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc. Job Number: 600-146026-1

Login Number: 146026 **List Source: TestAmerica Nashville**
List Number: 2 **List Creation: 04/05/17 03:58 PM**
Creator: Armstrong, Daniel

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.3C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc. Job Number: 600-146026-1

Login Number: 146026 **List Source: TestAmerica Nashville**
List Number: 3 **List Creation: 04/05/17 04:00 PM**
Creator: Armstrong, Daniel

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.3C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-146197-1
Client Project/Site: San Juan Site Characterization
Revision: 1

For:
CH2M Hill Constructors, Inc.
14701 St. Mary's Lane
Suite 300
Houston, Texas 77079-2923

Attn: Mr. John Ynfante

Steve A Stepanski

Authorized for release by:
12/7/2020 4:28:12 PM
Steve Stepanski, Project Mgmt. Assistant
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steve.stepanski@Eurofinset.com

Designee for

Cathy Upton, Project Manager I
(713)690-4444
cathy.upton@testamericainc.com

LINKS

Review your project results through TotalAccess

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-146197-1
Project/Site: San Juan Site Characterization

Job ID: 600-146197-1

Laboratory: TestAmerica Houston

Narrative

CASE NARRATIVE

Client: CH2M Hill Constructors, Inc.

Project: San Juan Site Characterization

Report Number: 600-146197-1

COMMENTS
This report was revised to a Level 2 deliverable per client's request.

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
Note: All samples that require thermal preservation are considered acceptable if the arrival temperature is within 2°C of the required temperature or method specified range. For samples with a specified temperature of 4°C, samples with a temperature ranging from just above freezing temperature of water to 6°C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

The samples were received on 04/05/2017; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.6º C and 3.3º C.

Receipt Exceptions

One or more containers for the following sample(s) was received broken or leaking: 1 VOA vial preserved with HCL arrived broken.

The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. Trip blank was not marked on the COC for analysis and the matrix was listed as solid instead of water. Analyzed by 8260B per containers received.

VOLATILE ORGANIC COMPOUNDS (GC-MS)-Soil
Samples SJRP-SB14-1-2-04042017 (600-146197-1), SJRP-SB06-1-2-04042017 (600-146197-2), SJRP-SB13-1-2-04042017 (600-146197-3), SJRP-MW11-1-2-04042017 (600-146197-4), SJRP-MW12-1-2-04042017 (600-146197-5) and SJRP-MW13-1-2-04042017 (600-146197-6) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were prepared on 04/05/2017 and analyzed on 04/07/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GC-MS)-Water
Samples SJRP-TB-04042017 (600-146197-7) and SJRP-EB-04042017 (600-146197-8) were analyzed for volatile organic compounds

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-146197-1
Project/Site: San Juan Site Characterization

Job ID: 600-146197-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

(GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/06/2017 and 04/07/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GASOLINE RANGE ORGANICS (GRO)-Soil
Samples SJRP-SB14-1-2-04042017 (600-146197-1), SJRP-SB06-1-2-04042017 (600-146197-2), SJRP-SB13-1-2-04042017 (600-146197-3), SJRP-MW11-1-2-04042017 (600-146197-4), SJRP-MW12-1-2-04042017 (600-146197-5) and SJRP-MW13-1-2-04042017 (600-146197-6) were analyzed for gasoline range organics (GRO) in accordance with EPA SW-846 Method 8015C - GRO. The samples were analyzed on 04/13/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GASOLINE RANGE ORGANICS (GRO)-Water
Sample SJRP-EB-04042017 (600-146197-8) was analyzed for gasoline range organics (GRO) in accordance with 8015C GRO. The samples were analyzed on 04/10/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DIESEL RANGE ORGANICS (DRO)-Soil
Samples SJRP-SB14-1-2-04042017 (600-146197-1), SJRP-SB06-1-2-04042017 (600-146197-2), SJRP-SB13-1-2-04042017 (600-146197-3), SJRP-MW11-1-2-04042017 (600-146197-4), SJRP-MW12-1-2-04042017 (600-146197-5) and SJRP-MW13-1-2-04042017 (600-146197-6) were analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 04/09/2017 and analyzed on 04/12/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DIESEL RANGE ORGANICS (DRO)-Water
Sample SJRP-EB-04042017 (600-146197-8) was analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 04/11/2017 and analyzed on 04/12/2017.

o-Terphenyl (Surr) failed the surrogate recovery criteria low for MB 490-421488/1-A. All associated sample and QC surrogate recoveries were within control limits; therefore, the data have been qualified and reported.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)-Soil
Samples SJRP-SB14-1-2-04042017 (600-146197-1), SJRP-SB06-1-2-04042017 (600-146197-2), SJRP-SB13-1-2-04042017 (600-146197-3), SJRP-MW11-1-2-04042017 (600-146197-4), SJRP-MW12-1-2-04042017 (600-146197-5) and SJRP-MW13-1-2-04042017 (600-146197-6) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 04/14/2017 and analyzed on 04/14/2017 and 04/17/2017.

Selenium and Sodium were detected in method blank MB 600-210755/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

Samples SJRP-SB14-1-2-04042017 (600-146197-1)[5X], SJRP-SB06-1-2-04042017 (600-146197-2)[5X], SJRP-SB13-1-2-04042017 (600-146197-3)[5X], SJRP-MW11-1-2-04042017 (600-146197-4)[5X], SJRP-MW12-1-2-04042017 (600-146197-5)[5X] and SJRP-MW13-1-2-04042017 (600-146197-6)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-146197-1
Project/Site: San Juan Site Characterization

Job ID: 600-146197-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

TOTAL METALS (ICP)-Water
Sample SJRP-EB-04042017 (600-146197-8) was analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared and analyzed on 04/14/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY-Soil
Samples SJRP-SB14-1-2-04042017 (600-146197-1), SJRP-SB06-1-2-04042017 (600-146197-2), SJRP-SB13-1-2-04042017 (600-146197-3), SJRP-MW11-1-2-04042017 (600-146197-4), SJRP-MW12-1-2-04042017 (600-146197-5) and SJRP-MW13-1-2-04042017 (600-146197-6) were analyzed for total mercury in accordance with EPA SW-846 Method 7471A. The samples were prepared on 04/11/2017 and analyzed on 04/13/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY-Water
Sample SJRP-EB-04042017 (600-146197-8) was analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 04/06/2017 and analyzed on 04/07/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PERCENT SOLIDS
Samples SJRP-SB14-1-2-04042017 (600-146197-1), SJRP-SB06-1-2-04042017 (600-146197-2), SJRP-SB13-1-2-04042017 (600-146197-3), SJRP-MW11-1-2-04042017 (600-146197-4), SJRP-MW12-1-2-04042017 (600-146197-5) and SJRP-MW13-1-2-04042017 (600-146197-6) were analyzed for percent solids in accordance with EPA SW846 Method 3550C. The samples were analyzed on 04/05/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL NSH
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL NSH
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU

Protocol References:

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-146197-1	SJRP-SB14-1-2-04042017	Solid	04/04/17 10:30	04/05/17 10:05
600-146197-2	SJRP-SB06-1-2-04042017	Solid	04/04/17 13:10	04/05/17 10:05
600-146197-3	SJRP-SB13-1-2-04042017	Solid	04/04/17 14:10	04/05/17 10:05
600-146197-4	SJRP-MW11-1-2-04042017	Solid	04/04/17 08:00	04/05/17 10:05
600-146197-5	SJRP-MW12-1-2-04042017	Solid	04/04/17 09:20	04/05/17 10:05
600-146197-6	SJRP-MW13-1-2-04042017	Solid	04/04/17 12:20	04/05/17 10:05
600-146197-7	SJRP-TB-04042017	Water	04/04/17 12:48	04/05/17 10:05
600-146197-8	SJRP-EB-04042017	Water	04/04/17 11:15	04/05/17 10:05

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Client Sample ID: SJRP-SB14-1-2-04042017
Date Collected: 04/04/17 10:30
Date Received: 04/05/17 10:05

Lab Sample ID: 600-146197-1
Matrix: Solid
Percent Solids: 87.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000674	U	0.00535	0.000674	mg/Kg	☼	04/05/17 14:42	04/07/17 11:27	1
Ethylbenzene	0.00109	U	0.00535	0.00109	mg/Kg	☼	04/05/17 14:42	04/07/17 11:27	1
Toluene	0.00148	U	0.00535	0.00148	mg/Kg	☼	04/05/17 14:42	04/07/17 11:27	1
Xylenes, Total	0.00121	U	0.00535	0.00121	mg/Kg	☼	04/05/17 14:42	04/07/17 11:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*77*		*61 - 130*	*04/05/17 14:42*	*04/07/17 11:27*	*1*
Dibromofluoromethane	*86*		*68 - 140*	*04/05/17 14:42*	*04/07/17 11:27*	*1*
Toluene-d8 (Surr)	*100*		*50 - 130*	*04/05/17 14:42*	*04/07/17 11:27*	*1*
4-Bromofluorobenzene	*101*		*57 - 140*	*04/05/17 14:42*	*04/07/17 11:27*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.45	U	4.90	2.45	mg/Kg		04/07/17 14:57	04/13/17 04:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*64*		*50 - 150*	*04/07/17 14:57*	*04/13/17 04:57*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.82	U	5.64	2.82	mg/Kg	☼	04/09/17 11:38	04/12/17 03:34	1
ORO C24-C40	**4.51**	**J**	5.64	2.82	mg/Kg	☼	04/09/17 11:38	04/12/17 03:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*92*		*50 - 150*	*04/09/17 11:38*	*04/12/17 03:34*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**13400**		136	1.64	mg/Kg	☼	04/14/17 06:08	04/17/17 14:11	5
Arsenic	**4.97**		1.09	0.238	mg/Kg	☼	04/14/17 06:08	04/14/17 13:55	1
Barium	**67.1**		1.09	0.0327	mg/Kg	☼	04/14/17 06:08	04/14/17 13:55	1
Boron	**2.94**	**J**	21.8	0.421	mg/Kg	☼	04/14/17 06:08	04/14/17 13:55	1
Cadmium	**0.229**	**J**	0.273	0.0279	mg/Kg	☼	04/14/17 06:08	04/14/17 13:55	1
Calcium	**25400**		545	4.71	mg/Kg	☼	04/14/17 06:08	04/17/17 14:11	5
Chromium	**7.06**		0.545	0.0552	mg/Kg	☼	04/14/17 06:08	04/14/17 13:55	1
Cobalt	**6.17**		0.545	0.0737	mg/Kg	☼	04/14/17 06:08	04/14/17 13:55	1
Iron	**18300**		109	13.8	mg/Kg	☼	04/14/17 06:08	04/17/17 14:11	5
Lead	**14.5**		0.545	0.115	mg/Kg	☼	04/14/17 06:08	04/14/17 13:55	1
Magnesium	**3620**		109	2.09	mg/Kg	☼	04/14/17 06:08	04/14/17 13:55	1
Manganese	**196**		1.64	0.0415	mg/Kg	☼	04/14/17 06:08	04/14/17 13:55	1
Molybdenum	**1.59**		0.545	0.148	mg/Kg	☼	04/14/17 06:08	04/14/17 13:55	1
Nickel	**9.71**		1.09	0.128	mg/Kg	☼	04/14/17 06:08	04/14/17 13:55	1
Potassium	**1560**		109	12.0	mg/Kg	☼	04/14/17 06:08	04/14/17 13:55	1
Selenium	0.282	U	2.18	0.282	mg/Kg	☼	04/14/17 06:08	04/14/17 13:55	1
Sodium	**7250**	**B**	109	0.966	mg/Kg	☼	04/14/17 06:08	04/14/17 13:55	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0297**		0.0185	0.00390	mg/Kg	☼	04/11/17 12:17	04/13/17 09:56	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Client Sample ID: SJRP-SB14-1-2-04042017

Lab Sample ID: 600-146197-1
Date Collected: 04/04/17 10:30
Matrix: Solid
Date Received: 04/05/17 10:05
Percent Solids: 87.3

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**12.7**		1.0	1.0	%			04/05/17 16:19	1
Percent Solids	**87.3**		1.0	1.0	%			04/05/17 16:19	1

Client Sample ID: SJRP-SB06-1-2-04042017

Lab Sample ID: 600-146197-2
Date Collected: 04/04/17 13:10
Matrix: Solid
Date Received: 04/05/17 10:05
Percent Solids: 85.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000783	U	0.00621	0.000783	mg/Kg	☼	04/05/17 14:42	04/07/17 11:51	1
Ethylbenzene	0.00127	U	0.00621	0.00127	mg/Kg	☼	04/05/17 14:42	04/07/17 11:51	1
Toluene	0.00172	U	0.00621	0.00172	mg/Kg	☼	04/05/17 14:42	04/07/17 11:51	1
Xylenes, Total	0.00140	U	0.00621	0.00140	mg/Kg	☼	04/05/17 14:42	04/07/17 11:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*61 - 130*	*04/05/17 14:42*	*04/07/17 11:51*	*1*
Dibromofluoromethane	*86*		*68 - 140*	*04/05/17 14:42*	*04/07/17 11:51*	*1*
Toluene-d8 (Surr)	*98*		*50 - 130*	*04/05/17 14:42*	*04/07/17 11:51*	*1*
4-Bromofluorobenzene	*99*		*57 - 140*	*04/05/17 14:42*	*04/07/17 11:51*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.46	U	4.92	2.46	mg/Kg		04/07/17 14:57	04/13/17 05:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*68*		*50 - 150*	*04/07/17 14:57*	*04/13/17 05:28*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.87	U	5.75	2.87	mg/Kg	☼	04/09/17 11:38	04/12/17 04:25	1
ORO C24-C40	**4.07**	**J**	5.75	2.87	mg/Kg	☼	04/09/17 11:38	04/12/17 04:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*95*		*50 - 150*	*04/09/17 11:38*	*04/12/17 04:25*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**13300**		144	1.73	mg/Kg	☼	04/14/17 06:08	04/17/17 14:13	5
Arsenic	**4.09**		1.15	0.252	mg/Kg	☼	04/14/17 06:08	04/14/17 13:57	1
Barium	**112**		1.15	0.0346	mg/Kg	☼	04/14/17 06:08	04/14/17 13:57	1
Boron	**2.29**	**J**	23.1	0.446	mg/Kg	☼	04/14/17 06:08	04/14/17 13:57	1
Cadmium	**0.214**	**J**	0.289	0.0296	mg/Kg	☼	04/14/17 06:08	04/14/17 13:57	1
Calcium	**16200**		577	4.99	mg/Kg	☼	04/14/17 06:08	04/17/17 14:13	5
Chromium	**6.91**		0.577	0.0584	mg/Kg	☼	04/14/17 06:08	04/14/17 13:57	1
Cobalt	**7.68**		0.577	0.0781	mg/Kg	☼	04/14/17 06:08	04/14/17 13:57	1
Iron	**16000**		115	14.6	mg/Kg	☼	04/14/17 06:08	04/17/17 14:13	5
Lead	**9.58**		0.577	0.121	mg/Kg	☼	04/14/17 06:08	04/14/17 13:57	1
Magnesium	**4610**		115	2.22	mg/Kg	☼	04/14/17 06:08	04/14/17 13:57	1
Manganese	**767**		8.66	0.220	mg/Kg	☼	04/14/17 06:08	04/17/17 14:13	5
Molybdenum	**0.849**		0.577	0.157	mg/Kg	☼	04/14/17 06:08	04/14/17 13:57	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Client Sample ID: SJRP-SB06-1-2-04042017

Lab Sample ID: 600-146197-2
Date Collected: 04/04/17 13:10
Matrix: Solid
Date Received: 04/05/17 10:05
Percent Solids: 85.7

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	10.2		1.15	0.135	mg/Kg	☼	04/14/17 06:08	04/14/17 13:57	1
Potassium	1480		115	12.7	mg/Kg	☼	04/14/17 06:08	04/14/17 13:57	1
Selenium	0.299	U	2.31	0.299	mg/Kg	☼	04/14/17 06:08	04/14/17 13:57	1
Sodium	6320	B	115	1.02	mg/Kg	☼	04/14/17 06:08	04/14/17 13:57	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00391	U	0.0186	0.00391	mg/Kg	☼	04/11/17 12:17	04/13/17 10:02	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14.3		1.0	1.0	%			04/05/17 16:19	1
Percent Solids	85.7		1.0	1.0	%			04/05/17 16:19	1

Client Sample ID: SJRP-SB13-1-2-04042017

Lab Sample ID: 600-146197-3
Date Collected: 04/04/17 14:10
Matrix: Solid
Date Received: 04/05/17 10:05
Percent Solids: 88.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000683	U	0.00542	0.000683	mg/Kg	☼	04/05/17 14:42	04/07/17 12:18	1
Ethylbenzene	0.00111	U	0.00542	0.00111	mg/Kg	☼	04/05/17 14:42	04/07/17 12:18	1
Toluene	0.00150	U	0.00542	0.00150	mg/Kg	☼	04/05/17 14:42	04/07/17 12:18	1
Xylenes, Total	0.00122	U	0.00542	0.00122	mg/Kg	☼	04/05/17 14:42	04/07/17 12:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*61 - 130*	*04/05/17 14:42*	*04/07/17 12:18*	*1*
Dibromofluoromethane	*89*		*68 - 140*	*04/05/17 14:42*	*04/07/17 12:18*	*1*
Toluene-d8 (Surr)	*99*		*50 - 130*	*04/05/17 14:42*	*04/07/17 12:18*	*1*
4-Bromofluorobenzene	*102*		*57 - 140*	*04/05/17 14:42*	*04/07/17 12:18*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.22	U	4.44	2.22	mg/Kg		04/07/17 14:57	04/13/17 05:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*69*		*50 - 150*	*04/07/17 14:57*	*04/13/17 05:58*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.73	U	5.45	2.73	mg/Kg	☼	04/09/17 11:38	04/12/17 04:42	1
ORO C24-C40	4.78	J	5.45	2.73	mg/Kg	☼	04/09/17 11:38	04/12/17 04:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*100*		*50 - 150*	*04/09/17 11:38*	*04/12/17 04:42*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	16600		136	1.63	mg/Kg	☼	04/14/17 06:08	04/17/17 14:15	5
Arsenic	7.20		1.08	0.236	mg/Kg	☼	04/14/17 06:08	04/14/17 14:06	1
Barium	27.0		1.08	0.0325	mg/Kg	☼	04/14/17 06:08	04/14/17 14:06	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Client Sample ID: SJRP-SB13-1-2-04042017

Lab Sample ID: 600-146197-3
Date Collected: 04/04/17 14:10
Matrix: Solid
Date Received: 04/05/17 10:05
Percent Solids: 88.7

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2.86	J	21.7	0.419	mg/Kg	☼	04/14/17 06:08	04/14/17 14:06	1
Cadmium	0.298		0.271	0.0278	mg/Kg	☼	04/14/17 06:08	04/14/17 14:06	1
Calcium	11800		542	4.69	mg/Kg	☼	04/14/17 06:08	04/17/17 14:15	5
Chromium	6.98		0.542	0.0549	mg/Kg	☼	04/14/17 06:08	04/14/17 14:06	1
Cobalt	30.8		0.542	0.0733	mg/Kg	☼	04/14/17 06:08	04/14/17 14:06	1
Iron	32600		108	13.7	mg/Kg	☼	04/14/17 06:08	04/17/17 14:15	5
Lead	11.4		0.542	0.114	mg/Kg	☼	04/14/17 06:08	04/14/17 14:06	1
Magnesium	3380		108	2.08	mg/Kg	☼	04/14/17 06:08	04/14/17 14:06	1
Manganese	321		1.63	0.0413	mg/Kg	☼	04/14/17 06:08	04/14/17 14:06	1
Molybdenum	2.89		0.542	0.148	mg/Kg	☼	04/14/17 06:08	04/14/17 14:06	1
Nickel	24.2		1.08	0.127	mg/Kg	☼	04/14/17 06:08	04/14/17 14:06	1
Potassium	1040		108	11.9	mg/Kg	☼	04/14/17 06:08	04/14/17 14:06	1
Selenium	0.281	U	2.17	0.281	mg/Kg	☼	04/14/17 06:08	04/14/17 14:06	1
Sodium	4380	B	108	0.961	mg/Kg	☼	04/14/17 06:08	04/14/17 14:06	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0164	J	0.0186	0.00391	mg/Kg	☼	04/11/17 12:17	04/13/17 10:04	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	11.3		1.0	1.0	%			04/05/17 16:19	1
Percent Solids	88.7		1.0	1.0	%			04/05/17 16:19	1

Client Sample ID: SJRP-MW11-1-2-04042017

Lab Sample ID: 600-146197-4
Date Collected: 04/04/17 08:00
Matrix: Solid
Date Received: 04/05/17 10:05
Percent Solids: 88.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000747	U	0.00593	0.000747	mg/Kg	☼	04/05/17 14:42	04/07/17 12:43	1
Ethylbenzene	0.00121	U	0.00593	0.00121	mg/Kg	☼	04/05/17 14:42	04/07/17 12:43	1
Toluene	0.00164	U	0.00593	0.00164	mg/Kg	☼	04/05/17 14:42	04/07/17 12:43	1
Xylenes, Total	0.00134	U	0.00593	0.00134	mg/Kg	☼	04/05/17 14:42	04/07/17 12:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*61 - 130*	*04/05/17 14:42*	*04/07/17 12:43*	*1*
Dibromofluoromethane	*86*		*68 - 140*	*04/05/17 14:42*	*04/07/17 12:43*	*1*
Toluene-d8 (Surr)	*97*		*50 - 130*	*04/05/17 14:42*	*04/07/17 12:43*	*1*
4-Bromofluorobenzene	*103*		*57 - 140*	*04/05/17 14:42*	*04/07/17 12:43*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.47	U	4.94	2.47	mg/Kg		04/07/17 14:58	04/13/17 06:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*68*		*50 - 150*	*04/07/17 14:58*	*04/13/17 06:28*	*1*

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Client Sample ID: SJRP-MW11-1-2-04042017

Lab Sample ID: 600-146197-4
Date Collected: 04/04/17 08:00
Matrix: Solid
Date Received: 04/05/17 10:05
Percent Solids: 88.8

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.72	U	5.43	2.72	mg/Kg	☼	04/09/17 11:38	04/12/17 04:59	1
ORO C24-C40	5.05	J	5.43	2.72	mg/Kg	☼	04/09/17 11:38	04/12/17 04:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*84*		*50 - 150*	*04/09/17 11:38*	*04/12/17 04:59*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9880		133	1.59	mg/Kg	☼	04/14/17 06:08	04/17/17 14:17	5
Arsenic	2.17		1.06	0.232	mg/Kg	☼	04/14/17 06:08	04/14/17 14:08	1
Barium	68.2		1.06	0.0319	mg/Kg	☼	04/14/17 06:08	04/14/17 14:08	1
Boron	2.71	J	21.2	0.410	mg/Kg	☼	04/14/17 06:08	04/14/17 14:08	1
Cadmium	0.112	J	0.266	0.0272	mg/Kg	☼	04/14/17 06:08	04/14/17 14:08	1
Calcium	45900		531	4.59	mg/Kg	☼	04/14/17 06:08	04/17/17 14:17	5
Chromium	6.24		0.531	0.0537	mg/Kg	☼	04/14/17 06:08	04/14/17 14:08	1
Cobalt	6.31		0.531	0.0718	mg/Kg	☼	04/14/17 06:08	04/14/17 14:08	1
Iron	14000		106	13.4	mg/Kg	☼	04/14/17 06:08	04/17/17 14:17	5
Lead	6.91		0.531	0.112	mg/Kg	☼	04/14/17 06:08	04/14/17 14:08	1
Magnesium	2220		106	2.04	mg/Kg	☼	04/14/17 06:08	04/14/17 14:08	1
Manganese	1410		7.97	0.202	mg/Kg	☼	04/14/17 06:08	04/17/17 14:17	5
Molybdenum	1.77		0.531	0.144	mg/Kg	☼	04/14/17 06:08	04/14/17 14:08	1
Nickel	7.08		1.06	0.124	mg/Kg	☼	04/14/17 06:08	04/14/17 14:08	1
Potassium	416		106	11.7	mg/Kg	☼	04/14/17 06:08	04/14/17 14:08	1
Selenium	0.398	J B	2.12	0.275	mg/Kg	☼	04/14/17 06:08	04/14/17 14:08	1
Sodium	2240	B	106	0.941	mg/Kg	☼	04/14/17 06:08	04/14/17 14:08	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00390	U	0.0185	0.00390	mg/Kg	☼	04/11/17 12:17	04/13/17 10:06	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	11.2		1.0	1.0	%			04/05/17 16:19	1
Percent Solids	88.8		1.0	1.0	%			04/05/17 16:19	1

Client Sample ID: SJRP-MW12-1-2-04042017

Lab Sample ID: 600-146197-5
Date Collected: 04/04/17 09:20
Matrix: Solid
Date Received: 04/05/17 10:05
Percent Solids: 86.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000614	U	0.00488	0.000614	mg/Kg	☼	04/05/17 14:42	04/07/17 13:07	1
Ethylbenzene	0.000995	U	0.00488	0.000995	mg/Kg	☼	04/05/17 14:42	04/07/17 13:07	1
Toluene	0.00135	U	0.00488	0.00135	mg/Kg	☼	04/05/17 14:42	04/07/17 13:07	1
Xylenes, Total	0.00110	U	0.00488	0.00110	mg/Kg	☼	04/05/17 14:42	04/07/17 13:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*61 - 130*	*04/05/17 14:42*	*04/07/17 13:07*	*1*
Dibromofluoromethane	*85*		*68 - 140*	*04/05/17 14:42*	*04/07/17 13:07*	*1*
Toluene-d8 (Surr)	*98*		*50 - 130*	*04/05/17 14:42*	*04/07/17 13:07*	*1*
4-Bromofluorobenzene	*102*		*57 - 140*	*04/05/17 14:42*	*04/07/17 13:07*	*1*

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.24	U	4.49	2.24	mg/Kg		04/07/17 14:58	04/13/17 06:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*66*		*50 - 150*	*04/07/17 14:58*	*04/13/17 06:58*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.84	U	5.68	2.84	mg/Kg	☼	04/09/17 11:38	04/12/17 05:17	1
ORO C24-C40	**6.18**		5.68	2.84	mg/Kg	☼	04/09/17 11:38	04/12/17 05:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*75*		*50 - 150*	*04/09/17 11:38*	*04/12/17 05:17*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**12100**		139	1.66	mg/Kg	☼	04/14/17 06:08	04/17/17 14:19	5
Arsenic	**3.23**		1.11	0.242	mg/Kg	☼	04/14/17 06:08	04/14/17 14:10	1
Barium	**79.5**		1.11	0.0333	mg/Kg	☼	04/14/17 06:08	04/14/17 14:10	1
Boron	**1.81**	**J**	22.2	0.428	mg/Kg	☼	04/14/17 06:08	04/14/17 14:10	1
Cadmium	**0.144**	**J**	0.277	0.0284	mg/Kg	☼	04/14/17 06:08	04/14/17 14:10	1
Calcium	**23600**		555	4.79	mg/Kg	☼	04/14/17 06:08	04/17/17 14:19	5
Chromium	**6.18**		0.555	0.0562	mg/Kg	☼	04/14/17 06:08	04/14/17 14:10	1
Cobalt	**8.93**		0.555	0.0750	mg/Kg	☼	04/14/17 06:08	04/14/17 14:10	1
Iron	**16600**		111	14.0	mg/Kg	☼	04/14/17 06:08	04/17/17 14:19	5
Lead	**8.86**		0.555	0.117	mg/Kg	☼	04/14/17 06:08	04/14/17 14:10	1
Magnesium	**3470**		111	2.13	mg/Kg	☼	04/14/17 06:08	04/14/17 14:10	1
Manganese	**386**		1.66	0.0423	mg/Kg	☼	04/14/17 06:08	04/14/17 14:10	1
Molybdenum	**1.16**		0.555	0.151	mg/Kg	☼	04/14/17 06:08	04/14/17 14:10	1
Nickel	**9.32**		1.11	0.130	mg/Kg	☼	04/14/17 06:08	04/14/17 14:10	1
Potassium	**704**		111	12.2	mg/Kg	☼	04/14/17 06:08	04/14/17 14:10	1
Selenium	0.287	U	2.22	0.287	mg/Kg	☼	04/14/17 06:08	04/14/17 14:10	1
Sodium	**2920**	**B**	111	0.983	mg/Kg	☼	04/14/17 06:08	04/14/17 14:10	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.251**		0.0196	0.00413	mg/Kg	☼	04/11/17 12:17	04/13/17 10:08	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**13.4**		1.0	1.0	%			04/05/17 16:19	1
Percent Solids	**86.6**		1.0	1.0	%			04/05/17 16:19	1

Client Sample ID: SJRP-MW13-1-2-04042017 — **Lab Sample ID: 600-146197-6**
Date Collected: 04/04/17 12:20 — **Matrix: Solid**
Date Received: 04/05/17 10:05 — **Percent Solids: 89.4**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000704	U	0.00559	0.000704	mg/Kg	☼	04/05/17 14:42	04/07/17 13:32	1
Ethylbenzene	0.00114	U	0.00559	0.00114	mg/Kg	☼	04/05/17 14:42	04/07/17 13:32	1
Toluene	0.00154	U	0.00559	0.00154	mg/Kg	☼	04/05/17 14:42	04/07/17 13:32	1
Xylenes, Total	0.00126	U	0.00559	0.00126	mg/Kg	☼	04/05/17 14:42	04/07/17 13:32	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Client Sample ID: SJRP-MW13-1-2-04042017
Date Collected: 04/04/17 12:20
Date Received: 04/05/17 10:05

Lab Sample ID: 600-146197-6
Matrix: Solid
Percent Solids: 89.4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		61 - 130	04/05/17 14:42	04/07/17 13:32	1
Dibromofluoromethane	86		68 - 140	04/05/17 14:42	04/07/17 13:32	1
Toluene-d8 (Surr)	97		50 - 130	04/05/17 14:42	04/07/17 13:32	1
4-Bromofluorobenzene	100		57 - 140	04/05/17 14:42	04/07/17 13:32	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.41	U	4.82	2.41	mg/Kg		04/07/17 14:58	04/13/17 07:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	66		50 - 150	04/07/17 14:58	04/13/17 07:29	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3.92	J	5.55	2.78	mg/Kg	☼	04/09/17 11:38	04/12/17 05:34	1
ORO C24-C40	6.74		5.55	2.78	mg/Kg	☼	04/09/17 11:38	04/12/17 05:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	107		50 - 150	04/09/17 11:38	04/12/17 05:34	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	12000		131	1.57	mg/Kg	☼	04/14/17 06:08	04/17/17 14:21	5
Arsenic	2.43		1.05	0.228	mg/Kg	☼	04/14/17 06:08	04/14/17 14:12	1
Barium	158		1.05	0.0314	mg/Kg	☼	04/14/17 06:08	04/14/17 14:12	1
Boron	2.53	J	20.9	0.404	mg/Kg	☼	04/14/17 06:08	04/14/17 14:12	1
Cadmium	0.157	J	0.261	0.0268	mg/Kg	☼	04/14/17 06:08	04/14/17 14:12	1
Calcium	58000		523	4.52	mg/Kg	☼	04/14/17 06:08	04/17/17 14:21	5
Chromium	6.75		0.523	0.0529	mg/Kg	☼	04/14/17 06:08	04/14/17 14:12	1
Cobalt	7.54		0.523	0.0707	mg/Kg	☼	04/14/17 06:08	04/14/17 14:12	1
Iron	13400		105	13.2	mg/Kg	☼	04/14/17 06:08	04/17/17 14:21	5
Lead	8.39		0.523	0.110	mg/Kg	☼	04/14/17 06:08	04/14/17 14:12	1
Magnesium	3160		105	2.01	mg/Kg	☼	04/14/17 06:08	04/14/17 14:12	1
Manganese	2170		7.84	0.199	mg/Kg	☼	04/14/17 06:08	04/17/17 14:21	5
Molybdenum	1.25		0.523	0.142	mg/Kg	☼	04/14/17 06:08	04/14/17 14:12	1
Nickel	8.95		1.05	0.122	mg/Kg	☼	04/14/17 06:08	04/14/17 14:12	1
Potassium	911		105	11.5	mg/Kg	☼	04/14/17 06:08	04/14/17 14:12	1
Selenium	0.271	U	2.09	0.271	mg/Kg	☼	04/14/17 06:08	04/14/17 14:12	1
Sodium	5060	B	105	0.927	mg/Kg	☼	04/14/17 06:08	04/14/17 14:12	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.121		0.0184	0.00388	mg/Kg	☼	04/11/17 12:17	04/13/17 10:09	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.6		1.0	1.0	%			04/05/17 16:19	1
Percent Solids	89.4		1.0	1.0	%			04/05/17 16:19	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Client Sample ID: SJRP-TB-04042017

Lab Sample ID: 600-146197-7
Date Collected: 04/04/17 12:48
Matrix: Water
Date Received: 04/05/17 10:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/06/17 18:57	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/06/17 18:57	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/06/17 18:57	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/06/17 18:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*50 - 134*		*04/06/17 18:57*	*1*
Dibromofluoromethane	*101*		*62 - 130*		*04/06/17 18:57*	*1*
Toluene-d8 (Surr)	*110*		*70 - 130*		*04/06/17 18:57*	*1*
4-Bromofluorobenzene	*108*		*67 - 139*		*04/06/17 18:57*	*1*

Client Sample ID: SJRP-EB-04042017

Lab Sample ID: 600-146197-8
Date Collected: 04/04/17 11:15
Matrix: Water
Date Received: 04/05/17 10:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/07/17 13:04	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/07/17 13:04	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/07/17 13:04	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/07/17 13:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*50 - 134*		*04/07/17 13:04*	*1*
Dibromofluoromethane	*92*		*62 - 130*		*04/07/17 13:04*	*1*
Toluene-d8 (Surr)	*107*		*70 - 130*		*04/07/17 13:04*	*1*
4-Bromofluorobenzene	*99*		*67 - 139*		*04/07/17 13:04*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			04/10/17 21:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*119*		*50 - 150*		*04/10/17 21:00*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0948	U	0.104	0.0948	mg/L		04/11/17 16:54	04/12/17 13:42	1
ORO C24-C40	0.0948	U	0.104	0.0948	mg/L		04/11/17 16:54	04/12/17 13:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*51*		*50 - 150*	*04/11/17 16:54*	*04/12/17 13:42*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		04/14/17 05:16	04/14/17 14:27	1
Arsenic	**0.00372**	**J**	0.0100	0.00285	mg/L		04/14/17 05:16	04/14/17 14:27	1
Barium	0.000530	U	0.0200	0.000530	mg/L		04/14/17 05:16	04/14/17 14:27	1
Boron	0.0116	U	0.200	0.0116	mg/L		04/14/17 05:16	04/14/17 14:27	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		04/14/17 05:16	04/14/17 14:27	1
Calcium	0.0240	U	1.00	0.0240	mg/L		04/14/17 05:16	04/14/17 14:27	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Client Sample ID: SJRP-EB-04042017 **Lab Sample ID: 600-146197-8**
Date Collected: 04/04/17 11:15 **Matrix: Water**
Date Received: 04/05/17 10:05

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/14/17 05:16	04/14/17 14:27	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		04/14/17 05:16	04/14/17 14:27	1
Iron	0.0270	U	0.400	0.0270	mg/L		04/14/17 05:16	04/14/17 14:27	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/14/17 05:16	04/14/17 14:27	1
Magnesium	0.0555	U	1.00	0.0555	mg/L		04/14/17 05:16	04/14/17 14:27	1
Manganese	0.000360	U	0.0100	0.000360	mg/L		04/14/17 05:16	04/14/17 14:27	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		04/14/17 05:16	04/14/17 14:27	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		04/14/17 05:16	04/14/17 14:27	1
Potassium	0.0374	U	1.00	0.0374	mg/L		04/14/17 05:16	04/14/17 14:27	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/14/17 05:16	04/14/17 14:27	1
Sodium	**0.319**	**J**	1.00	0.0214	mg/L		04/14/17 05:16	04/14/17 14:27	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000820	U	0.000200	0.0000820	mg/L		04/06/17 14:07	04/07/17 10:06	1

Definitions/Glossary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	12DCE (61-130)	DBFM (68-140)	TOL (50-130)	BFB (57-140)
600-146197-1	SJRP-SB14-1-2-04042017	77	86	100	101
600-146197-2	SJRP-SB06-1-2-04042017	80	86	98	99
600-146197-3	SJRP-SB13-1-2-04042017	84	89	99	102
600-146197-4	SJRP-MW11-1-2-04042017	84	86	97	103
600-146197-5	SJRP-MW12-1-2-04042017	82	85	98	102
600-146197-6	SJRP-MW13-1-2-04042017	81	86	97	100
LCS 600-210234/3	Lab Control Sample	69	88	111	107
LCSD 600-210234/4	Lab Control Sample Dup	76	90	107	107
MB 600-210234/6	Method Blank	78	84	102	100

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	12DCE (50-134)	DBFM (62-130)	TOL (70-130)	BFB (67-139)
600-146197-7	SJRP-TB-04042017	102	101	110	108
600-146197-8	SJRP-EB-04042017	90	92	107	99
LCS 600-210119/3	Lab Control Sample	107	109	110	112
LCS 600-210233/3	Lab Control Sample	104	107	104	109
LCSD 600-210119/4	Lab Control Sample Dup	108	109	109	111
LCSD 600-210233/4	Lab Control Sample Dup	107	108	102	104
MB 600-210119/6	Method Blank	104	102	110	105
MB 600-210233/6	Method Blank	101	96	104	101

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	TFT2 (50-150)
600-146197-1	SJRP-SB14-1-2-04042017	64
600-146197-2	SJRP-SB06-1-2-04042017	68
600-146197-3	SJRP-SB13-1-2-04042017	69
600-146197-4	SJRP-MW11-1-2-04042017	68
600-146197-5	SJRP-MW12-1-2-04042017	66
600-146197-6	SJRP-MW13-1-2-04042017	66
LCS 490-420272/2-A	Lab Control Sample	87

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		TFT2							
Lab Sample ID	Client Sample ID	(50-150)							
LCS 490-420678/2-A	Lab Control Sample	86							
LCSD 490-420272/3-A	Lab Control Sample Dup	86							
LCSD 490-420678/3-A	Lab Control Sample Dup	86							
MB 490-420272/1-A	Method Blank	64							
MB 490-420678/1-A	Method Blank	61							

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		TFT2							
Lab Sample ID	Client Sample ID	(50-150)							
600-146197-8	SJRP-EB-04042017	119							
LCS 490-420929/4	Lab Control Sample	117							
LCSD 490-420929/5	Lab Control Sample Dup	114							
MB 490-420929/9	Method Blank	120							

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		OTPH1							
Lab Sample ID	Client Sample ID	(50-150)							
600-146197-1	SJRP-SB14-1-2-04042017	92							
600-146197-1 MS	SJRP-SB14-1-2-04042017	83							
600-146197-1 MSD	SJRP-SB14-1-2-04042017	66							
600-146197-2	SJRP-SB06-1-2-04042017	95							
600-146197-3	SJRP-SB13-1-2-04042017	100							
600-146197-4	SJRP-MW11-1-2-04042017	84							
600-146197-5	SJRP-MW12-1-2-04042017	75							
600-146197-6	SJRP-MW13-1-2-04042017	107							
LCS 490-420889/2-A	Lab Control Sample	101							
MB 490-420889/1-A	Method Blank	88							

Surrogate Legend

OTPH = o-Terphenyl (Surr)

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	OTPH1 (50-150)								
600-146197-8	SJRP-EB-04042017	51								
LCS 490-421488/2-A	Lab Control Sample	58								
LCSD 490-421488/3-A	Lab Control Sample Dup	74								
MB 490-421488/1-A	Method Blank	49 X								

Surrogate Legend

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-210119/6
Matrix: Water
Analysis Batch: 210119

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/06/17 11:45	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/06/17 11:45	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/06/17 11:45	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/06/17 11:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*50 - 134*		*04/06/17 11:45*	*1*
Dibromofluoromethane	*102*		*62 - 130*		*04/06/17 11:45*	*1*
Toluene-d8 (Surr)	*110*		*70 - 130*		*04/06/17 11:45*	*1*
4-Bromofluorobenzene	*105*		*67 - 139*		*04/06/17 11:45*	*1*

Lab Sample ID: LCS 600-210119/3
Matrix: Water
Analysis Batch: 210119

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0100	0.009343		mg/L		93	70 - 130		
Ethylbenzene			0.0100	0.009771		mg/L		98	70 - 130		
Toluene			0.0100	0.009232		mg/L		92	70 - 130		
Xylenes, Total			0.0200	0.01979		mg/L		99	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*50 - 134*
Dibromofluoromethane	*109*		*62 - 130*
Toluene-d8 (Surr)	*110*		*70 - 130*
4-Bromofluorobenzene	*112*		*67 - 139*

Lab Sample ID: LCSD 600-210119/4
Matrix: Water
Analysis Batch: 210119

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0100	0.009383		mg/L		94	70 - 130	0	20
Ethylbenzene			0.0100	0.009705		mg/L		97	70 - 130	1	20
Toluene			0.0100	0.009210		mg/L		92	70 - 130	0	20
Xylenes, Total			0.0200	0.01971		mg/L		99	70 - 130	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*50 - 134*
Dibromofluoromethane	*109*		*62 - 130*
Toluene-d8 (Surr)	*109*		*70 - 130*
4-Bromofluorobenzene	*111*		*67 - 139*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-210233/6
Matrix: Water
Analysis Batch: 210233

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/07/17 10:58	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/07/17 10:58	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/07/17 10:58	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/07/17 10:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*50 - 134*		*04/07/17 10:58*	*1*
Dibromofluoromethane	*96*		*62 - 130*		*04/07/17 10:58*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*04/07/17 10:58*	*1*
4-Bromofluorobenzene	*101*		*67 - 139*		*04/07/17 10:58*	*1*

Lab Sample ID: LCS 600-210233/3
Matrix: Water
Analysis Batch: 210233

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0100	0.009146		mg/L		91	70 - 130
Ethylbenzene	0.0100	0.009548		mg/L		95	70 - 130
Toluene	0.0100	0.009176		mg/L		92	70 - 130
Xylenes, Total	0.0200	0.01957		mg/L		98	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*50 - 134*
Dibromofluoromethane	*107*		*62 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*
4-Bromofluorobenzene	*109*		*67 - 139*

Lab Sample ID: LCSD 600-210233/4
Matrix: Water
Analysis Batch: 210233

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0100	0.009605		mg/L		96	70 - 130	5	20
Ethylbenzene	0.0100	0.009663		mg/L		97	70 - 130	1	20
Toluene	0.0100	0.009161		mg/L		92	70 - 130	0	20
Xylenes, Total	0.0200	0.01978		mg/L		99	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*50 - 134*
Dibromofluoromethane	*108*		*62 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*
4-Bromofluorobenzene	*104*		*67 - 139*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-210234/6
Matrix: Solid
Analysis Batch: 210234

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			04/07/17 11:02	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			04/07/17 11:02	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			04/07/17 11:02	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			04/07/17 11:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*78*		*61 - 130*		*04/07/17 11:02*	*1*
Dibromofluoromethane	*84*		*68 - 140*		*04/07/17 11:02*	*1*
Toluene-d8 (Surr)	*102*		*50 - 130*		*04/07/17 11:02*	*1*
4-Bromofluorobenzene	*100*		*57 - 140*		*04/07/17 11:02*	*1*

Lab Sample ID: LCS 600-210234/3
Matrix: Solid
Analysis Batch: 210234

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.05110		mg/Kg		102	70 - 131		
Ethylbenzene			0.0500	0.05272		mg/Kg		105	66 - 130		
Toluene			0.0500	0.05516		mg/Kg		110	67 - 130		
Xylenes, Total			0.100	0.1042		mg/Kg		104	63 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*69*		*61 - 130*
Dibromofluoromethane	*88*		*68 - 140*
Toluene-d8 (Surr)	*111*		*50 - 130*
4-Bromofluorobenzene	*107*		*57 - 140*

Lab Sample ID: LCSD 600-210234/4
Matrix: Solid
Analysis Batch: 210234

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.05122		mg/Kg		102	70 - 131	0	30
Ethylbenzene			0.0500	0.04910		mg/Kg		98	66 - 130	7	30
Toluene			0.0500	0.05279		mg/Kg		106	67 - 130	4	30
Xylenes, Total			0.100	0.09814		mg/Kg		98	63 - 130	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*76*		*61 - 130*
Dibromofluoromethane	*90*		*68 - 140*
Toluene-d8 (Surr)	*107*		*50 - 130*
4-Bromofluorobenzene	*107*		*57 - 140*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 490-420272/1-A
Matrix: Solid
Analysis Batch: 421820

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 420272

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		04/06/17 11:20	04/12/17 22:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*64*		*50 - 150*	*04/06/17 11:20*	*04/12/17 22:53*	*1*

Lab Sample ID: LCS 490-420272/2-A
Matrix: Solid
Analysis Batch: 421820

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 420272

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	500	518.9		mg/Kg		104	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*87*		*50 - 150*

Lab Sample ID: LCSD 490-420272/3-A
Matrix: Solid
Analysis Batch: 421820

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 420272

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	500	530.1		mg/Kg		106	70 - 130	2	21

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*86*		*50 - 150*

Lab Sample ID: MB 490-420678/1-A
Matrix: Solid
Analysis Batch: 421820

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 420678

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		04/07/17 14:57	04/12/17 23:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*61*		*50 - 150*	*04/07/17 14:57*	*04/12/17 23:23*	*1*

Lab Sample ID: LCS 490-420678/2-A
Matrix: Solid
Analysis Batch: 421820

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 420678

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	500	546.4		mg/Kg		109	70 - 130

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: LCS 490-420678/2-A
Matrix: Solid
Analysis Batch: 421820

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 420678

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	86		50 - 150

Lab Sample ID: LCSD 490-420678/3-A
Matrix: Solid
Analysis Batch: 421820

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 420678

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10			500	544.3		mg/Kg		109	70 - 130	0	21

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	86		50 - 150

Lab Sample ID: MB 490-420929/9
Matrix: Water
Analysis Batch: 420929

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			04/10/17 11:18	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	120		50 - 150		04/10/17 11:18	1

Lab Sample ID: LCS 490-420929/4
Matrix: Water
Analysis Batch: 420929

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C6-C10			1.00	0.9637		mg/L		96	66 - 140		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	117		50 - 150

Lab Sample ID: LCSD 490-420929/5
Matrix: Water
Analysis Batch: 420929

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10			1.00	0.9308		mg/L		93	66 - 140	3	42

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	114		50 - 150

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Lab Sample ID: MB 490-420889/1-A
Matrix: Solid
Analysis Batch: 421296

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 420889

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.50	U	5.00	2.50	mg/Kg		04/09/17 11:38	04/11/17 20:42	1
ORO C24-C40	2.50	U	5.00	2.50	mg/Kg		04/09/17 11:38	04/11/17 20:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*88*		*50 - 150*	*04/09/17 11:38*	*04/11/17 20:42*	*1*

Lab Sample ID: LCS 490-420889/2-A
Matrix: Solid
Analysis Batch: 421296

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 420889

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			40.0	35.90		mg/Kg		90	54 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*101*		*50 - 150*

Lab Sample ID: 600-146197-1 MS
Matrix: Solid
Analysis Batch: 421296

Client Sample ID: SJRP-SB14-1-2-04042017
Prep Type: Total/NA
Prep Batch: 420889

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]	2.82	U	45.7	34.94		mg/Kg	☼	76	10 - 142		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
o-Terphenyl (Surr)	*83*		*50 - 150*

Lab Sample ID: 600-146197-1 MSD
Matrix: Solid
Analysis Batch: 421296

Client Sample ID: SJRP-SB14-1-2-04042017
Prep Type: Total/NA
Prep Batch: 420889

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	2.82	U	45.0	28.08		mg/Kg	☼	62	10 - 142	22	47

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
o-Terphenyl (Surr)	*66*		*50 - 150*

Lab Sample ID: MB 490-421488/1-A
Matrix: Water
Analysis Batch: 421605

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 421488

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0910	U	0.100	0.0910	mg/L		04/11/17 16:54	04/12/17 12:56	1
ORO C24-C40	0.0910	U	0.100	0.0910	mg/L		04/11/17 16:54	04/12/17 12:56	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Lab Sample ID: MB 490-421488/1-A
Matrix: Water
Analysis Batch: 421605

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 421488

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	49	X	50 - 150	04/11/17 16:54	04/12/17 12:56	1

Lab Sample ID: LCS 490-421488/2-A
Matrix: Water
Analysis Batch: 421605

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 421488

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	0.800	0.4503		mg/L		56	46 - 132

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	58		50 - 150

Lab Sample ID: LCSD 490-421488/3-A
Matrix: Water
Analysis Batch: 421605

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 421488

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	0.800	0.5722		mg/L		72	46 - 132	24	31

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o-Terphenyl (Surr)	74		50 - 150

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-210750/1-A
Matrix: Water
Analysis Batch: 210785

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210750

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		04/14/17 05:16	04/14/17 13:33	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		04/14/17 05:16	04/14/17 13:33	1
Barium	0.000530	U	0.0200	0.000530	mg/L		04/14/17 05:16	04/14/17 13:33	1
Boron	0.0116	U	0.200	0.0116	mg/L		04/14/17 05:16	04/14/17 13:33	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		04/14/17 05:16	04/14/17 13:33	1
Calcium	0.0240	U	1.00	0.0240	mg/L		04/14/17 05:16	04/14/17 13:33	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/14/17 05:16	04/14/17 13:33	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		04/14/17 05:16	04/14/17 13:33	1
Iron	0.0270	U	0.400	0.0270	mg/L		04/14/17 05:16	04/14/17 13:33	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/14/17 05:16	04/14/17 13:33	1
Magnesium	0.0555	U	1.00	0.0555	mg/L		04/14/17 05:16	04/14/17 13:33	1
Manganese	0.000360	U	0.0100	0.000360	mg/L		04/14/17 05:16	04/14/17 13:33	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		04/14/17 05:16	04/14/17 13:33	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		04/14/17 05:16	04/14/17 13:33	1
Potassium	0.0374	U	1.00	0.0374	mg/L		04/14/17 05:16	04/14/17 13:33	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: MB 600-210750/1-A
Matrix: Water
Analysis Batch: 210785

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210750

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/14/17 05:16	04/14/17 13:33	1
Sodium	0.0214	U	1.00	0.0214	mg/L		04/14/17 05:16	04/14/17 13:33	1

Lab Sample ID: LCS 600-210750/2-A
Matrix: Water
Analysis Batch: 210785

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210750

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	9.702		mg/L		97	80 - 120
Arsenic	1.00	0.9613		mg/L		96	80 - 120
Barium	1.00	0.9866		mg/L		99	80 - 120
Boron	1.00	0.9687		mg/L		97	80 - 120
Cadmium	0.500	0.4840		mg/L		97	80 - 120
Calcium	10.0	9.919		mg/L		99	80 - 120
Chromium	1.00	0.9878		mg/L		99	80 - 120
Cobalt	1.00	0.9711		mg/L		97	80 - 120
Iron	10.0	10.07		mg/L		101	80 - 120
Lead	1.00	0.9717		mg/L		97	80 - 120
Magnesium	10.0	9.636		mg/L		96	80 - 120
Manganese	1.00	0.9903		mg/L		99	80 - 120
Molybdenum	1.00	0.9519		mg/L		95	80 - 120
Nickel	1.00	0.9836		mg/L		98	80 - 120
Potassium	10.0	10.25		mg/L		103	80 - 120
Selenium	1.00	0.9935		mg/L		99	80 - 120
Sodium	10.0	10.14		mg/L		101	80 - 120

Lab Sample ID: MB 600-210755/1-A
Matrix: Solid
Analysis Batch: 210799

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210755

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.300	U	25.0	0.300	mg/Kg		04/14/17 06:08	04/14/17 13:18	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		04/14/17 06:08	04/14/17 13:18	1
Barium	0.0300	U	1.00	0.0300	mg/Kg		04/14/17 06:08	04/14/17 13:18	1
Boron	0.386	U	20.0	0.386	mg/Kg		04/14/17 06:08	04/14/17 13:18	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		04/14/17 06:08	04/14/17 13:18	1
Calcium	0.864	U	100	0.864	mg/Kg		04/14/17 06:08	04/14/17 13:18	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		04/14/17 06:08	04/14/17 13:18	1
Cobalt	0.0676	U	0.500	0.0676	mg/Kg		04/14/17 06:08	04/14/17 13:18	1
Iron	2.53	U	20.0	2.53	mg/Kg		04/14/17 06:08	04/14/17 13:18	1
Lead	0.105	U	0.500	0.105	mg/Kg		04/14/17 06:08	04/14/17 13:18	1
Magnesium	1.92	U	100	1.92	mg/Kg		04/14/17 06:08	04/14/17 13:18	1
Manganese	0.0381	U	1.50	0.0381	mg/Kg		04/14/17 06:08	04/14/17 13:18	1
Molybdenum	0.136	U	0.500	0.136	mg/Kg		04/14/17 06:08	04/14/17 13:18	1
Nickel	0.117	U	1.00	0.117	mg/Kg		04/14/17 06:08	04/14/17 13:18	1
Potassium	11.0	U	100	11.0	mg/Kg		04/14/17 06:08	04/14/17 13:18	1
Selenium	0.4700	J	2.00	0.259	mg/Kg		04/14/17 06:08	04/14/17 13:18	1
Sodium	3.815	J	100	0.886	mg/Kg		04/14/17 06:08	04/14/17 13:18	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-210755/2-A
Matrix: Solid
Analysis Batch: 210799

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210755

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	7590	6375		mg/Kg		84.0	34.9 - 151.5
Arsenic	97.5	99.84		mg/Kg		102.4	69.2 - 145.6
Barium	306	259.9		mg/Kg		84.9	82.7 - 117.0
Boron	116	105.5		mg/Kg		90.9	73.0 - 127.6
Cadmium	76.6	78.28		mg/Kg		102.2	73.2 - 126.8
Calcium	5880	5366		mg/Kg		91.3	81.8 - 118.4
Chromium	103	100.3		mg/Kg		97.4	79.7 - 121.4
Cobalt	103	105.0		mg/Kg		101.9	83.3 - 116.5
Iron	14500	12780		mg/Kg		88.1	45.0 - 155.9
Lead	96.7	96.64		mg/Kg		99.9	81.7 - 117.9
Magnesium	2680	2212		mg/Kg		82.5	75.4 - 124.6
Manganese	400	377.6		mg/Kg		94.4	81.0 - 119.0
Molybdenum	94.9	96.58		mg/Kg		101.8	78.5 - 121.2
Nickel	153	157.3		mg/Kg		102.8	73.2 - 126.8
Potassium	2230	1917		mg/Kg		86.0	69.5 - 130.5
Selenium	161	168.1		mg/Kg		104.4	77.6 - 123.0
Sodium	370	320.8		mg/Kg		86.7	70.5 - 129.7

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Lab Sample ID: LB 600-210128/1-B
Matrix: Water
Analysis Batch: 210258

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210192

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000820	U	0.000200	0.0000820	mg/L		04/06/17 14:06	04/07/17 09:13	1

Lab Sample ID: MB 600-210192/7-A
Matrix: Water
Analysis Batch: 210258

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210192

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000820	U	0.000200	0.0000820	mg/L		04/06/17 14:06	04/07/17 09:10	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) (Continued)

Lab Sample ID: LCS 600-210192/8-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 210258 — **Prep Batch: 210192**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00300	0.002550		mg/L		85	70 - 130

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-210506/7-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 210702 — **Prep Batch: 210506**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00325	U	0.0155	0.00325	mg/Kg		04/11/17 12:17	04/13/17 09:52	1

Lab Sample ID: LCSSRM 600-210506/8-A ^100 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 210702 — **Prep Batch: 210506**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	20.2	25.54		mg/Kg		126.4	70.8 - 129.2

Lab Sample ID: 600-146197-1 MS — **Client Sample ID: SJRP-SB14-1-2-04042017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 210702 — **Prep Batch: 210506**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0297		0.277	0.3010		mg/Kg	☼	98	75 - 125

Lab Sample ID: 600-146197-1 DU — **Client Sample ID: SJRP-SB14-1-2-04042017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 210702 — **Prep Batch: 210506**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.0297		0.03579		mg/Kg	☼	19	20

Method: 2540B - Percent Moisture

Lab Sample ID: 600-146197-6 DU — **Client Sample ID: SJRP-MW13-1-2-04042017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 210080

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	10.6		11.5		%		8	20
Percent Solids	89.4		88.5		%		1	20

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

GC/MS VOA

Analysis Batch: 210119

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146197-7	SJRP-TB-04042017	Total/NA	Water	8260B	
MB 600-210119/6	Method Blank	Total/NA	Water	8260B	
LCS 600-210119/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-210119/4	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 210233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146197-8	SJRP-EB-04042017	Total/NA	Water	8260B	
MB 600-210233/6	Method Blank	Total/NA	Water	8260B	
LCS 600-210233/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-210233/4	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 210234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146197-1	SJRP-SB14-1-2-04042017	Total/NA	Solid	8260B	210279
600-146197-2	SJRP-SB06-1-2-04042017	Total/NA	Solid	8260B	210279
600-146197-3	SJRP-SB13-1-2-04042017	Total/NA	Solid	8260B	210279
600-146197-4	SJRP-MW11-1-2-04042017	Total/NA	Solid	8260B	210279
600-146197-5	SJRP-MW12-1-2-04042017	Total/NA	Solid	8260B	210279
600-146197-6	SJRP-MW13-1-2-04042017	Total/NA	Solid	8260B	210279
MB 600-210234/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-210234/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-210234/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 210279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146197-1	SJRP-SB14-1-2-04042017	Total/NA	Solid	5035	
600-146197-2	SJRP-SB06-1-2-04042017	Total/NA	Solid	5035	
600-146197-3	SJRP-SB13-1-2-04042017	Total/NA	Solid	5035	
600-146197-4	SJRP-MW11-1-2-04042017	Total/NA	Solid	5035	
600-146197-5	SJRP-MW12-1-2-04042017	Total/NA	Solid	5035	
600-146197-6	SJRP-MW13-1-2-04042017	Total/NA	Solid	5035	

GC VOA

Prep Batch: 420272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-420272/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 490-420272/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 490-420272/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Prep Batch: 420678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146197-1	SJRP-SB14-1-2-04042017	Total/NA	Solid	5030B	
600-146197-2	SJRP-SB06-1-2-04042017	Total/NA	Solid	5030B	
600-146197-3	SJRP-SB13-1-2-04042017	Total/NA	Solid	5030B	
600-146197-4	SJRP-MW11-1-2-04042017	Total/NA	Solid	5030B	
600-146197-5	SJRP-MW12-1-2-04042017	Total/NA	Solid	5030B	
600-146197-6	SJRP-MW13-1-2-04042017	Total/NA	Solid	5030B	
MB 490-420678/1-A	Method Blank	Total/NA	Solid	5030B	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

GC VOA (Continued)

Prep Batch: 420678 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 490-420678/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 490-420678/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 420929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146197-8	SJRP-EB-04042017	Total/NA	Water	8015C	
MB 490-420929/9	Method Blank	Total/NA	Water	8015C	
LCS 490-420929/4	Lab Control Sample	Total/NA	Water	8015C	
LCSD 490-420929/5	Lab Control Sample Dup	Total/NA	Water	8015C	

Analysis Batch: 421820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146197-1	SJRP-SB14-1-2-04042017	Total/NA	Solid	8015C	420678
600-146197-2	SJRP-SB06-1-2-04042017	Total/NA	Solid	8015C	420678
600-146197-3	SJRP-SB13-1-2-04042017	Total/NA	Solid	8015C	420678
600-146197-4	SJRP-MW11-1-2-04042017	Total/NA	Solid	8015C	420678
600-146197-5	SJRP-MW12-1-2-04042017	Total/NA	Solid	8015C	420678
600-146197-6	SJRP-MW13-1-2-04042017	Total/NA	Solid	8015C	420678
MB 490-420272/1-A	Method Blank	Total/NA	Solid	8015C	420272
MB 490-420678/1-A	Method Blank	Total/NA	Solid	8015C	420678
LCS 490-420272/2-A	Lab Control Sample	Total/NA	Solid	8015C	420272
LCS 490-420678/2-A	Lab Control Sample	Total/NA	Solid	8015C	420678
LCSD 490-420272/3-A	Lab Control Sample Dup	Total/NA	Solid	8015C	420272
LCSD 490-420678/3-A	Lab Control Sample Dup	Total/NA	Solid	8015C	420678

GC Semi VOA

Prep Batch: 420889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146197-1	SJRP-SB14-1-2-04042017	Total/NA	Solid	3550C	
600-146197-2	SJRP-SB06-1-2-04042017	Total/NA	Solid	3550C	
600-146197-3	SJRP-SB13-1-2-04042017	Total/NA	Solid	3550C	
600-146197-4	SJRP-MW11-1-2-04042017	Total/NA	Solid	3550C	
600-146197-5	SJRP-MW12-1-2-04042017	Total/NA	Solid	3550C	
600-146197-6	SJRP-MW13-1-2-04042017	Total/NA	Solid	3550C	
MB 490-420889/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-420889/2-A	Lab Control Sample	Total/NA	Solid	3550C	
600-146197-1 MS	SJRP-SB14-1-2-04042017	Total/NA	Solid	3550C	
600-146197-1 MSD	SJRP-SB14-1-2-04042017	Total/NA	Solid	3550C	

Analysis Batch: 421296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146197-1	SJRP-SB14-1-2-04042017	Total/NA	Solid	8015C	420889
600-146197-2	SJRP-SB06-1-2-04042017	Total/NA	Solid	8015C	420889
600-146197-3	SJRP-SB13-1-2-04042017	Total/NA	Solid	8015C	420889
600-146197-4	SJRP-MW11-1-2-04042017	Total/NA	Solid	8015C	420889
600-146197-5	SJRP-MW12-1-2-04042017	Total/NA	Solid	8015C	420889
600-146197-6	SJRP-MW13-1-2-04042017	Total/NA	Solid	8015C	420889
MB 490-420889/1-A	Method Blank	Total/NA	Solid	8015C	420889
LCS 490-420889/2-A	Lab Control Sample	Total/NA	Solid	8015C	420889

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

GC Semi VOA (Continued)

Analysis Batch: 421296 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146197-1 MS	SJRP-SB14-1-2-04042017	Total/NA	Solid	8015C	420889
600-146197-1 MSD	SJRP-SB14-1-2-04042017	Total/NA	Solid	8015C	420889

Prep Batch: 421488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146197-8	SJRP-EB-04042017	Total/NA	Water	3510C	
MB 490-421488/1-A	Method Blank	Total/NA	Water	3510C	
LCS 490-421488/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 490-421488/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 421605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146197-8	SJRP-EB-04042017	Total/NA	Water	8015C	421488
MB 490-421488/1-A	Method Blank	Total/NA	Water	8015C	421488
LCS 490-421488/2-A	Lab Control Sample	Total/NA	Water	8015C	421488
LCSD 490-421488/3-A	Lab Control Sample Dup	Total/NA	Water	8015C	421488

Metals

Leach Batch: 210128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 600-210128/1-B	Method Blank	Total/NA	Water	1311	

Prep Batch: 210192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146197-8	SJRP-EB-04042017	Total/NA	Water	7470A	
LB 600-210128/1-B	Method Blank	Total/NA	Water	7470A	210128
MB 600-210192/7-A	Method Blank	Total/NA	Water	7470A	
LCS 600-210192/8-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 210258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146197-8	SJRP-EB-04042017	Total/NA	Water	7470A	210192
LB 600-210128/1-B	Method Blank	Total/NA	Water	7470A	210192
MB 600-210192/7-A	Method Blank	Total/NA	Water	7470A	210192
LCS 600-210192/8-A	Lab Control Sample	Total/NA	Water	7470A	210192

Prep Batch: 210506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146197-1	SJRP-SB14-1-2-04042017	Total/NA	Solid	7471A	
600-146197-2	SJRP-SB06-1-2-04042017	Total/NA	Solid	7471A	
600-146197-3	SJRP-SB13-1-2-04042017	Total/NA	Solid	7471A	
600-146197-4	SJRP-MW11-1-2-04042017	Total/NA	Solid	7471A	
600-146197-5	SJRP-MW12-1-2-04042017	Total/NA	Solid	7471A	
600-146197-6	SJRP-MW13-1-2-04042017	Total/NA	Solid	7471A	
MB 600-210506/7-A	Method Blank	Total/NA	Solid	7471A	
LCSSRM 600-210506/8-A ^100	Lab Control Sample	Total/NA	Solid	7471A	
600-146197-1 MS	SJRP-SB14-1-2-04042017	Total/NA	Solid	7471A	
600-146197-1 DU	SJRP-SB14-1-2-04042017	Total/NA	Solid	7471A	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Metals (Continued)

Analysis Batch: 210702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146197-1	SJRP-SB14-1-2-04042017	Total/NA	Solid	7471A	210506
600-146197-2	SJRP-SB06-1-2-04042017	Total/NA	Solid	7471A	210506
600-146197-3	SJRP-SB13-1-2-04042017	Total/NA	Solid	7471A	210506
600-146197-4	SJRP-MW11-1-2-04042017	Total/NA	Solid	7471A	210506
600-146197-5	SJRP-MW12-1-2-04042017	Total/NA	Solid	7471A	210506
600-146197-6	SJRP-MW13-1-2-04042017	Total/NA	Solid	7471A	210506
MB 600-210506/7-A	Method Blank	Total/NA	Solid	7471A	210506
LCSSRM 600-210506/8-A ^100	Lab Control Sample	Total/NA	Solid	7471A	210506
600-146197-1 MS	SJRP-SB14-1-2-04042017	Total/NA	Solid	7471A	210506
600-146197-1 DU	SJRP-SB14-1-2-04042017	Total/NA	Solid	7471A	210506

Prep Batch: 210750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146197-8	SJRP-EB-04042017	Total/NA	Water	3010A	
MB 600-210750/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-210750/2-A	Lab Control Sample	Total/NA	Water	3010A	

Prep Batch: 210755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146197-1	SJRP-SB14-1-2-04042017	Total/NA	Solid	3050B	
600-146197-2	SJRP-SB06-1-2-04042017	Total/NA	Solid	3050B	
600-146197-3	SJRP-SB13-1-2-04042017	Total/NA	Solid	3050B	
600-146197-4	SJRP-MW11-1-2-04042017	Total/NA	Solid	3050B	
600-146197-5	SJRP-MW12-1-2-04042017	Total/NA	Solid	3050B	
600-146197-6	SJRP-MW13-1-2-04042017	Total/NA	Solid	3050B	
MB 600-210755/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-210755/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 210785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146197-8	SJRP-EB-04042017	Total/NA	Water	6010B	210750
MB 600-210750/1-A	Method Blank	Total/NA	Water	6010B	210750
LCS 600-210750/2-A	Lab Control Sample	Total/NA	Water	6010B	210750

Analysis Batch: 210799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146197-1	SJRP-SB14-1-2-04042017	Total/NA	Solid	6010B	210755
600-146197-2	SJRP-SB06-1-2-04042017	Total/NA	Solid	6010B	210755
600-146197-3	SJRP-SB13-1-2-04042017	Total/NA	Solid	6010B	210755
600-146197-4	SJRP-MW11-1-2-04042017	Total/NA	Solid	6010B	210755
600-146197-5	SJRP-MW12-1-2-04042017	Total/NA	Solid	6010B	210755
600-146197-6	SJRP-MW13-1-2-04042017	Total/NA	Solid	6010B	210755
MB 600-210755/1-A	Method Blank	Total/NA	Solid	6010B	210755
LCSSRM 600-210755/2-A	Lab Control Sample	Total/NA	Solid	6010B	210755

Analysis Batch: 210913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146197-1	SJRP-SB14-1-2-04042017	Total/NA	Solid	6010B	210755
600-146197-2	SJRP-SB06-1-2-04042017	Total/NA	Solid	6010B	210755
600-146197-3	SJRP-SB13-1-2-04042017	Total/NA	Solid	6010B	210755
600-146197-4	SJRP-MW11-1-2-04042017	Total/NA	Solid	6010B	210755

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Metals (Continued)

Analysis Batch: 210913 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146197-5	SJRP-MW12-1-2-04042017	Total/NA	Solid	6010B	210755
600-146197-6	SJRP-MW13-1-2-04042017	Total/NA	Solid	6010B	210755

General Chemistry

Analysis Batch: 210080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146197-1	SJRP-SB14-1-2-04042017	Total/NA	Solid	2540B	
600-146197-2	SJRP-SB06-1-2-04042017	Total/NA	Solid	2540B	
600-146197-3	SJRP-SB13-1-2-04042017	Total/NA	Solid	2540B	
600-146197-4	SJRP-MW11-1-2-04042017	Total/NA	Solid	2540B	
600-146197-5	SJRP-MW12-1-2-04042017	Total/NA	Solid	2540B	
600-146197-6	SJRP-MW13-1-2-04042017	Total/NA	Solid	2540B	
600-146197-6 DU	SJRP-MW13-1-2-04042017	Total/NA	Solid	2540B	

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Client Sample ID: SJRP-SB14-1-2-04042017 — Lab Sample ID: 600-146197-1

Date Collected: 04/04/17 10:30 — **Matrix: Solid**
Date Received: 04/05/17 10:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.10 g	5.0 mL	420678	04/07/17 14:57	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421820	04/13/17 04:57	FKG	TAL NSH
Total/NA	Analysis	2540B		1			210080	04/05/17 16:19	B1K	TAL HOU

Client Sample ID: SJRP-SB14-1-2-04042017 — Lab Sample ID: 600-146197-1

Date Collected: 04/04/17 10:30 — **Matrix: Solid**
Date Received: 04/05/17 10:05 — **Percent Solids: 87.3**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.355 g	5 mL	210279	04/05/17 14:42	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210234	04/07/17 11:27	WS1	TAL HOU
Total/NA	Prep	3550C			25.39 g	1.00 mL	420889	04/09/17 11:38	MNM	TAL NSH
Total/NA	Analysis	8015C		1			421296	04/12/17 03:34	A1B	TAL NSH
Total/NA	Prep	3050B			1.05 g	50 mL	210755	04/14/17 06:08	DCL	TAL HOU
Total/NA	Analysis	6010B		5			210913	04/17/17 14:11	DCL	TAL HOU
Total/NA	Prep	3050B			1.05 g	50 mL	210755	04/14/17 06:08	DCL	TAL HOU
Total/NA	Analysis	6010B		1			210799	04/14/17 13:55	DCL	TAL HOU
Total/NA	Prep	7471A			.63 g	50 mL	210506	04/11/17 12:17	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210702	04/13/17 09:56	DDE	TAL HOU

Client Sample ID: SJRP-SB06-1-2-04042017 — Lab Sample ID: 600-146197-2

Date Collected: 04/04/17 13:10 — **Matrix: Solid**
Date Received: 04/05/17 10:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.08 g	5.0 mL	420678	04/07/17 14:57	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421820	04/13/17 05:28	FKG	TAL NSH
Total/NA	Analysis	2540B		1			210080	04/05/17 16:19	B1K	TAL HOU

Client Sample ID: SJRP-SB06-1-2-04042017 — Lab Sample ID: 600-146197-2

Date Collected: 04/04/17 13:10 — **Matrix: Solid**
Date Received: 04/05/17 10:05 — **Percent Solids: 85.7**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.692 g	5 mL	210279	04/05/17 14:42	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210234	04/07/17 11:51	WS1	TAL HOU
Total/NA	Prep	3550C			25.37 g	1.00 mL	420889	04/09/17 11:38	MNM	TAL NSH
Total/NA	Analysis	8015C		1			421296	04/12/17 04:25	A1B	TAL NSH
Total/NA	Prep	3050B			1.01 g	50 mL	210755	04/14/17 06:08	DCL	TAL HOU
Total/NA	Analysis	6010B		5			210913	04/17/17 14:13	DCL	TAL HOU
Total/NA	Prep	3050B			1.01 g	50 mL	210755	04/14/17 06:08	DCL	TAL HOU
Total/NA	Analysis	6010B		1			210799	04/14/17 13:57	DCL	TAL HOU
Total/NA	Prep	7471A			.64 g	50 mL	210506	04/11/17 12:17	DDE	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Client Sample ID: SJRP-SB06-1-2-04042017
Lab Sample ID: 600-146197-2
Date Collected: 04/04/17 13:10
Matrix: Solid
Date Received: 04/05/17 10:05
Percent Solids: 85.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1			210702	04/13/17 10:02	DDE	TAL HOU

Client Sample ID: SJRP-SB13-1-2-04042017
Lab Sample ID: 600-146197-3
Date Collected: 04/04/17 14:10
Matrix: Solid
Date Received: 04/05/17 10:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.63 g	5.0 mL	420678	04/07/17 14:57	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421820	04/13/17 05:58	FKG	TAL NSH
Total/NA	Analysis	2540B		1			210080	04/05/17 16:19	B1K	TAL HOU

Client Sample ID: SJRP-SB13-1-2-04042017
Lab Sample ID: 600-146197-3
Date Collected: 04/04/17 14:10
Matrix: Solid
Date Received: 04/05/17 10:05
Percent Solids: 88.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.204 g	5 mL	210279	04/05/17 14:42	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210234	04/07/17 12:18	WS1	TAL HOU
Total/NA	Prep	3550C			25.86 g	1.00 mL	420889	04/09/17 11:38	MNM	TAL NSH
Total/NA	Analysis	8015C		1			421296	04/12/17 04:42	A1B	TAL NSH
Total/NA	Prep	3050B			1.04 g	50 mL	210755	04/14/17 06:08	DCL	TAL HOU
Total/NA	Analysis	6010B		5			210913	04/17/17 14:15	DCL	TAL HOU
Total/NA	Prep	3050B			1.04 g	50 mL	210755	04/14/17 06:08	DCL	TAL HOU
Total/NA	Analysis	6010B		1			210799	04/14/17 14:06	DCL	TAL HOU
Total/NA	Prep	7471A			.62 g	50 mL	210506	04/11/17 12:17	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210702	04/13/17 10:04	DDE	TAL HOU

Client Sample ID: SJRP-MW11-1-2-04042017
Lab Sample ID: 600-146197-4
Date Collected: 04/04/17 08:00
Matrix: Solid
Date Received: 04/05/17 10:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.06 g	5.0 mL	420678	04/07/17 14:58	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421820	04/13/17 06:28	FKG	TAL NSH
Total/NA	Analysis	2540B		1			210080	04/05/17 16:19	B1K	TAL HOU

Client Sample ID: SJRP-MW11-1-2-04042017
Lab Sample ID: 600-146197-4
Date Collected: 04/04/17 08:00
Matrix: Solid
Date Received: 04/05/17 10:05
Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.749 g	5 mL	210279	04/05/17 14:42	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210234	04/07/17 12:43	WS1	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			25.91 g	1.00 mL	420889	04/09/17 11:38	MNM	TAL NSH
Total/NA	Analysis	8015C		1			421296	04/12/17 04:59	A1B	TAL NSH
Total/NA	Prep	3050B			1.06 g	50 mL	210755	04/14/17 06:08	DCL	TAL HOU
Total/NA	Analysis	6010B		5			210913	04/17/17 14:17	DCL	TAL HOU
Total/NA	Prep	3050B			1.06 g	50 mL	210755	04/14/17 06:08	DCL	TAL HOU
Total/NA	Analysis	6010B		1			210799	04/14/17 14:08	DCL	TAL HOU
Total/NA	Prep	7471A			.62 g	50 mL	210506	04/11/17 12:17	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210702	04/13/17 10:06	DDE	TAL HOU

Client Sample ID: SJRP-MW12-1-2-04042017

Lab Sample ID: 600-146197-5

Date Collected: 04/04/17 09:20

Matrix: Solid

Date Received: 04/05/17 10:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.57 g	5.0 mL	420678	04/07/17 14:58	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421820	04/13/17 06:58	FKG	TAL NSH
Total/NA	Analysis	2540B		1			210080	04/05/17 16:19	B1K	TAL HOU

Client Sample ID: SJRP-MW12-1-2-04042017

Lab Sample ID: 600-146197-5

Date Collected: 04/04/17 09:20

Matrix: Solid

Date Received: 04/05/17 10:05

Percent Solids: 86.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.918 g	5 mL	210279	04/05/17 14:42	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210234	04/07/17 13:07	WS1	TAL HOU
Total/NA	Prep	3550C			25.42 g	1.00 mL	420889	04/09/17 11:38	MNM	TAL NSH
Total/NA	Analysis	8015C		1			421296	04/12/17 05:17	A1B	TAL NSH
Total/NA	Prep	3050B			1.04 g	50 mL	210755	04/14/17 06:08	DCL	TAL HOU
Total/NA	Analysis	6010B		5			210913	04/17/17 14:19	DCL	TAL HOU
Total/NA	Prep	3050B			1.04 g	50 mL	210755	04/14/17 06:08	DCL	TAL HOU
Total/NA	Analysis	6010B		1			210799	04/14/17 14:10	DCL	TAL HOU
Total/NA	Prep	7471A			.60 g	50 mL	210506	04/11/17 12:17	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210702	04/13/17 10:08	DDE	TAL HOU

Client Sample ID: SJRP-MW13-1-2-04042017

Lab Sample ID: 600-146197-6

Date Collected: 04/04/17 12:20

Matrix: Solid

Date Received: 04/05/17 10:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.19 g	5.0 mL	420678	04/07/17 14:58	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421820	04/13/17 07:29	FKG	TAL NSH
Total/NA	Analysis	2540B		1			210080	04/05/17 16:19	B1K	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Client Sample ID: SJRP-MW13-1-2-04042017

Lab Sample ID: 600-146197-6

Date Collected: 04/04/17 12:20
Matrix: Solid
Date Received: 04/05/17 10:05
Percent Solids: 89.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.008 g	5 mL	210279	04/05/17 14:42	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210234	04/07/17 13:32	WS1	TAL HOU
Total/NA	Prep	3550C			25.20 g	1.00 mL	420889	04/09/17 11:38	MNM	TAL NSH
Total/NA	Analysis	8015C		1			421296	04/12/17 05:34	A1B	TAL NSH
Total/NA	Prep	3050B			1.07 g	50 mL	210755	04/14/17 06:08	DCL	TAL HOU
Total/NA	Analysis	6010B		5			210913	04/17/17 14:21	DCL	TAL HOU
Total/NA	Prep	3050B			1.07 g	50 mL	210755	04/14/17 06:08	DCL	TAL HOU
Total/NA	Analysis	6010B		1			210799	04/14/17 14:12	DCL	TAL HOU
Total/NA	Prep	7471A			.62 g	50 mL	210506	04/11/17 12:17	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210702	04/13/17 10:09	DDE	TAL HOU

Client Sample ID: SJRP-TB-04042017

Lab Sample ID: 600-146197-7

Date Collected: 04/04/17 12:48
Matrix: Water
Date Received: 04/05/17 10:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	210119	04/06/17 18:57	WS1	TAL HOU

Client Sample ID: SJRP-EB-04042017

Lab Sample ID: 600-146197-8

Date Collected: 04/04/17 11:15
Matrix: Water
Date Received: 04/05/17 10:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	210233	04/07/17 13:04	WS1	TAL HOU
Total/NA	Analysis	8015C		1	5 mL	5 mL	420929	04/10/17 21:00	GWM	TAL NSH
Total/NA	Prep	3510C			240 mL	1 mL	421488	04/11/17 16:54	SAT	TAL NSH
Total/NA	Analysis	8015C		1			421605	04/12/17 13:42	MDW	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	210750	04/14/17 05:16	DCL	TAL HOU
Total/NA	Analysis	6010B		1			210785	04/14/17 14:27	DCL	TAL HOU
Total/NA	Prep	7470A			40 mL	40 mL	210192	04/06/17 14:07	DDE	TAL HOU
Total/NA	Analysis	7470A		1			210258	04/07/17 10:06	DDE	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146197-1

Laboratory: TestAmerica Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	16-046-0	08-04-17
Louisiana	NELAP	6	01967	06-30-17
Oklahoma	State Program	6	2015-050	08-31-17
Texas	NELAP	6	T104704223-17-21	10-31-17
USDA	Federal		P330-14-00192	06-06-17

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	A2LA		NA: NELAP & A2LA	12-31-17
A2LA	ISO/IEC 17025		0453.07	12-31-17
Alaska (UST)	State Program	10	UST-087	09-01-17
Arizona	State Program	9	AZ0473	05-05-17
Arkansas DEQ	State Program	6	88-0737	04-25-17
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-17
Florida	NELAP	4	E87358	06-30-17
Georgia	State Program	4	N/A	12-31-17
Illinois	NELAP	5	200010	12-09-17
Iowa	State Program	7	131	04-01-18
Kansas	NELAP	7	E-10229	10-31-17
Kentucky (UST)	State Program	4	19	06-30-17
Kentucky (WW)	State Program	4	90038	12-31-17
Louisiana	NELAP	6	30613	06-30-17
Maine	State Program	1	TN00032	11-03-17
Maryland	State Program	3	316	03-31-18
Massachusetts	State Program	1	M-TN032	06-30-17
Minnesota	NELAP	5	047-999-345	12-31-17
Mississippi	State Program	4	N/A	06-30-17
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-17
New Hampshire	NELAP	1	2963	10-09-17
New Jersey	NELAP	2	TN965	06-30-17
New York	NELAP	2	11342	03-31-18
North Carolina (WW/SW)	State Program	4	387	12-31-17
North Dakota	State Program	8	R-146	06-30-17
Ohio VAP	State Program	5	CL0033	07-10-17
Oklahoma	State Program	6	9412	08-31-17
Oregon	NELAP	10	TN200001	04-27-17
Pennsylvania	NELAP	3	68-00585	06-30-17
Rhode Island	State Program	1	LAO00268	12-30-17
South Carolina	State Program	4	84009 (001)	02-18-17 *
South Carolina (Do Not Use - DW)	State Program	4	84009 (002)	12-16-17
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-17
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-17
Virginia	NELAP	3	460152	06-14-17
Washington	State Program	10	C789	07-19-17

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc. TestAmerica Job ID: 600-146197-1
Project/Site: San Juan Site Characterization

Laboratory: TestAmerica Nashville (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
West Virginia DEP	State Program	3	219	02-28-18
Wisconsin	State Program	5	998020430	08-31-17
Wyoming (UST)	A2LA	8	453.07	12-31-17

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica

Client Information	Sampler: Katherine Moazakis	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-52002-15345.10
Client Contact: Jeffrey Minchak	Phone: 9043826573	E-Mail: cathy.upton@testamericainc.com		Page: Page 10 of 10
Company: CH2M Hill, Inc.				Job #:
Address: 3721 Rutledge Rd. NE Suite B-1	Due Date Requested:			
City: Albuquerque	TAT Requested (days):			
State, Zip: NM, 87109				
Phone: 281-721-8546(Tel)	PO #: Purchase Order Requested			
Email: Jeffrey.Minchak@ch2m.com	WO #: WD225383			
Project Name: Kinder Morgan Bloomfield, NM San Juan	Project #: 60005961-Analysis group BTEX/GRO/DRO/Metals			
Site: San Juan Site Characterization	SSOW#:			

Analysis Requested — Dallas . Ft Worth

560501

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO - Diesel and Oil Range Organics	8015C_GRO - GRO Range (C6-C10)	6010B, 7471A - NMWQCC List Metals	8260B - 5035 BTEX	Moisture	Waters	6010B, 7470A - NMWQCC List Metals	8260B_LL - BTEX Only	8015C_GRO - GRO Range (C6-C10)	8015C_DRO - Diesel and Oil Range Organics	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N		D	A	A	N		
SJRP-SB14-1-2-04042017	04/04/2017	1030	G	Solid	N	N	X	X	X	X	X							
SJRP-SB06-1-2-04042017	04/04/2017	1310	G	Solid	N	N	X	X	X	X	X							2 coolers
SJRP-SB13-1-2-04042017	04/04/2017	1410	G	Solid	N	N	X	X	X	X	X							
SJRP-MW11-1-2-04042017	04/04/17	08:00	G	Solid	N	N	X	X	X	X	X							
SJRP-MW12-1-2-04042017	4/4/17	9120	G	Solid	N	N	X	X	X	X	X							
SJRP-MW13-1-2-04042017	4/4/17	12:20	G	Solid	N	N	X	X	X	X	X							
			G	Solid														
			G	Solid														
			G	Solid														
SJRP-TB-04042017	4/4/17	12:48	G	Solid														
SJRP-FB-04042017	4/4/17	11:15	G	Water									X	X	X	X		

600-146197 Chain of Custody

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer tha
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	4/4/17 / 16:00	CH2M	Shivy Justus	4/5/17 1001	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Loc: 600
146197

TestAmerica Houston

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Receipt Checklist

Date/Time Received: '17APR 5 10:05

JOB NUMBER: _____ CLIENT: CH2M

UNPACKED BY: _____ CARRIER/DRIVER: ff

Custody Seal Present: ☒ YES ☐ NO Number of Coolers Received: 2

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Them CF	Corrected Temp (°C)
B/W	Y / N	Y / N	1.9	5C19	-0.3	1.6
B/W	Y / N	Y / N	3.6	1	1	3.3
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☒ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☐ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☐ YES ☐ NO

pH paper Lot #_____

VOA headspace acceptable (5-6mm): ☐ YES ☐ NO ☐ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?		X

COMMENTS:

1) Vial broken

FedEx TRK# 0221 6025 5771 6033
WED – 05 APR 10:30A
PRIORITY OVERNIGHT
XH LKSA
77040
TX-US IAH

FedEx TRK# 0221 6025 5771 6158
WED
PRI
XH LKSA

HS-SA-WI-013

Rev. 3; 07/01/2014

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

600-146197 Chain of Custody

COOLER RECEIPT FORM

Cooler Received/Opened On 4-7-17 @ 0955

Time Samples Removed From Cooler 1410 Time Samples Placed In Storage 1407 (2 Hour Window)

1. Tracking # 6518 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID_14740456 pH Strip Lot NA Chlorine Strip Lot NA

2. Temperature of rep. sample or temp blank when opened: 2.7 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where:

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) DA

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial?

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #

I certify that I unloaded the cooler and answered questions 7-14 (intial) PM

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) PM

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) PM

I certify that I attached a label with the unique LIMS number to each container (intial) PM

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 12/15/15

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

LOC: 600
146197

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Upton, Cathy L	(s):	COC No: 600-26321.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: cathy.upton@testamericainc.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):		Job #: 600-146197-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 4/17/2017			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: San Juan Site Characterization	Project #: 60005961			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO/3550C DRO/ORO	8015C_GRO/5030B_SolidNAC GRO Range (C6-C10)	8015C_DRO/3510C_LVI DRO/ORO	8015C_GRO/5030B GRO Range (C6-C10)	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
SJRP-SB14-1-2-04042017 (600-146197-1)	4/4/17	10:30 Mountain		Solid			X	X			2	
SJRP-SB06-1-2-04042017 (600-146197-2)	4/4/17	13:10 Mountain		Solid			X	X			2	
SJRP-SB13-1-2-04042017 (600-146197-3)	4/4/17	14:10 Mountain		Solid			X	X			2	
SJRP-MW11-1-2-04042017 (600-146197-4)	4/4/17	08:00 Mountain		Solid			X	X			2	
SJRP-MW12-1-2-04042017 (600-146197-5)	4/4/17	09:20 Mountain		Solid			X	X			2	
SJRP-MW13-1-2-04042017 (600-146197-6)	4/4/17	12:20 Mountain		Solid			X	X			2	
SJRP-EB-04042017 (600-146197-8)	4/4/17	11:15 Mountain		Water					X	X	4	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 4/6/17 1700	Company	Received by:	Date/Time: 4/7/17 0955	Company TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

600-146197 Chain of Custody

COOLER RECEIPT FORM

Cooler Received/Opened On 4-7-17 @ 0955

Time Samples Removed From Cooler 1410 Time Samples Placed In Storage 1407 (2 Hour Window)

1. Tracking # 6518 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID_14740456 pH Strip Lot NA Chlorine Strip Lot NA

2. Temperature of rep. sample or temp blank when opened: 2.7 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where:

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) DA

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #

I certify that I unloaded the cooler and answered questions 7-14 (intial) PM

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) PM

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) PM

I certify that I attached a label with the unique LIMS number to each container (intial) PM

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 12/15/15

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

Loc: 600
146197

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Upton, Cathy L	COC No: 600-26321.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: cathy.upton@testamericainc.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):	Job #: 600-146197-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 4/17/2017		
City: Nashville	TAT Requested (days):		
State, Zip: TN, 37204			
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:		
Email:	WO #:		
Project Name: San Juan Site Characterization	Project #: 60005961		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO/3550C DRO/ORO	8015C_GRO/5030B_SolidNAC GRO Range (C6-C10)	8015C_DRO/3510C_LVI DRO/ORO	8015C_GRO/5030B GRO Range (C6-C10)	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
SJRP-SB14-1-2-04042017 (600-146197-1)	4/4/17	10:30 Mountain		Solid			X	X			2	
SJRP-SB06-1-2-04042017 (600-146197-2)	4/4/17	13:10 Mountain		Solid			X	X			2	
SJRP-SB13-1-2-04042017 (600-146197-3)	4/4/17	14:10 Mountain		Solid			X	X			2	
SJRP-MW11-1-2-04042017 (600-146197-4)	4/4/17	08:00 Mountain		Solid			X	X			2	
SJRP-MW12-1-2-04042017 (600-146197-5)	4/4/17	09:20 Mountain		Solid			X	X			2	
SJRP-MW13-1-2-04042017 (600-146197-6)	4/4/17	12:20 Mountain		Solid			X	X			2	
SJRP-EB-04042017 (600-146197-8)	4/4/17	11:15 Mountain		Water					X	X	4	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by:	Date/Time: 4/6/17 1700	Company TAN	Received by:		Date/Time: 4/7/17 955	Company TAN.	
Relinquished by:	Date/Time:	Company	Received by:		Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by:		Date/Time:	Company	

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc. Job Number: 600-146197-1

Login Number: 146197 **List Source: TestAmerica Houston**
List Number: 1
Creator: Justus, Sherry E

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.6, 3.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-146197-1

Login Number: 146197
List Number: 2
Creator: Ngo, Phiet

List Source: TestAmerica Nashville
List Creation: 04/07/17 12:02 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-146197-1

Login Number: 146197
List Number: 3
Creator: Ngo, Phiet

List Source: TestAmerica Nashville
List Creation: 04/07/17 12:03 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-146305-1
Client Project/Site: San Juan Site Characterization
Revision: 1

For:
CH2M Hill Constructors, Inc.
14701 St. Mary's Lane
Suite 300
Houston, Texas 77079-2923

Attn: Mr. John Ynfante

Steve A Stepanski

Authorized for release by:
12/7/2020 4:31:34 PM
Steve Stepanski, Project Mgmt. Assistant
(713)690-4444
steve.stepanski@Eurofinset.com

Designee for

Cathy Upton, Project Manager I
(713)690-4444
cathy.upton@testamericainc.com

LINKS
Review your project results through TotalAccess
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

Job ID: 600-146305-1

Job ID: 600-146305-1

Laboratory: TestAmerica Houston

Narrative

CASE NARRATIVE

Client: CH2M Hill Constructors, Inc.

Project: San Juan Site Characterization

Report Number: 600-146305-1

COMMENT
This report was revised to a Level 2 deliverable per client's request.

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
Note: All samples that require thermal preservation are considered acceptable if the arrival temperature is within 2°C of the required temperature or method specified range. For samples with a specified temperature of 4°C, samples with a temperature ranging from just above freezing temperature of water to 6°C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

The samples were received on 04/06/2017; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.6º C and 3.0º C.

Receipt Exceptions

The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. The COC is marked for all analyses on the TB sample. The laboratory only analyzed this sample for BTEX.

One or more containers for the following sample were received in Nashville broken or leaking: SJRP-EB-04052017 (600-146305-9). Sufficient volume was available for analysis.

VOLATILE ORGANIC COMPOUNDS (GC-MS)-Soil
Samples SJRP-SB17-26-27-04052017 (600-146305-1), SJRP-SB17-26-27-04052017DUP (600-146305-2), SJRP-SB17-21-22-04052017 (600-146305-3), SJRP-SB17-21-22-04052017DUP (600-146305-4), SJRP-SB13-14-15-04052017 (600-146305-5), SJRP-SB13-18-19-04052017 (600-146305-6) and SJRP-SB17-11-12-04052017 (600-146305-7) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were prepared on 04/06/2017 and analyzed on 04/07/2017, 04/10/2017 and 04/11/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GC-MS)-Water

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-146305-1
Project/Site: San Juan Site Characterization

Job ID: 600-146305-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

Samples SJRP-TB-04052017 (600-146305-8) and SJRP-EB-04052017 (600-146305-9) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/10/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GASOLINE RANGE ORGANICS (GRO)-Soil
Samples SJRP-SB17-26-27-04052017 (600-146305-1), SJRP-SB17-26-27-04052017DUP (600-146305-2), SJRP-SB17-21-22-04052017 (600-146305-3), SJRP-SB17-21-22-04052017DUP (600-146305-4), SJRP-SB13-14-15-04052017 (600-146305-5), SJRP-SB13-18-19-04052017 (600-146305-6) and SJRP-SB17-11-12-04052017 (600-146305-7) were analyzed for gasoline range organics (GRO) in accordance with EPA SW-846 Method 8015C - GRO. The samples were analyzed on 04/13/2017.

Gasoline Range Organics (GRO)-C6-C10 failed the recovery criteria low for the MSD of sample SJRP-SB17-26-27-04052017MSD (600-146305-1) in batch 490-421820. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) met acceptance criteria.

Refer to the QC report for details.

Gasoline Range Organics (GRO)-C6-C10 exceeded the RPD limit.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GASOLINE RANGE ORGANICS (GRO)-Water
Sample SJRP-EB-04052017 (600-146305-9) was analyzed for gasoline range organics (GRO) in accordance with 8015C GRO. The samples were analyzed on 04/10/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DIESEL RANGE ORGANICS (DRO)-Soil
Samples SJRP-SB17-26-27-04052017 (600-146305-1), SJRP-SB17-26-27-04052017DUP (600-146305-2), SJRP-SB17-21-22-04052017 (600-146305-3), SJRP-SB17-21-22-04052017DUP (600-146305-4), SJRP-SB13-14-15-04052017 (600-146305-5), SJRP-SB13-18-19-04052017 (600-146305-6) and SJRP-SB17-11-12-04052017 (600-146305-7) were analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 04/10/2017 and analyzed on 04/12/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DIESEL RANGE ORGANICS (DRO)-Water
Sample SJRP-EB-04052017 (600-146305-9) was analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 04/09/2017 and analyzed on 04/10/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)-Soil
Samples SJRP-SB17-26-27-04052017 (600-146305-1), SJRP-SB17-26-27-04052017DUP (600-146305-2), SJRP-SB17-21-22-04052017 (600-146305-3), SJRP-SB17-21-22-04052017DUP (600-146305-4), SJRP-SB13-14-15-04052017 (600-146305-5), SJRP-SB13-18-19-04052017 (600-146305-6) and SJRP-SB17-11-12-04052017 (600-146305-7) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared and analyzed on 04/18/2017.

Sodium was detected in method blank MB 600-210973/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-146305-1
Project/Site: San Juan Site Characterization

Job ID: 600-146305-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

Due to the high concentrations of target analytes, samples SJRP-SB17-26-27-04052017 MS (600-146305-1) could not be evaluated for accuracy. The associated laboratory control sample (LCS) met acceptance criteria.

Refer to the QC report for details.

Barium, Cadmium, Potassium and Sodium exceeded the RPD limit for the duplicate of sample SJRP-SB17-26-27-04052017DU (600-146305-1).

Refer to the QC report for details.

The post digestion spike recoveries for Potassium (162%) and Sodium (270%) associated with batch 211005 were outside control limits. Sample matrix interference is suspected.

Method(s) 6010B: The serial dilution performed for the following sample associated with batch 211005 was outside control limits for Calcium at 16% recovery, Cobalt at 12% recovery, Iron at 24% recovery, Sodium at 46% recovery, and Nickel at 12% recovery: (600-146305-C-1-B SD).

Samples SJRP-SB17-26-27-04052017 (600-146305-1)[5X], SJRP-SB17-26-27-04052017DUP (600-146305-2)[5X], SJRP-SB17-21-22-04052017 (600-146305-3)[10X], SJRP-SB17-21-22-04052017DUP (600-146305-4)[10X], SJRP-SB13-14-15-04052017 (600-146305-5)[5X], SJRP-SB13-18-19-04052017 (600-146305-6)[10X], SJRP-SB13-18-19-04052017 (600-146305-6)[5X] and SJRP-SB17-11-12-04052017 (600-146305-7)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)-Water
Sample SJRP-EB-04052017 (600-146305-9) was analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared and analyzed on 04/14/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY-Soil
Samples SJRP-SB17-26-27-04052017 (600-146305-1), SJRP-SB17-26-27-04052017DUP (600-146305-2), SJRP-SB17-21-22-04052017 (600-146305-3), SJRP-SB17-21-22-04052017DUP (600-146305-4), SJRP-SB13-14-15-04052017 (600-146305-5), SJRP-SB13-18-19-04052017 (600-146305-6) and SJRP-SB17-11-12-04052017 (600-146305-7) were analyzed for total mercury in accordance with EPA SW-846 Method 7471A. The samples were prepared on 04/11/2017 and analyzed on 04/13/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY-Water
Sample SJRP-EB-04052017 (600-146305-9) was analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 04/13/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PERCENT SOLIDS
Samples SJRP-SB17-26-27-04052017 (600-146305-1), SJRP-SB17-26-27-04052017DUP (600-146305-2), SJRP-SB17-21-22-04052017 (600-146305-3), SJRP-SB17-21-22-04052017DUP (600-146305-4), SJRP-SB13-14-15-04052017 (600-146305-5), SJRP-SB13-18-19-04052017 (600-146305-6) and SJRP-SB17-11-12-04052017 (600-146305-7) were analyzed for percent solids in accordance with EPA SW846 Method 3550C. The samples were analyzed on 04/07/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL NSH
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL NSH
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU

Protocol References:

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-146305-1	SJRP-SB17-26-27-04052017	Solid	04/05/17 10:45	04/06/17 09:50
600-146305-2	SJRP-SB17-26-27-04052017DUP	Solid	04/05/17 10:45	04/06/17 09:50
600-146305-3	SJRP-SB17-21-22-04052017	Solid	04/05/17 10:40	04/06/17 09:50
600-146305-4	SJRP-SB17-21-22-04052017DUP	Solid	04/05/17 10:40	04/06/17 09:50
600-146305-5	SJRP-SB13-14-15-04052017	Solid	04/05/17 08:50	04/06/17 09:50
600-146305-6	SJRP-SB13-18-19-04052017	Solid	04/05/17 09:10	04/06/17 09:50
600-146305-7	SJRP-SB17-11-12-04052017	Solid	04/05/17 10:25	04/06/17 09:50
600-146305-8	SJRP-TB-04052017	Water	04/05/17 14:00	04/06/17 09:50
600-146305-9	SJRP-EB-04052017	Water	04/05/17 12:50	04/06/17 09:50

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Client Sample ID: SJRP-SB17-26-27-04052017 **Lab Sample ID: 600-146305-1**
Date Collected: 04/05/17 10:45 **Matrix: Solid**
Date Received: 04/06/17 09:50 **Percent Solids: 89.8**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000537	U	0.00426	0.000537	mg/Kg	☼	04/06/17 16:00	04/07/17 14:49	1
Ethylbenzene	0.000869	U	0.00426	0.000869	mg/Kg	☼	04/06/17 16:00	04/07/17 14:49	1
Toluene	0.00118	U	0.00426	0.00118	mg/Kg	☼	04/06/17 16:00	04/07/17 14:49	1
Xylenes, Total	0.000963	U	0.00426	0.000963	mg/Kg	☼	04/06/17 16:00	04/07/17 14:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*61 - 130*	*04/06/17 16:00*	*04/07/17 14:49*	*1*
Dibromofluoromethane	*85*		*68 - 140*	*04/06/17 16:00*	*04/07/17 14:49*	*1*
Toluene-d8 (Surr)	*94*		*50 - 130*	*04/06/17 16:00*	*04/07/17 14:49*	*1*
4-Bromofluorobenzene	*101*		*57 - 140*	*04/06/17 16:00*	*04/07/17 14:49*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.37	U F2 F1	4.73	2.37	mg/Kg		04/09/17 20:44	04/13/17 19:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*66*		*50 - 150*	*04/09/17 20:44*	*04/13/17 19:58*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.71	U	5.43	2.71	mg/Kg	☼	04/10/17 11:39	04/12/17 10:17	1
ORO C24-C40	**3.69**	**J**	5.43	2.71	mg/Kg	☼	04/10/17 11:39	04/12/17 10:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*88*		*50 - 150*	*04/10/17 11:39*	*04/12/17 10:17*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**7490**		26.2	0.315	mg/Kg	☼	04/18/17 08:52	04/18/17 12:45	1
Arsenic	1.14	U	5.25	1.14	mg/Kg	☼	04/18/17 08:52	04/18/17 14:16	5
Barium	**211**	**F1**	1.05	0.0315	mg/Kg	☼	04/18/17 08:52	04/18/17 12:45	1
Boron	**5.14**	**J F1**	21.0	0.405	mg/Kg	☼	04/18/17 08:52	04/18/17 12:45	1
Cadmium	**0.430**		0.262	0.0269	mg/Kg	☼	04/18/17 08:52	04/18/17 12:45	1
Calcium	**5440**		105	0.907	mg/Kg	☼	04/18/17 08:52	04/18/17 12:45	1
Chromium	**5.62**		0.525	0.0531	mg/Kg	☼	04/18/17 08:52	04/18/17 12:45	1
Cobalt	**9.94**		0.525	0.0710	mg/Kg	☼	04/18/17 08:52	04/18/17 12:45	1
Iron	**13300**		21.0	2.66	mg/Kg	☼	04/18/17 08:52	04/18/17 12:45	1
Lead	**7.34**		0.525	0.110	mg/Kg	☼	04/18/17 08:52	04/18/17 12:45	1
Magnesium	**3360**		105	2.02	mg/Kg	☼	04/18/17 08:52	04/18/17 12:45	1
Manganese	**203**	**F1**	1.57	0.0400	mg/Kg	☼	04/18/17 08:52	04/18/17 12:45	1
Molybdenum	**3.47**		0.525	0.143	mg/Kg	☼	04/18/17 08:52	04/18/17 12:45	1
Nickel	**9.28**		1.05	0.123	mg/Kg	☼	04/18/17 08:52	04/18/17 12:45	1
Potassium	**530**	**F1**	105	11.5	mg/Kg	☼	04/18/17 08:52	04/18/17 12:45	1
Selenium	0.272	U	2.10	0.272	mg/Kg	☼	04/18/17 08:52	04/18/17 12:45	1
Sodium	**2110**	**B F1**	105	0.930	mg/Kg	☼	04/18/17 08:52	04/18/17 12:45	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00932**	**J**	0.0177	0.00374	mg/Kg	☼	04/11/17 12:17	04/13/17 10:16	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Client Sample ID: SJRP-SB17-26-27-04052017

Lab Sample ID: 600-146305-1
Date Collected: 04/05/17 10:45
Matrix: Solid
Date Received: 04/06/17 09:50
Percent Solids: 89.8

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.2		1.0	1.0	%			04/07/17 17:18	1
Percent Solids	89.8		1.0	1.0	%			04/07/17 17:18	1

Client Sample ID: SJRP-SB17-26-27-04052017DUP

Lab Sample ID: 600-146305-2
Date Collected: 04/05/17 10:45
Matrix: Solid
Date Received: 04/06/17 09:50
Percent Solids: 88.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00591		0.00453	0.000570	mg/Kg	☼	04/06/17 16:00	04/07/17 14:25	1
Ethylbenzene	0.000923	U	0.00453	0.000923	mg/Kg	☼	04/06/17 16:00	04/07/17 14:25	1
Toluene	0.00512		0.00453	0.00125	mg/Kg	☼	04/06/17 16:00	04/07/17 14:25	1
Xylenes, Total	0.00102	U	0.00453	0.00102	mg/Kg	☼	04/06/17 16:00	04/07/17 14:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*61 - 130*	*04/06/17 16:00*	*04/07/17 14:25*	*1*
Dibromofluoromethane	*85*		*68 - 140*	*04/06/17 16:00*	*04/07/17 14:25*	*1*
Toluene-d8 (Surr)	*96*		*50 - 130*	*04/06/17 16:00*	*04/07/17 14:25*	*1*
4-Bromofluorobenzene	*102*		*57 - 140*	*04/06/17 16:00*	*04/07/17 14:25*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.43	U	4.86	2.43	mg/Kg		04/09/17 20:44	04/13/17 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*66*		*50 - 150*	*04/09/17 20:44*	*04/13/17 20:28*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.74	U	5.48	2.74	mg/Kg	☼	04/10/17 11:39	04/12/17 11:08	1
ORO C24-C40	3.92	J	5.48	2.74	mg/Kg	☼	04/10/17 11:39	04/12/17 11:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*57*		*50 - 150*	*04/10/17 11:39*	*04/12/17 11:08*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6820		27.9	0.335	mg/Kg	☼	04/18/17 08:52	04/18/17 12:51	1
Arsenic	1.22	U	5.58	1.22	mg/Kg	☼	04/18/17 08:52	04/18/17 14:23	5
Barium	192		1.12	0.0335	mg/Kg	☼	04/18/17 08:52	04/18/17 12:51	1
Boron	4.81	J	22.3	0.431	mg/Kg	☼	04/18/17 08:52	04/18/17 12:51	1
Cadmium	0.361		0.279	0.0286	mg/Kg	☼	04/18/17 08:52	04/18/17 12:51	1
Calcium	4900		112	0.964	mg/Kg	☼	04/18/17 08:52	04/18/17 12:51	1
Chromium	4.90		0.558	0.0565	mg/Kg	☼	04/18/17 08:52	04/18/17 12:51	1
Cobalt	16.9		0.558	0.0754	mg/Kg	☼	04/18/17 08:52	04/18/17 12:51	1
Iron	12800		22.3	2.82	mg/Kg	☼	04/18/17 08:52	04/18/17 12:51	1
Lead	7.92		0.558	0.117	mg/Kg	☼	04/18/17 08:52	04/18/17 12:51	1
Magnesium	3160		112	2.14	mg/Kg	☼	04/18/17 08:52	04/18/17 12:51	1
Manganese	377		1.67	0.0425	mg/Kg	☼	04/18/17 08:52	04/18/17 12:51	1
Molybdenum	4.11		0.558	0.152	mg/Kg	☼	04/18/17 08:52	04/18/17 12:51	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Client Sample ID: SJRP-SB17-26-27-04052017DUP

Lab Sample ID: 600-146305-2
Date Collected: 04/05/17 10:45
Matrix: Solid
Date Received: 04/06/17 09:50
Percent Solids: 88.7

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	10.9		1.12	0.131	mg/Kg	☼	04/18/17 08:52	04/18/17 12:51	1
Potassium	779		112	12.3	mg/Kg	☼	04/18/17 08:52	04/18/17 12:51	1
Selenium	0.289	U	2.23	0.289	mg/Kg	☼	04/18/17 08:52	04/18/17 12:51	1
Sodium	2760	B	112	0.989	mg/Kg	☼	04/18/17 08:52	04/18/17 12:51	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00768	J	0.0192	0.00403	mg/Kg	☼	04/11/17 12:17	04/13/17 10:18	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	11.3		1.0	1.0	%			04/07/17 17:18	1
Percent Solids	88.7		1.0	1.0	%			04/07/17 17:18	1

Client Sample ID: SJRP-SB17-21-22-04052017

Lab Sample ID: 600-146305-3
Date Collected: 04/05/17 10:40
Matrix: Solid
Date Received: 04/06/17 09:50
Percent Solids: 79.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000702	U	0.00557	0.000702	mg/Kg	☼	04/06/17 16:00	04/07/17 15:13	1
Ethylbenzene	0.00114	U	0.00557	0.00114	mg/Kg	☼	04/06/17 16:00	04/07/17 15:13	1
Toluene	0.00154	U	0.00557	0.00154	mg/Kg	☼	04/06/17 16:00	04/07/17 15:13	1
Xylenes, Total	0.00126	U	0.00557	0.00126	mg/Kg	☼	04/06/17 16:00	04/07/17 15:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*79*		*61 - 130*	*04/06/17 16:00*	*04/07/17 15:13*	*1*
Dibromofluoromethane	*82*		*68 - 140*	*04/06/17 16:00*	*04/07/17 15:13*	*1*
Toluene-d8 (Surr)	*96*		*50 - 130*	*04/06/17 16:00*	*04/07/17 15:13*	*1*
4-Bromofluorobenzene	*100*		*57 - 140*	*04/06/17 16:00*	*04/07/17 15:13*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.47	U	4.94	2.47	mg/Kg		04/09/17 20:44	04/13/17 20:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*67*		*50 - 150*	*04/09/17 20:44*	*04/13/17 20:59*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3.12	U	6.24	3.12	mg/Kg	☼	04/10/17 11:39	04/12/17 11:25	1
ORO C24-C40	4.35	J	6.24	3.12	mg/Kg	☼	04/10/17 11:39	04/12/17 11:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*75*		*50 - 150*	*04/10/17 11:39*	*04/12/17 11:25*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	14000		30.7	0.369	mg/Kg	☼	04/18/17 08:52	04/18/17 12:53	1
Arsenic	2.68	U	12.3	2.68	mg/Kg	☼	04/18/17 08:52	04/18/17 15:04	10
Barium	62.1		1.23	0.0369	mg/Kg	☼	04/18/17 08:52	04/18/17 12:53	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Client Sample ID: SJRP-SB17-21-22-04052017

Lab Sample ID: 600-146305-3
Date Collected: 04/05/17 10:40
Matrix: Solid
Date Received: 04/06/17 09:50
Percent Solids: 79.7

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	7.55	J	24.6	0.475	mg/Kg	☼	04/18/17 08:52	04/18/17 12:53	1
Cadmium	0.831		0.307	0.0315	mg/Kg	☼	04/18/17 08:52	04/18/17 12:53	1
Calcium	3480		123	1.06	mg/Kg	☼	04/18/17 08:52	04/18/17 12:53	1
Chromium	7.97		0.615	0.0622	mg/Kg	☼	04/18/17 08:52	04/18/17 12:53	1
Cobalt	19.5		0.615	0.0831	mg/Kg	☼	04/18/17 08:52	04/18/17 12:53	1
Iron	19500		24.6	3.11	mg/Kg	☼	04/18/17 08:52	04/18/17 12:53	1
Lead	10.9		0.615	0.129	mg/Kg	☼	04/18/17 08:52	04/18/17 12:53	1
Magnesium	4710		123	2.36	mg/Kg	☼	04/18/17 08:52	04/18/17 12:53	1
Manganese	128		1.84	0.0469	mg/Kg	☼	04/18/17 08:52	04/18/17 12:53	1
Molybdenum	0.267	J	0.615	0.167	mg/Kg	☼	04/18/17 08:52	04/18/17 12:53	1
Nickel	15.5		1.23	0.144	mg/Kg	☼	04/18/17 08:52	04/18/17 12:53	1
Potassium	1680		123	13.5	mg/Kg	☼	04/18/17 08:52	04/18/17 12:53	1
Selenium	0.318	U	2.46	0.318	mg/Kg	☼	04/18/17 08:52	04/18/17 12:53	1
Sodium	3780	B	123	1.09	mg/Kg	☼	04/18/17 08:52	04/18/17 12:53	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0245		0.0213	0.00449	mg/Kg	☼	04/11/17 12:17	04/13/17 10:19	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20.3		1.0	1.0	%			04/07/17 17:18	1
Percent Solids	79.7		1.0	1.0	%			04/07/17 17:18	1

Client Sample ID: SJRP-SB17-21-22-04052017DUP

Lab Sample ID: 600-146305-4
Date Collected: 04/05/17 10:40
Matrix: Solid
Date Received: 04/06/17 09:50
Percent Solids: 85.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000700	U	0.00556	0.000700	mg/Kg	☼	04/06/17 16:00	04/07/17 15:38	1
Ethylbenzene	0.00113	U	0.00556	0.00113	mg/Kg	☼	04/06/17 16:00	04/07/17 15:38	1
Toluene	0.00153	U	0.00556	0.00153	mg/Kg	☼	04/06/17 16:00	04/07/17 15:38	1
Xylenes, Total	0.00126	U	0.00556	0.00126	mg/Kg	☼	04/06/17 16:00	04/07/17 15:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*61 - 130*	*04/06/17 16:00*	*04/07/17 15:38*	*1*
Dibromofluoromethane	*87*		*68 - 140*	*04/06/17 16:00*	*04/07/17 15:38*	*1*
Toluene-d8 (Surr)	*93*		*50 - 130*	*04/06/17 16:00*	*04/07/17 15:38*	*1*
4-Bromofluorobenzene	*101*		*57 - 140*	*04/06/17 16:00*	*04/07/17 15:38*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.26	U	4.51	2.26	mg/Kg		04/09/17 20:44	04/13/17 21:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*61*		*50 - 150*	*04/09/17 20:44*	*04/13/17 21:29*	*1*

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Client Sample ID: SJRP-SB17-21-22-04052017DUP

Lab Sample ID: 600-146305-4
Date Collected: 04/05/17 10:40
Matrix: Solid
Date Received: 04/06/17 09:50
Percent Solids: 85.2

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.87	U	5.74	2.87	mg/Kg	☼	04/10/17 11:39	04/12/17 11:43	1
ORO C24-C40	**4.08**	**J**	5.74	2.87	mg/Kg	☼	04/10/17 11:39	04/12/17 11:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*81*		*50 - 150*	*04/10/17 11:39*	*04/12/17 11:43*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**12900**		27.7	0.332	mg/Kg	☼	04/18/17 08:52	04/18/17 12:55	1
Arsenic	2.41	U	11.1	2.41	mg/Kg	☼	04/18/17 08:52	04/18/17 15:06	10
Barium	**77.9**		1.11	0.0332	mg/Kg	☼	04/18/17 08:52	04/18/17 12:55	1
Boron	**7.43**	**J**	22.2	0.428	mg/Kg	☼	04/18/17 08:52	04/18/17 12:55	1
Cadmium	**0.868**		0.277	0.0284	mg/Kg	☼	04/18/17 08:52	04/18/17 12:55	1
Calcium	**3930**		111	0.957	mg/Kg	☼	04/18/17 08:52	04/18/17 12:55	1
Chromium	**8.56**		0.554	0.0561	mg/Kg	☼	04/18/17 08:52	04/18/17 12:55	1
Cobalt	**15.0**		0.554	0.0749	mg/Kg	☼	04/18/17 08:52	04/18/17 12:55	1
Iron	**18000**		22.2	2.80	mg/Kg	☼	04/18/17 08:52	04/18/17 12:55	1
Lead	**10.8**		0.554	0.116	mg/Kg	☼	04/18/17 08:52	04/18/17 12:55	1
Magnesium	**4450**		111	2.13	mg/Kg	☼	04/18/17 08:52	04/18/17 12:55	1
Manganese	**150**		1.66	0.0422	mg/Kg	☼	04/18/17 08:52	04/18/17 12:55	1
Molybdenum	**0.479**	**J**	0.554	0.151	mg/Kg	☼	04/18/17 08:52	04/18/17 12:55	1
Nickel	**14.5**		1.11	0.130	mg/Kg	☼	04/18/17 08:52	04/18/17 12:55	1
Potassium	**1610**		111	12.2	mg/Kg	☼	04/18/17 08:52	04/18/17 12:55	1
Selenium	0.287	U	2.22	0.287	mg/Kg	☼	04/18/17 08:52	04/18/17 12:55	1
Sodium	**3300**	**B**	111	0.981	mg/Kg	☼	04/18/17 08:52	04/18/17 12:55	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00955**	**J**	0.0193	0.00407	mg/Kg	☼	04/11/17 12:17	04/13/17 10:21	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**14.8**		1.0	1.0	%			04/07/17 17:18	1
Percent Solids	**85.2**		1.0	1.0	%			04/07/17 17:18	1

Client Sample ID: SJRP-SB13-14-15-04052017

Lab Sample ID: 600-146305-5
Date Collected: 04/05/17 08:50
Matrix: Solid
Date Received: 04/06/17 09:50
Percent Solids: 85.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000643	U	0.00510	0.000643	mg/Kg	☼	04/06/17 16:00	04/07/17 16:02	1
Ethylbenzene	0.00104	U	0.00510	0.00104	mg/Kg	☼	04/06/17 16:00	04/07/17 16:02	1
Toluene	0.00141	U	0.00510	0.00141	mg/Kg	☼	04/06/17 16:00	04/07/17 16:02	1
Xylenes, Total	0.00115	U	0.00510	0.00115	mg/Kg	☼	04/06/17 16:00	04/07/17 16:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*61 - 130*	*04/06/17 16:00*	*04/07/17 16:02*	*1*
Dibromofluoromethane	*86*		*68 - 140*	*04/06/17 16:00*	*04/07/17 16:02*	*1*
Toluene-d8 (Surr)	*94*		*50 - 130*	*04/06/17 16:00*	*04/07/17 16:02*	*1*
4-Bromofluorobenzene	*101*		*57 - 140*	*04/06/17 16:00*	*04/07/17 16:02*	*1*

TestAmerica Houston

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.22	U	4.43	2.22	mg/Kg		04/09/17 20:44	04/13/17 21:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*66*		*50 - 150*	*04/09/17 20:44*	*04/13/17 21:59*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**3.90**	**J**	5.78	2.89	mg/Kg	☼	04/10/17 11:39	04/12/17 12:00	1
ORO C24-C40	**7.15**		5.78	2.89	mg/Kg	☼	04/10/17 11:39	04/12/17 12:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*81*		*50 - 150*	*04/10/17 11:39*	*04/12/17 12:00*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8980**		28.3	0.339	mg/Kg	☼	04/18/17 08:52	04/18/17 13:02	1
Arsenic	1.23	U	5.66	1.23	mg/Kg	☼	04/18/17 08:52	04/18/17 14:29	5
Barium	**85.8**		1.13	0.0339	mg/Kg	☼	04/18/17 08:52	04/18/17 13:02	1
Boron	**5.09**	**J**	22.6	0.437	mg/Kg	☼	04/18/17 08:52	04/18/17 13:02	1
Cadmium	**0.434**		0.283	0.0290	mg/Kg	☼	04/18/17 08:52	04/18/17 13:02	1
Calcium	**3970**		113	0.978	mg/Kg	☼	04/18/17 08:52	04/18/17 13:02	1
Chromium	**3.89**		0.566	0.0573	mg/Kg	☼	04/18/17 08:52	04/18/17 13:02	1
Cobalt	**11.0**		0.566	0.0765	mg/Kg	☼	04/18/17 08:52	04/18/17 13:02	1
Iron	**13800**		22.6	2.86	mg/Kg	☼	04/18/17 08:52	04/18/17 13:02	1
Lead	**14.7**		0.566	0.119	mg/Kg	☼	04/18/17 08:52	04/18/17 13:02	1
Magnesium	**3640**		113	2.17	mg/Kg	☼	04/18/17 08:52	04/18/17 13:02	1
Manganese	**160**		1.70	0.0431	mg/Kg	☼	04/18/17 08:52	04/18/17 13:02	1
Molybdenum	**2.57**		0.566	0.154	mg/Kg	☼	04/18/17 08:52	04/18/17 13:02	1
Nickel	**7.96**		1.13	0.132	mg/Kg	☼	04/18/17 08:52	04/18/17 13:02	1
Potassium	**1380**		113	12.4	mg/Kg	☼	04/18/17 08:52	04/18/17 13:02	1
Selenium	0.293	U	2.26	0.293	mg/Kg	☼	04/18/17 08:52	04/18/17 13:02	1
Sodium	**2300**	**B**	113	1.00	mg/Kg	☼	04/18/17 08:52	04/18/17 13:02	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00843**	**J**	0.0195	0.00410	mg/Kg	☼	04/11/17 12:17	04/13/17 10:23	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**14.2**		1.0	1.0	%			04/07/17 17:18	1
Percent Solids	**85.8**		1.0	1.0	%			04/07/17 17:18	1

Client Sample ID: SJRP-SB13-18-19-04052017 — **Lab Sample ID: 600-146305-6**
Date Collected: 04/05/17 09:10 — **Matrix: Solid**
Date Received: 04/06/17 09:50 — **Percent Solids: 89.7**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000602	U	0.00477	0.000602	mg/Kg	☼	04/06/17 16:00	04/07/17 16:26	1
Ethylbenzene	0.000974	U	0.00477	0.000974	mg/Kg	☼	04/06/17 16:00	04/07/17 16:26	1
Toluene	0.00132	U	0.00477	0.00132	mg/Kg	☼	04/06/17 16:00	04/07/17 16:26	1
Xylenes, Total	0.00108	U	0.00477	0.00108	mg/Kg	☼	04/06/17 16:00	04/07/17 16:26	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Client Sample ID: SJRP-SB13-18-19-04052017 **Lab Sample ID: 600-146305-6**
Date Collected: 04/05/17 09:10 **Matrix: Solid**
Date Received: 04/06/17 09:50 **Percent Solids: 89.7**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	82		61 - 130	04/06/17 16:00	04/07/17 16:26	1
Dibromofluoromethane	86		68 - 140	04/06/17 16:00	04/07/17 16:26	1
Toluene-d8 (Surr)	93		50 - 130	04/06/17 16:00	04/07/17 16:26	1
4-Bromofluorobenzene	102		57 - 140	04/06/17 16:00	04/07/17 16:26	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.48	U	4.95	2.48	mg/Kg		04/09/17 20:44	04/13/17 22:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	69		50 - 150	04/09/17 20:44	04/13/17 22:30	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.76	J	5.47	2.74	mg/Kg	☼	04/10/17 11:39	04/12/17 12:17	1
ORO C24-C40	5.55		5.47	2.74	mg/Kg	☼	04/10/17 11:39	04/12/17 12:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	75		50 - 150	04/10/17 11:39	04/12/17 12:17	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6590		27.6	0.331	mg/Kg	☼	04/18/17 08:52	04/18/17 13:04	1
Arsenic	2.41	U	11.0	2.41	mg/Kg	☼	04/18/17 08:52	04/18/17 15:08	10
Barium	70.6		1.10	0.0331	mg/Kg	☼	04/18/17 08:52	04/18/17 13:04	1
Boron	3.81	J	22.1	0.426	mg/Kg	☼	04/18/17 08:52	04/18/17 13:04	1
Cadmium	0.309		0.276	0.0282	mg/Kg	☼	04/18/17 08:52	04/18/17 13:04	1
Calcium	40800		110	0.953	mg/Kg	☼	04/18/17 08:52	04/18/17 13:04	1
Chromium	3.20		0.552	0.0558	mg/Kg	☼	04/18/17 08:52	04/18/17 13:04	1
Cobalt	16.2		0.552	0.0746	mg/Kg	☼	04/18/17 08:52	04/18/17 13:04	1
Iron	6600		22.1	2.79	mg/Kg	☼	04/18/17 08:52	04/18/17 13:04	1
Lead	6.30		0.552	0.116	mg/Kg	☼	04/18/17 08:52	04/18/17 13:04	1
Magnesium	2110		110	2.12	mg/Kg	☼	04/18/17 08:52	04/18/17 13:04	1
Manganese	2680		8.27	0.210	mg/Kg	☼	04/18/17 08:52	04/18/17 14:31	5
Molybdenum	0.479	J	0.552	0.150	mg/Kg	☼	04/18/17 08:52	04/18/17 13:04	1
Nickel	14.5		1.10	0.129	mg/Kg	☼	04/18/17 08:52	04/18/17 13:04	1
Potassium	886		110	12.1	mg/Kg	☼	04/18/17 08:52	04/18/17 13:04	1
Selenium	0.286	U	2.21	0.286	mg/Kg	☼	04/18/17 08:52	04/18/17 13:04	1
Sodium	752	B	110	0.977	mg/Kg	☼	04/18/17 08:52	04/18/17 13:04	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00374	U	0.0178	0.00374	mg/Kg	☼	04/11/17 12:17	04/13/17 10:25	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.3		1.0	1.0	%			04/07/17 17:18	1
Percent Solids	89.7		1.0	1.0	%			04/07/17 17:18	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Client Sample ID: SJRP-SB17-11-12-04052017
Date Collected: 04/05/17 10:25
Date Received: 04/06/17 09:50

Lab Sample ID: 600-146305-7
Matrix: Solid
Percent Solids: 75.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000715	U	0.00567	0.000715	mg/Kg	☼	04/06/17 16:00	04/10/17 19:56	1
Toluene	0.00157	U	0.00567	0.00157	mg/Kg	☼	04/06/17 16:00	04/10/17 19:56	1
Xylenes, Total	0.00128	U	0.00567	0.00128	mg/Kg	☼	04/06/17 16:00	04/10/17 19:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*66*		*61 - 130*	*04/06/17 16:00*	*04/10/17 19:56*	*1*
Dibromofluoromethane	*81*		*68 - 140*	*04/06/17 16:00*	*04/10/17 19:56*	*1*
Toluene-d8 (Surr)	*96*		*50 - 130*	*04/06/17 16:00*	*04/10/17 19:56*	*1*
4-Bromofluorobenzene	*90*		*57 - 140*	*04/06/17 16:00*	*04/10/17 19:56*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	**0.482**		0.181	0.0369	mg/Kg		04/06/17 16:00	04/11/17 17:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*61 - 130*	*04/06/17 16:00*	*04/11/17 17:03*	*1*
Dibromofluoromethane	*117*		*68 - 140*	*04/06/17 16:00*	*04/11/17 17:03*	*1*
Toluene-d8 (Surr)	*122*		*50 - 130*	*04/06/17 16:00*	*04/11/17 17:03*	*1*
4-Bromofluorobenzene	*99*		*57 - 140*	*04/06/17 16:00*	*04/11/17 17:03*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.37	U	4.73	2.37	mg/Kg		04/09/17 20:44	04/13/17 23:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*65*		*50 - 150*	*04/09/17 20:44*	*04/13/17 23:00*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**80.3**		6.67	3.33	mg/Kg	☼	04/10/17 11:39	04/12/17 12:34	1
ORO C24-C40	**9.04**		6.67	3.33	mg/Kg	☼	04/10/17 11:39	04/12/17 12:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*75*		*50 - 150*	*04/10/17 11:39*	*04/12/17 12:34*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**11500**		31.5	0.378	mg/Kg	☼	04/18/17 08:52	04/18/17 13:06	1
Arsenic	1.37	U	6.29	1.37	mg/Kg	☼	04/18/17 08:52	04/18/17 14:33	5
Barium	**76.3**		1.26	0.0378	mg/Kg	☼	04/18/17 08:52	04/18/17 13:06	1
Boron	**6.42**	**J**	25.2	0.486	mg/Kg	☼	04/18/17 08:52	04/18/17 13:06	1
Cadmium	**0.417**		0.315	0.0322	mg/Kg	☼	04/18/17 08:52	04/18/17 13:06	1
Calcium	**2500**		126	1.09	mg/Kg	☼	04/18/17 08:52	04/18/17 13:06	1
Chromium	**5.44**		0.629	0.0637	mg/Kg	☼	04/18/17 08:52	04/18/17 13:06	1
Cobalt	**4.80**		0.629	0.0851	mg/Kg	☼	04/18/17 08:52	04/18/17 13:06	1
Iron	**12900**		25.2	3.18	mg/Kg	☼	04/18/17 08:52	04/18/17 13:06	1
Lead	**11.9**		0.629	0.132	mg/Kg	☼	04/18/17 08:52	04/18/17 13:06	1
Magnesium	**3300**		126	2.42	mg/Kg	☼	04/18/17 08:52	04/18/17 13:06	1
Manganese	**108**		1.89	0.0479	mg/Kg	☼	04/18/17 08:52	04/18/17 13:06	1
Molybdenum	**0.771**		0.629	0.171	mg/Kg	☼	04/18/17 08:52	04/18/17 13:06	1
Nickel	**7.51**		1.26	0.147	mg/Kg	☼	04/18/17 08:52	04/18/17 13:06	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Client Sample ID: SJRP-SB17-11-12-04052017

Lab Sample ID: 600-146305-7
Date Collected: 04/05/17 10:25
Matrix: Solid
Date Received: 04/06/17 09:50
Percent Solids: 75.0

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	1420		126	13.8	mg/Kg	☼	04/18/17 08:52	04/18/17 13:06	1
Selenium	0.326	U	2.52	0.326	mg/Kg	☼	04/18/17 08:52	04/18/17 13:06	1
Sodium	9120	B	126	1.11	mg/Kg	☼	04/18/17 08:52	04/18/17 13:06	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0156	J	0.0219	0.00462	mg/Kg	☼	04/11/17 12:17	04/13/17 10:27	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	25.0		1.0	1.0	%			04/07/17 17:18	1
Percent Solids	75.0		1.0	1.0	%			04/07/17 17:18	1

Client Sample ID: SJRP-TB-04052017

Lab Sample ID: 600-146305-8
Date Collected: 04/05/17 14:00
Matrix: Water
Date Received: 04/06/17 09:50

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/10/17 14:24	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/10/17 14:24	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/10/17 14:24	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/10/17 14:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*50 - 134*		*04/10/17 14:24*	*1*
Dibromofluoromethane	*88*		*62 - 130*		*04/10/17 14:24*	*1*
Toluene-d8 (Surr)	*89*		*70 - 130*		*04/10/17 14:24*	*1*
4-Bromofluorobenzene	*96*		*67 - 139*		*04/10/17 14:24*	*1*

Client Sample ID: SJRP-EB-04052017

Lab Sample ID: 600-146305-9
Date Collected: 04/05/17 12:50
Matrix: Water
Date Received: 04/06/17 09:50

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/10/17 14:53	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/10/17 14:53	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/10/17 14:53	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/10/17 14:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*50 - 134*		*04/10/17 14:53*	*1*
Dibromofluoromethane	*90*		*62 - 130*		*04/10/17 14:53*	*1*
Toluene-d8 (Surr)	*88*		*70 - 130*		*04/10/17 14:53*	*1*
4-Bromofluorobenzene	*95*		*67 - 139*		*04/10/17 14:53*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			04/10/17 21:30	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Client Sample ID: SJRP-EB-04052017
Date Collected: 04/05/17 12:50
Date Received: 04/06/17 09:50

Lab Sample ID: 600-146305-9
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	119		50 - 150		04/10/17 21:30	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0910	U	0.100	0.0910	mg/L		04/09/17 15:53	04/10/17 17:03	1
ORO C24-C40	0.0910	U	0.100	0.0910	mg/L		04/09/17 15:53	04/10/17 17:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	88		50 - 150	04/09/17 15:53	04/10/17 17:03	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		04/14/17 05:16	04/14/17 14:25	1
Arsenic	**0.00325**	**J**	0.0100	0.00285	mg/L		04/14/17 05:16	04/14/17 14:25	1
Barium	0.000530	U	0.0200	0.000530	mg/L		04/14/17 05:16	04/14/17 14:25	1
Boron	**0.0275**	**J**	0.200	0.0116	mg/L		04/14/17 05:16	04/14/17 14:25	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		04/14/17 05:16	04/14/17 14:25	1
Calcium	**0.0916**	**J**	1.00	0.0240	mg/L		04/14/17 05:16	04/14/17 14:25	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/14/17 05:16	04/14/17 14:25	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		04/14/17 05:16	04/14/17 14:25	1
Iron	**0.0746**	**J**	0.400	0.0270	mg/L		04/14/17 05:16	04/14/17 14:25	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/14/17 05:16	04/14/17 14:25	1
Magnesium	0.0555	U	1.00	0.0555	mg/L		04/14/17 05:16	04/14/17 14:25	1
Manganese	**0.00183**	**J**	0.0100	0.000360	mg/L		04/14/17 05:16	04/14/17 14:25	1
Molybdenum	**0.000989**	**J**	0.0100	0.000540	mg/L		04/14/17 05:16	04/14/17 14:25	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		04/14/17 05:16	04/14/17 14:25	1
Potassium	**0.130**	**J**	1.00	0.0374	mg/L		04/14/17 05:16	04/14/17 14:25	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/14/17 05:16	04/14/17 14:25	1
Sodium	**1.17**		1.00	0.0214	mg/L		04/14/17 05:16	04/14/17 14:25	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000820	U	0.000200	0.0000820	mg/L		04/13/17 11:35	04/13/17 13:48	1

Definitions/Glossary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(61-130)	(68-140)	(50-130)	(57-140)
600-146305-1	SJRP-SB17-26-27-04052017	81	85	94	101
600-146305-2	SJRP-SB17-26-27-04052017DUP	82	85	96	102
600-146305-3	SJRP-SB17-21-22-04052017	79	82	96	100
600-146305-4	SJRP-SB17-21-22-04052017DUP	80	87	93	101
600-146305-5	SJRP-SB13-14-15-04052017	80	86	94	101
600-146305-6	SJRP-SB13-18-19-04052017	82	86	93	102
600-146305-7	SJRP-SB17-11-12-04052017	66	81	96	90
600-146305-7 - DL	SJRP-SB17-11-12-04052017	106	117	122	99
LCS 600-210234/3	Lab Control Sample	69	88	111	107
LCS 600-210347/3	Lab Control Sample	87	92	99	107
LCS 600-210487/1-A	Lab Control Sample	127	118	120	98
LCSD 600-210234/4	Lab Control Sample Dup	76	90	107	107
LCSD 600-210347/4	Lab Control Sample Dup	93	91	98	107
LCSD 600-210487/2-A	Lab Control Sample Dup	118	113	100	82
MB 600-210234/6	Method Blank	78	84	102	100
MB 600-210347/6	Method Blank	91	87	88	100
MB 600-210487/3-A	Method Blank	104	108	108	86

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(50-134)	(62-130)	(70-130)	(67-139)
600-146305-8	SJRP-TB-04052017	87	88	89	96
600-146305-9	SJRP-EB-04052017	92	90	88	95
LCS 600-210376/4	Lab Control Sample	92	91	85	98
LCSD 600-210376/5	Lab Control Sample Dup	90	92	86	99
MB 600-210376/7	Method Blank	84	84	87	97

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		TFT2							
Lab Sample ID	Client Sample ID	(50-150)							
600-146305-1	SJRP-SB17-26-27-04052017	66							
600-146305-1 MS	SJRP-SB17-26-27-04052017	79							
600-146305-1 MSD	SJRP-SB17-26-27-04052017	66							
600-146305-2	SJRP-SB17-26-27-04052017D UP	66							
600-146305-3	SJRP-SB17-21-22-04052017	67							
600-146305-4	SJRP-SB17-21-22-04052017D UP	61							
600-146305-5	SJRP-SB13-14-15-04052017	66							
600-146305-6	SJRP-SB13-18-19-04052017	69							
600-146305-7	SJRP-SB17-11-12-04052017	65							
LCS 490-420919/2-A	Lab Control Sample	88							
LCSD 490-420919/3-A	Lab Control Sample Dup	89							
MB 490-420678/1-A	Method Blank	61							
MB 490-420919/1-A	Method Blank	70							

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		TFT2							
Lab Sample ID	Client Sample ID	(50-150)							
600-146305-9	SJRP-EB-04052017	119							
LCS 490-420929/4	Lab Control Sample	117							
LCSD 490-420929/5	Lab Control Sample Dup	114							
MB 490-420929/9	Method Blank	120							

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		OTPH1							
Lab Sample ID	Client Sample ID	(50-150)							
600-146305-1	SJRP-SB17-26-27-04052017	88							
600-146305-1 MS	SJRP-SB17-26-27-04052017	83							
600-146305-1 MSD	SJRP-SB17-26-27-04052017	74							
600-146305-2	SJRP-SB17-26-27-04052017D UP	57							
600-146305-3	SJRP-SB17-21-22-04052017	75							
600-146305-4	SJRP-SB17-21-22-04052017D UP	81							
600-146305-5	SJRP-SB13-14-15-04052017	81							
600-146305-6	SJRP-SB13-18-19-04052017	75							
600-146305-7	SJRP-SB17-11-12-04052017	75							
LCS 490-421100/2-A	Lab Control Sample	84							

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	OTPH1 (50-150)							
MB 490-421100/1-A	Method Blank	70							

Surrogate Legend

OTPH = o-Terphenyl (Surr)

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	OTPH1 (50-150)							
600-146305-9	SJRP-EB-04052017	88							
LCS 490-420912/2-A	Lab Control Sample	86							
LCSD 490-420912/3-A	Lab Control Sample Dup	91							
MB 490-420912/1-A	Method Blank	78							

Surrogate Legend

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-210234/6
Matrix: Solid
Analysis Batch: 210234

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			04/07/17 11:02	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			04/07/17 11:02	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			04/07/17 11:02	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			04/07/17 11:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*78*		*61 - 130*		*04/07/17 11:02*	*1*
Dibromofluoromethane	*84*		*68 - 140*		*04/07/17 11:02*	*1*
Toluene-d8 (Surr)	*102*		*50 - 130*		*04/07/17 11:02*	*1*
4-Bromofluorobenzene	*100*		*57 - 140*		*04/07/17 11:02*	*1*

Lab Sample ID: LCS 600-210234/3
Matrix: Solid
Analysis Batch: 210234

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.05110		mg/Kg		102	70 - 131		
Ethylbenzene			0.0500	0.05272		mg/Kg		105	66 - 130		
Toluene			0.0500	0.05516		mg/Kg		110	67 - 130		
Xylenes, Total			0.100	0.1042		mg/Kg		104	63 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*69*		*61 - 130*
Dibromofluoromethane	*88*		*68 - 140*
Toluene-d8 (Surr)	*111*		*50 - 130*
4-Bromofluorobenzene	*107*		*57 - 140*

Lab Sample ID: LCSD 600-210234/4
Matrix: Solid
Analysis Batch: 210234

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.05122		mg/Kg		102	70 - 131	0	30
Ethylbenzene			0.0500	0.04910		mg/Kg		98	66 - 130	7	30
Toluene			0.0500	0.05279		mg/Kg		106	67 - 130	4	30
Xylenes, Total			0.100	0.09814		mg/Kg		98	63 - 130	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*76*		*61 - 130*
Dibromofluoromethane	*90*		*68 - 140*
Toluene-d8 (Surr)	*107*		*50 - 130*
4-Bromofluorobenzene	*107*		*57 - 140*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-210347/6
Matrix: Solid
Analysis Batch: 210347

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			04/10/17 11:27	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			04/10/17 11:27	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			04/10/17 11:27	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			04/10/17 11:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*61 - 130*		*04/10/17 11:27*	*1*
Dibromofluoromethane	*87*		*68 - 140*		*04/10/17 11:27*	*1*
Toluene-d8 (Surr)	*88*		*50 - 130*		*04/10/17 11:27*	*1*
4-Bromofluorobenzene	*100*		*57 - 140*		*04/10/17 11:27*	*1*

Lab Sample ID: LCS 600-210347/3
Matrix: Solid
Analysis Batch: 210347

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.05257		mg/Kg		105	70 - 131		
Ethylbenzene			0.0500	0.04931		mg/Kg		99	66 - 130		
Toluene			0.0500	0.05074		mg/Kg		101	67 - 130		
Xylenes, Total			0.100	0.09999		mg/Kg		100	63 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*61 - 130*
Dibromofluoromethane	*92*		*68 - 140*
Toluene-d8 (Surr)	*99*		*50 - 130*
4-Bromofluorobenzene	*107*		*57 - 140*

Lab Sample ID: LCSD 600-210347/4
Matrix: Solid
Analysis Batch: 210347

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.04363		mg/Kg		87	70 - 131	19	30
Ethylbenzene			0.0500	0.04080		mg/Kg		82	66 - 130	19	30
Toluene			0.0500	0.04259		mg/Kg		85	67 - 130	17	30
Xylenes, Total			0.100	0.08142		mg/Kg		81	63 - 130	20	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*61 - 130*
Dibromofluoromethane	*91*		*68 - 140*
Toluene-d8 (Surr)	*98*		*50 - 130*
4-Bromofluorobenzene	*107*		*57 - 140*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-210376/7
Matrix: Water
Analysis Batch: 210376

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/10/17 13:55	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/10/17 13:55	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/10/17 13:55	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/10/17 13:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*50 - 134*		*04/10/17 13:55*	*1*
Dibromofluoromethane	*84*		*62 - 130*		*04/10/17 13:55*	*1*
Toluene-d8 (Surr)	*87*		*70 - 130*		*04/10/17 13:55*	*1*
4-Bromofluorobenzene	*97*		*67 - 139*		*04/10/17 13:55*	*1*

Lab Sample ID: LCS 600-210376/4
Matrix: Water
Analysis Batch: 210376

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0100	0.01020		mg/L		102	70 - 130		
Ethylbenzene			0.0100	0.01004		mg/L		100	70 - 130		
Toluene			0.0100	0.009361		mg/L		94	70 - 130		
Xylenes, Total			0.0200	0.01947		mg/L		97	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*50 - 134*
Dibromofluoromethane	*91*		*62 - 130*
Toluene-d8 (Surr)	*85*		*70 - 130*
4-Bromofluorobenzene	*98*		*67 - 139*

Lab Sample ID: LCSD 600-210376/5
Matrix: Water
Analysis Batch: 210376

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0100	0.009463		mg/L		95	70 - 130	8	20
Ethylbenzene			0.0100	0.009256		mg/L		93	70 - 130	8	20
Toluene			0.0100	0.008764		mg/L		88	70 - 130	7	20
Xylenes, Total			0.0200	0.01810		mg/L		90	70 - 130	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*50 - 134*
Dibromofluoromethane	*92*		*62 - 130*
Toluene-d8 (Surr)	*86*		*70 - 130*
4-Bromofluorobenzene	*99*		*67 - 139*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-210487/3-A
Matrix: Solid
Analysis Batch: 210489

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210487

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	0.128	U	0.625	0.128	mg/Kg		04/11/17 11:00	04/11/17 16:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*61 - 130*	*04/11/17 11:00*	*04/11/17 16:34*	*1*
Dibromofluoromethane	*108*		*68 - 140*	*04/11/17 11:00*	*04/11/17 16:34*	*1*
Toluene-d8 (Surr)	*108*		*50 - 130*	*04/11/17 11:00*	*04/11/17 16:34*	*1*
4-Bromofluorobenzene	*86*		*57 - 140*	*04/11/17 11:00*	*04/11/17 16:34*	*1*

Lab Sample ID: LCS 600-210487/1-A
Matrix: Solid
Analysis Batch: 210489

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210487

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ethylbenzene			6.25	5.780		mg/Kg		92	66 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*127*		*61 - 130*
Dibromofluoromethane	*118*		*68 - 140*
Toluene-d8 (Surr)	*120*		*50 - 130*
4-Bromofluorobenzene	*98*		*57 - 140*

Lab Sample ID: LCSD 600-210487/2-A
Matrix: Solid
Analysis Batch: 210489

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 210487

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene			6.25	6.058		mg/Kg		97	66 - 130	5	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*118*		*61 - 130*
Dibromofluoromethane	*113*		*68 - 140*
Toluene-d8 (Surr)	*100*		*50 - 130*
4-Bromofluorobenzene	*82*		*57 - 140*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 490-420678/1-A
Matrix: Solid
Analysis Batch: 421820

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 420678

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		04/07/17 14:57	04/12/17 23:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*61*		*50 - 150*	*04/07/17 14:57*	*04/12/17 23:23*	*1*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: MB 490-420919/1-A
Matrix: Solid
Analysis Batch: 421820

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 420919

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		04/09/17 20:42	04/13/17 18:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*70*		*50 - 150*	*04/09/17 20:42*	*04/13/17 18:26*	*1*

Lab Sample ID: LCS 490-420919/2-A
Matrix: Solid
Analysis Batch: 421820

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 420919

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	500	533.6		mg/Kg		107	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*88*		*50 - 150*

Lab Sample ID: LCSD 490-420919/3-A
Matrix: Solid
Analysis Batch: 421820

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 420919

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	500	528.3		mg/Kg		106	70 - 130	1	21

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*89*		*50 - 150*

Lab Sample ID: 600-146305-1 MS
Matrix: Solid
Analysis Batch: 421820

Client Sample ID: SJRP-SB17-26-27-04052017
Prep Type: Total/NA
Prep Batch: 420919

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	2.37	U F2 F1	473	286.9		mg/Kg		61	56 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*79*		*50 - 150*

Lab Sample ID: 600-146305-1 MSD
Matrix: Solid
Analysis Batch: 421820

Client Sample ID: SJRP-SB17-26-27-04052017
Prep Type: Total/NA
Prep Batch: 420919

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	2.37	U F2 F1	473	228.7	F1 F2	mg/Kg		48	56 - 130	23	21

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: 600-146305-1 MSD
Matrix: Solid
Analysis Batch: 421820

Client Sample ID: SJRP-SB17-26-27-04052017
Prep Type: Total/NA
Prep Batch: 420919

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene	66		50 - 150

Lab Sample ID: MB 490-420929/9
Matrix: Water
Analysis Batch: 420929

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			04/10/17 11:18	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	120		50 - 150		04/10/17 11:18	1

Lab Sample ID: LCS 490-420929/4
Matrix: Water
Analysis Batch: 420929

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C6-C10			1.00	0.9637		mg/L		96	66 - 140		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	117		50 - 150

Lab Sample ID: LCSD 490-420929/5
Matrix: Water
Analysis Batch: 420929

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10			1.00	0.9308		mg/L		93	66 - 140	3	42

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	114		50 - 150

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Lab Sample ID: MB 490-420912/1-A
Matrix: Water
Analysis Batch: 420970

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 420912

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0910	U	0.100	0.0910	mg/L		04/09/17 15:53	04/10/17 12:53	1
ORO C24-C40	0.0910	U	0.100	0.0910	mg/L		04/09/17 15:53	04/10/17 12:53	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Lab Sample ID: MB 490-420912/1-A
Matrix: Water
Analysis Batch: 420970

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 420912

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	78		50 - 150	04/09/17 15:53	04/10/17 12:53	1

Lab Sample ID: LCS 490-420912/2-A
Matrix: Water
Analysis Batch: 420970

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 420912

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			0.800	0.6843		mg/L		86	46 - 132		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	86		50 - 150

Lab Sample ID: LCSD 490-420912/3-A
Matrix: Water
Analysis Batch: 420970

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 420912

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			0.800	0.7353		mg/L		92	46 - 132	7	31

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o-Terphenyl (Surr)	91		50 - 150

Lab Sample ID: MB 490-421100/1-A
Matrix: Solid
Analysis Batch: 421584

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 421100

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.50	U	5.00	2.50	mg/Kg		04/10/17 11:28	04/12/17 09:43	1
ORO C24-C40	2.50	U	5.00	2.50	mg/Kg		04/10/17 11:28	04/12/17 09:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	70		50 - 150	04/10/17 11:28	04/12/17 09:43	1

Lab Sample ID: LCS 490-421100/2-A
Matrix: Solid
Analysis Batch: 421584

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 421100

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			40.0	28.64		mg/Kg		72	54 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	84		50 - 150

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Lab Sample ID: 600-146305-1 MS
Matrix: Solid
Analysis Batch: 421584

Client Sample ID: SJRP-SB17-26-27-04052017
Prep Type: Total/NA
Prep Batch: 421100

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	2.71	U	43.0	35.04		mg/Kg	☼	82	10 - 142

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
o-Terphenyl (Surr)	*83*		*50 - 150*

Lab Sample ID: 600-146305-1 MSD
Matrix: Solid
Analysis Batch: 421584

Client Sample ID: SJRP-SB17-26-27-04052017
Prep Type: Total/NA
Prep Batch: 421100

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	2.71	U	43.9	32.02		mg/Kg	☼	73	10 - 142	9	47

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
o-Terphenyl (Surr)	*74*		*50 - 150*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-210750/1-A
Matrix: Water
Analysis Batch: 210785

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210750

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		04/14/17 05:16	04/14/17 13:33	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		04/14/17 05:16	04/14/17 13:33	1
Barium	0.000530	U	0.0200	0.000530	mg/L		04/14/17 05:16	04/14/17 13:33	1
Boron	0.0116	U	0.200	0.0116	mg/L		04/14/17 05:16	04/14/17 13:33	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		04/14/17 05:16	04/14/17 13:33	1
Calcium	0.0240	U	1.00	0.0240	mg/L		04/14/17 05:16	04/14/17 13:33	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/14/17 05:16	04/14/17 13:33	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		04/14/17 05:16	04/14/17 13:33	1
Iron	0.0270	U	0.400	0.0270	mg/L		04/14/17 05:16	04/14/17 13:33	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/14/17 05:16	04/14/17 13:33	1
Magnesium	0.0555	U	1.00	0.0555	mg/L		04/14/17 05:16	04/14/17 13:33	1
Manganese	0.000360	U	0.0100	0.000360	mg/L		04/14/17 05:16	04/14/17 13:33	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		04/14/17 05:16	04/14/17 13:33	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		04/14/17 05:16	04/14/17 13:33	1
Potassium	0.0374	U	1.00	0.0374	mg/L		04/14/17 05:16	04/14/17 13:33	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/14/17 05:16	04/14/17 13:33	1
Sodium	0.0214	U	1.00	0.0214	mg/L		04/14/17 05:16	04/14/17 13:33	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCS 600-210750/2-A
Matrix: Water
Analysis Batch: 210785

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210750

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	9.702		mg/L		97	80 - 120
Arsenic	1.00	0.9613		mg/L		96	80 - 120
Barium	1.00	0.9866		mg/L		99	80 - 120
Boron	1.00	0.9687		mg/L		97	80 - 120
Cadmium	0.500	0.4840		mg/L		97	80 - 120
Calcium	10.0	9.919		mg/L		99	80 - 120
Chromium	1.00	0.9878		mg/L		99	80 - 120
Cobalt	1.00	0.9711		mg/L		97	80 - 120
Iron	10.0	10.07		mg/L		101	80 - 120
Lead	1.00	0.9717		mg/L		97	80 - 120
Magnesium	10.0	9.636		mg/L		96	80 - 120
Manganese	1.00	0.9903		mg/L		99	80 - 120
Molybdenum	1.00	0.9519		mg/L		95	80 - 120
Nickel	1.00	0.9836		mg/L		98	80 - 120
Potassium	10.0	10.25		mg/L		103	80 - 120
Selenium	1.00	0.9935		mg/L		99	80 - 120
Sodium	10.0	10.14		mg/L		101	80 - 120

Lab Sample ID: MB 600-210973/1-A
Matrix: Solid
Analysis Batch: 211005

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210973

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.300	U	25.0	0.300	mg/Kg		04/18/17 08:52	04/18/17 12:39	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		04/18/17 08:52	04/18/17 12:39	1
Barium	0.0300	U	1.00	0.0300	mg/Kg		04/18/17 08:52	04/18/17 12:39	1
Boron	0.386	U	20.0	0.386	mg/Kg		04/18/17 08:52	04/18/17 12:39	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		04/18/17 08:52	04/18/17 12:39	1
Calcium	0.864	U	100	0.864	mg/Kg		04/18/17 08:52	04/18/17 12:39	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		04/18/17 08:52	04/18/17 12:39	1
Cobalt	0.0676	U	0.500	0.0676	mg/Kg		04/18/17 08:52	04/18/17 12:39	1
Iron	2.53	U	20.0	2.53	mg/Kg		04/18/17 08:52	04/18/17 12:39	1
Lead	0.105	U	0.500	0.105	mg/Kg		04/18/17 08:52	04/18/17 12:39	1
Magnesium	1.92	U	100	1.92	mg/Kg		04/18/17 08:52	04/18/17 12:39	1
Manganese	0.0381	U	1.50	0.0381	mg/Kg		04/18/17 08:52	04/18/17 12:39	1
Molybdenum	0.136	U	0.500	0.136	mg/Kg		04/18/17 08:52	04/18/17 12:39	1
Nickel	0.117	U	1.00	0.117	mg/Kg		04/18/17 08:52	04/18/17 12:39	1
Potassium	11.0	U	100	11.0	mg/Kg		04/18/17 08:52	04/18/17 12:39	1
Selenium	0.259	U	2.00	0.259	mg/Kg		04/18/17 08:52	04/18/17 12:39	1
Sodium	7.519	J	100	0.886	mg/Kg		04/18/17 08:52	04/18/17 12:39	1

Lab Sample ID: LCSSRM 600-210973/2-A
Matrix: Solid
Analysis Batch: 211005

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210973

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	7590	5732		mg/Kg		75.5	34.9 - 151.5

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-210973/2-A
Matrix: Solid
Analysis Batch: 211005

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210973

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	97.5	71.91		mg/Kg		73.7	69.2 - 145.6
Barium	306	275.5		mg/Kg		90.0	82.7 - 117.0
Boron	116	105.8		mg/Kg		91.2	73.0 - 127.6
Cadmium	76.6	68.83		mg/Kg		89.9	73.2 - 126.8
Calcium	5880	5390		mg/Kg		91.7	81.8 - 118.4
Chromium	103	92.30		mg/Kg		89.6	79.7 - 121.4
Cobalt	103	96.48		mg/Kg		93.7	83.3 - 116.5
Iron	14500	11130		mg/Kg		76.8	45.0 - 155.9
Lead	96.7	84.50		mg/Kg		87.4	81.7 - 117.9
Magnesium	2680	2322		mg/Kg		86.6	75.4 - 124.6
Manganese	400	353.6		mg/Kg		88.4	81.0 - 119.0
Molybdenum	94.9	90.28		mg/Kg		95.1	78.5 - 121.2
Nickel	153	141.8		mg/Kg		92.7	73.2 - 126.8
Potassium	2230	1979		mg/Kg		88.8	69.5 - 130.5
Selenium	161	139.4		mg/Kg		86.6	77.6 - 123.0
Sodium	370	309.8		mg/Kg		83.7	70.5 - 129.7

Lab Sample ID: 600-146305-1 MS
Matrix: Solid
Analysis Batch: 211005

Client Sample ID: SJRP-SB17-26-27-04052017
Prep Type: Total/NA
Prep Batch: 210973

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	7490		530	8644	4	mg/Kg	☼	218	75 - 125
Arsenic	0.229	U L	53.0	46.81		mg/Kg	☼	88	75 - 125
Barium	211	F1	53.0	181.8	F1	mg/Kg	☼	-55	75 - 125
Boron	5.14	J F1	53.0	38.18	F1	mg/Kg	☼	62	75 - 125
Cadmium	0.430		26.5	24.73		mg/Kg	☼	92	75 - 125
Calcium	5440		530	10010	4	mg/Kg	☼	862	75 - 125
Chromium	5.62		53.0	54.91		mg/Kg	☼	93	75 - 125
Cobalt	9.94		53.0	64.98		mg/Kg	☼	104	75 - 125
Iron	13300		530	13270	4	mg/Kg	☼	-0.3	75 - 125
Lead	7.34		53.0	55.70		mg/Kg	☼	91	75 - 125
Magnesium	3360		530	3913	4	mg/Kg	☼	104	75 - 125
Manganese	203	F1	53.0	332.5	F1	mg/Kg	☼	245	75 - 125
Molybdenum	3.47		53.0	51.08		mg/Kg	☼	90	75 - 125
Nickel	9.28		53.0	60.26		mg/Kg	☼	96	75 - 125

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-146305-1 MS — **Client Sample ID: SJRP-SB17-26-27-04052017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211005 — **Prep Batch: 210973**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	530	F1	530	1262	F1	mg/Kg	☼	138	75 - 125
Selenium	0.272	U	53.0	45.23		mg/Kg	☼	85	75 - 125
Sodium	2110	B F1	530	3404	F1	mg/Kg	☼	244	75 - 125

Lab Sample ID: 600-146305-1 MS — **Client Sample ID: SJRP-SB17-26-27-04052017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211005 — **Prep Batch: 210973**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.14	U	53.0	50.70		mg/Kg	☼	96	75 - 125

Lab Sample ID: 600-146305-1 DU — **Client Sample ID: SJRP-SB17-26-27-04052017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211005 — **Prep Batch: 210973**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	7490		6916		mg/Kg	☼	8	20
Barium	211	F1	283.9	F3	mg/Kg	☼	29	20
Boron	5.14	J F1	4.556	J	mg/Kg	☼	12	20
Cadmium	0.430		0.3437	F5	mg/Kg	☼	22	20
Calcium	5440		4827		mg/Kg	☼	12	20
Chromium	5.62		4.776		mg/Kg	☼	16	20
Cobalt	9.94		8.736		mg/Kg	☼	13	20
Iron	13300		12410		mg/Kg	☼	7	20
Lead	7.34		6.331		mg/Kg	☼	15	20
Magnesium	3360		3151		mg/Kg	☼	7	20
Manganese	203	F1	197.4		mg/Kg	☼	3	20
Molybdenum	3.47		3.761		mg/Kg	☼	8	20
Nickel	9.28		8.463		mg/Kg	☼	9	20
Potassium	530	F1	710.5	F3	mg/Kg	☼	29	20
Selenium	0.272	U	0.280	U	mg/Kg	☼	NC	20
Sodium	2110	B F1	2603	F3	mg/Kg	☼	21	20

Lab Sample ID: 600-146305-1 DU — **Client Sample ID: SJRP-SB17-26-27-04052017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211005 — **Prep Batch: 210973**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	1.14	U	1.18	U	mg/Kg	☼	NC	20
Molybdenum	4.16		4.472		mg/Kg	☼	7	20

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-210705/8-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 210730 — **Prep Batch: 210705**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000820	U	0.000200	0.0000820	mg/L		04/13/17 11:35	04/13/17 13:17	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Lab Sample ID: LCS 600-210705/9-A
Matrix: Water
Analysis Batch: 210730

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210705

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00300	0.002836		mg/L		95	70 - 130

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-210506/7-A
Matrix: Solid
Analysis Batch: 210702

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210506

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00325	U	0.0155	0.00325	mg/Kg		04/11/17 12:17	04/13/17 09:52	1

Lab Sample ID: LCSSRM 600-210506/8-A ^100
Matrix: Solid
Analysis Batch: 210702

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210506

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	20.2	25.54		mg/Kg		126.4	70.8 - 129.2

Lab Sample ID: 600-146305-7 MS
Matrix: Solid
Analysis Batch: 210702

Client Sample ID: SJRP-SB17-11-12-04052017
Prep Type: Total/NA
Prep Batch: 210506

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0156	J	0.328	0.3201		mg/Kg	☼	93	75 - 125

Lab Sample ID: 600-146305-7 DU
Matrix: Solid
Analysis Batch: 210702

Client Sample ID: SJRP-SB17-11-12-04052017
Prep Type: Total/NA
Prep Batch: 210506

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.0156	J	0.01435	J	mg/Kg	☼	8	20

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

GC/MS VOA

Analysis Batch: 210234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146305-1	SJRP-SB17-26-27-04052017	Total/NA	Solid	8260B	210289
600-146305-2	SJRP-SB17-26-27-04052017DUP	Total/NA	Solid	8260B	210289
600-146305-3	SJRP-SB17-21-22-04052017	Total/NA	Solid	8260B	210289
600-146305-4	SJRP-SB17-21-22-04052017DUP	Total/NA	Solid	8260B	210289
600-146305-5	SJRP-SB13-14-15-04052017	Total/NA	Solid	8260B	210289
600-146305-6	SJRP-SB13-18-19-04052017	Total/NA	Solid	8260B	210289
MB 600-210234/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-210234/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-210234/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 210289

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146305-1	SJRP-SB17-26-27-04052017	Total/NA	Solid	5035	
600-146305-2	SJRP-SB17-26-27-04052017DUP	Total/NA	Solid	5035	
600-146305-3	SJRP-SB17-21-22-04052017	Total/NA	Solid	5035	
600-146305-4	SJRP-SB17-21-22-04052017DUP	Total/NA	Solid	5035	
600-146305-5	SJRP-SB13-14-15-04052017	Total/NA	Solid	5035	
600-146305-6	SJRP-SB13-18-19-04052017	Total/NA	Solid	5035	
600-146305-7	SJRP-SB17-11-12-04052017	Total/NA	Solid	5035	

Analysis Batch: 210347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146305-7	SJRP-SB17-11-12-04052017	Total/NA	Solid	8260B	210289
MB 600-210347/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-210347/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-210347/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 210376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146305-8	SJRP-TB-04052017	Total/NA	Water	8260B	
600-146305-9	SJRP-EB-04052017	Total/NA	Water	8260B	
MB 600-210376/7	Method Blank	Total/NA	Water	8260B	
LCS 600-210376/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-210376/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Prep Batch: 210487

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-210487/3-A	Method Blank	Total/NA	Solid	5030B	
LCS 600-210487/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 600-210487/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Prep Batch: 210488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146305-7 - DL	SJRP-SB17-11-12-04052017	Total/NA	Solid	5035	

Analysis Batch: 210489

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146305-7 - DL	SJRP-SB17-11-12-04052017	Total/NA	Solid	8260B	210488
MB 600-210487/3-A	Method Blank	Total/NA	Solid	8260B	210487
LCS 600-210487/1-A	Lab Control Sample	Total/NA	Solid	8260B	210487
LCSD 600-210487/2-A	Lab Control Sample Dup	Total/NA	Solid	8260B	210487

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

GC VOA

Prep Batch: 420678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-420678/1-A	Method Blank	Total/NA	Solid	5030B	

Prep Batch: 420919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146305-1	SJRP-SB17-26-27-04052017	Total/NA	Solid	5030B	
600-146305-2	SJRP-SB17-26-27-04052017DUP	Total/NA	Solid	5030B	
600-146305-3	SJRP-SB17-21-22-04052017	Total/NA	Solid	5030B	
600-146305-4	SJRP-SB17-21-22-04052017DUP	Total/NA	Solid	5030B	
600-146305-5	SJRP-SB13-14-15-04052017	Total/NA	Solid	5030B	
600-146305-6	SJRP-SB13-18-19-04052017	Total/NA	Solid	5030B	
600-146305-7	SJRP-SB17-11-12-04052017	Total/NA	Solid	5030B	
MB 490-420919/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 490-420919/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 490-420919/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
600-146305-1 MS	SJRP-SB17-26-27-04052017	Total/NA	Solid	5030B	
600-146305-1 MSD	SJRP-SB17-26-27-04052017	Total/NA	Solid	5030B	

Analysis Batch: 420929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146305-9	SJRP-EB-04052017	Total/NA	Water	8015C	
MB 490-420929/9	Method Blank	Total/NA	Water	8015C	
LCS 490-420929/4	Lab Control Sample	Total/NA	Water	8015C	
LCSD 490-420929/5	Lab Control Sample Dup	Total/NA	Water	8015C	

Analysis Batch: 421820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146305-1	SJRP-SB17-26-27-04052017	Total/NA	Solid	8015C	420919
600-146305-2	SJRP-SB17-26-27-04052017DUP	Total/NA	Solid	8015C	420919
600-146305-3	SJRP-SB17-21-22-04052017	Total/NA	Solid	8015C	420919
600-146305-4	SJRP-SB17-21-22-04052017DUP	Total/NA	Solid	8015C	420919
600-146305-5	SJRP-SB13-14-15-04052017	Total/NA	Solid	8015C	420919
600-146305-6	SJRP-SB13-18-19-04052017	Total/NA	Solid	8015C	420919
600-146305-7	SJRP-SB17-11-12-04052017	Total/NA	Solid	8015C	420919
MB 490-420678/1-A	Method Blank	Total/NA	Solid	8015C	420678
MB 490-420919/1-A	Method Blank	Total/NA	Solid	8015C	420919
LCS 490-420919/2-A	Lab Control Sample	Total/NA	Solid	8015C	420919
LCSD 490-420919/3-A	Lab Control Sample Dup	Total/NA	Solid	8015C	420919
600-146305-1 MS	SJRP-SB17-26-27-04052017	Total/NA	Solid	8015C	420919
600-146305-1 MSD	SJRP-SB17-26-27-04052017	Total/NA	Solid	8015C	420919

GC Semi VOA

Prep Batch: 420912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146305-9	SJRP-EB-04052017	Total/NA	Water	3510C	
MB 490-420912/1-A	Method Blank	Total/NA	Water	3510C	
LCS 490-420912/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 490-420912/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

GC Semi VOA (Continued)

Analysis Batch: 420970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146305-9	SJRP-EB-04052017	Total/NA	Water	8015C	420912
MB 490-420912/1-A	Method Blank	Total/NA	Water	8015C	420912
LCS 490-420912/2-A	Lab Control Sample	Total/NA	Water	8015C	420912
LCSD 490-420912/3-A	Lab Control Sample Dup	Total/NA	Water	8015C	420912

Prep Batch: 421100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146305-1	SJRP-SB17-26-27-04052017	Total/NA	Solid	3550C	
600-146305-2	SJRP-SB17-26-27-04052017DUP	Total/NA	Solid	3550C	
600-146305-3	SJRP-SB17-21-22-04052017	Total/NA	Solid	3550C	
600-146305-4	SJRP-SB17-21-22-04052017DUP	Total/NA	Solid	3550C	
600-146305-5	SJRP-SB13-14-15-04052017	Total/NA	Solid	3550C	
600-146305-6	SJRP-SB13-18-19-04052017	Total/NA	Solid	3550C	
600-146305-7	SJRP-SB17-11-12-04052017	Total/NA	Solid	3550C	
MB 490-421100/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-421100/2-A	Lab Control Sample	Total/NA	Solid	3550C	
600-146305-1 MS	SJRP-SB17-26-27-04052017	Total/NA	Solid	3550C	
600-146305-1 MSD	SJRP-SB17-26-27-04052017	Total/NA	Solid	3550C	

Analysis Batch: 421584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146305-1	SJRP-SB17-26-27-04052017	Total/NA	Solid	8015C	421100
600-146305-2	SJRP-SB17-26-27-04052017DUP	Total/NA	Solid	8015C	421100
600-146305-3	SJRP-SB17-21-22-04052017	Total/NA	Solid	8015C	421100
600-146305-4	SJRP-SB17-21-22-04052017DUP	Total/NA	Solid	8015C	421100
600-146305-5	SJRP-SB13-14-15-04052017	Total/NA	Solid	8015C	421100
600-146305-6	SJRP-SB13-18-19-04052017	Total/NA	Solid	8015C	421100
600-146305-7	SJRP-SB17-11-12-04052017	Total/NA	Solid	8015C	421100
MB 490-421100/1-A	Method Blank	Total/NA	Solid	8015C	421100
LCS 490-421100/2-A	Lab Control Sample	Total/NA	Solid	8015C	421100
600-146305-1 MS	SJRP-SB17-26-27-04052017	Total/NA	Solid	8015C	421100
600-146305-1 MSD	SJRP-SB17-26-27-04052017	Total/NA	Solid	8015C	421100

Metals

Prep Batch: 210506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146305-1	SJRP-SB17-26-27-04052017	Total/NA	Solid	7471A	
600-146305-2	SJRP-SB17-26-27-04052017DUP	Total/NA	Solid	7471A	
600-146305-3	SJRP-SB17-21-22-04052017	Total/NA	Solid	7471A	
600-146305-4	SJRP-SB17-21-22-04052017DUP	Total/NA	Solid	7471A	
600-146305-5	SJRP-SB13-14-15-04052017	Total/NA	Solid	7471A	
600-146305-6	SJRP-SB13-18-19-04052017	Total/NA	Solid	7471A	
600-146305-7	SJRP-SB17-11-12-04052017	Total/NA	Solid	7471A	
MB 600-210506/7-A	Method Blank	Total/NA	Solid	7471A	
LCSSRM 600-210506/8-A ^100	Lab Control Sample	Total/NA	Solid	7471A	
600-146305-7 MS	SJRP-SB17-11-12-04052017	Total/NA	Solid	7471A	
600-146305-7 DU	SJRP-SB17-11-12-04052017	Total/NA	Solid	7471A	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Metals (Continued)

Analysis Batch: 210702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146305-1	SJRP-SB17-26-27-04052017	Total/NA	Solid	7471A	210506
600-146305-2	SJRP-SB17-26-27-04052017DUP	Total/NA	Solid	7471A	210506
600-146305-3	SJRP-SB17-21-22-04052017	Total/NA	Solid	7471A	210506
600-146305-4	SJRP-SB17-21-22-04052017DUP	Total/NA	Solid	7471A	210506
600-146305-5	SJRP-SB13-14-15-04052017	Total/NA	Solid	7471A	210506
600-146305-6	SJRP-SB13-18-19-04052017	Total/NA	Solid	7471A	210506
600-146305-7	SJRP-SB17-11-12-04052017	Total/NA	Solid	7471A	210506
MB 600-210506/7-A	Method Blank	Total/NA	Solid	7471A	210506
LCSSRM 600-210506/8-A ^100	Lab Control Sample	Total/NA	Solid	7471A	210506
600-146305-7 MS	SJRP-SB17-11-12-04052017	Total/NA	Solid	7471A	210506
600-146305-7 DU	SJRP-SB17-11-12-04052017	Total/NA	Solid	7471A	210506

Prep Batch: 210705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146305-9	SJRP-EB-04052017	Total/NA	Water	7470A	
MB 600-210705/8-A	Method Blank	Total/NA	Water	7470A	
LCS 600-210705/9-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 210730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146305-9	SJRP-EB-04052017	Total/NA	Water	7470A	210705
MB 600-210705/8-A	Method Blank	Total/NA	Water	7470A	210705
LCS 600-210705/9-A	Lab Control Sample	Total/NA	Water	7470A	210705

Prep Batch: 210750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146305-9	SJRP-EB-04052017	Total/NA	Water	3010A	
MB 600-210750/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-210750/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 210785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146305-9	SJRP-EB-04052017	Total/NA	Water	6010B	210750
MB 600-210750/1-A	Method Blank	Total/NA	Water	6010B	210750
LCS 600-210750/2-A	Lab Control Sample	Total/NA	Water	6010B	210750

Prep Batch: 210973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146305-1	SJRP-SB17-26-27-04052017	Total/NA	Solid	3050B	
600-146305-2	SJRP-SB17-26-27-04052017DUP	Total/NA	Solid	3050B	
600-146305-3	SJRP-SB17-21-22-04052017	Total/NA	Solid	3050B	
600-146305-4	SJRP-SB17-21-22-04052017DUP	Total/NA	Solid	3050B	
600-146305-5	SJRP-SB13-14-15-04052017	Total/NA	Solid	3050B	
600-146305-6	SJRP-SB13-18-19-04052017	Total/NA	Solid	3050B	
600-146305-7	SJRP-SB17-11-12-04052017	Total/NA	Solid	3050B	
MB 600-210973/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-210973/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-146305-1 MS	SJRP-SB17-26-27-04052017	Total/NA	Solid	3050B	
600-146305-1 DU	SJRP-SB17-26-27-04052017	Total/NA	Solid	3050B	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Metals (Continued)

Analysis Batch: 211005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146305-1	SJRP-SB17-26-27-04052017	Total/NA	Solid	6010B	210973
600-146305-1	SJRP-SB17-26-27-04052017	Total/NA	Solid	6010B	210973
600-146305-2	SJRP-SB17-26-27-04052017DUP	Total/NA	Solid	6010B	210973
600-146305-2	SJRP-SB17-26-27-04052017DUP	Total/NA	Solid	6010B	210973
600-146305-3	SJRP-SB17-21-22-04052017	Total/NA	Solid	6010B	210973
600-146305-3	SJRP-SB17-21-22-04052017	Total/NA	Solid	6010B	210973
600-146305-4	SJRP-SB17-21-22-04052017DUP	Total/NA	Solid	6010B	210973
600-146305-4	SJRP-SB17-21-22-04052017DUP	Total/NA	Solid	6010B	210973
600-146305-5	SJRP-SB13-14-15-04052017	Total/NA	Solid	6010B	210973
600-146305-5	SJRP-SB13-14-15-04052017	Total/NA	Solid	6010B	210973
600-146305-6	SJRP-SB13-18-19-04052017	Total/NA	Solid	6010B	210973
600-146305-6	SJRP-SB13-18-19-04052017	Total/NA	Solid	6010B	210973
600-146305-6	SJRP-SB13-18-19-04052017	Total/NA	Solid	6010B	210973
600-146305-7	SJRP-SB17-11-12-04052017	Total/NA	Solid	6010B	210973
600-146305-7	SJRP-SB17-11-12-04052017	Total/NA	Solid	6010B	210973
MB 600-210973/1-A	Method Blank	Total/NA	Solid	6010B	210973
LCSSRM 600-210973/2-A	Lab Control Sample	Total/NA	Solid	6010B	210973
600-146305-1 MS	SJRP-SB17-26-27-04052017	Total/NA	Solid	6010B	210973
600-146305-1 MS	SJRP-SB17-26-27-04052017	Total/NA	Solid	6010B	210973
600-146305-1 DU	SJRP-SB17-26-27-04052017	Total/NA	Solid	6010B	210973
600-146305-1 DU	SJRP-SB17-26-27-04052017	Total/NA	Solid	6010B	210973

General Chemistry

Analysis Batch: 210305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146305-1	SJRP-SB17-26-27-04052017	Total/NA	Solid	2540B	
600-146305-2	SJRP-SB17-26-27-04052017DUP	Total/NA	Solid	2540B	
600-146305-3	SJRP-SB17-21-22-04052017	Total/NA	Solid	2540B	
600-146305-4	SJRP-SB17-21-22-04052017DUP	Total/NA	Solid	2540B	
600-146305-5	SJRP-SB13-14-15-04052017	Total/NA	Solid	2540B	
600-146305-6	SJRP-SB13-18-19-04052017	Total/NA	Solid	2540B	
600-146305-7	SJRP-SB17-11-12-04052017	Total/NA	Solid	2540B	

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Client Sample ID: SJRP-SB17-26-27-04052017 — Lab Sample ID: 600-146305-1

Date Collected: 04/05/17 10:45 — **Matrix: Solid**
Date Received: 04/06/17 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.28 g	5.0 mL	420919	04/09/17 20:44	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421820	04/13/17 19:58	FKG	TAL NSH
Total/NA	Analysis	2540B		1			210305	04/07/17 17:18	B1K	TAL HOU

Client Sample ID: SJRP-SB17-26-27-04052017 — Lab Sample ID: 600-146305-1

Date Collected: 04/05/17 10:45 — **Matrix: Solid**
Date Received: 04/06/17 09:50 — **Percent Solids: 89.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.532 g	5 mL	210289	04/06/17 16:00	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210234	04/07/17 14:49	WS1	TAL HOU
Total/NA	Prep	3550C			25.64 g	1.00 mL	421100	04/10/17 11:39	MNM	TAL NSH
Total/NA	Analysis	8015C		1			421584	04/12/17 10:17	MDW	TAL NSH
Total/NA	Prep	3050B			1.06 g	50 mL	210973	04/18/17 08:52	DCL	TAL HOU
Total/NA	Analysis	6010B		1			211005	04/18/17 12:45	DCL	TAL HOU
Total/NA	Prep	3050B			1.06 g	50 mL	210973	04/18/17 08:52	DCL	TAL HOU
Total/NA	Analysis	6010B		5			211005	04/18/17 14:16	DCL	TAL HOU
Total/NA	Prep	7471A			.64 g	50 mL	210506	04/11/17 12:17	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210702	04/13/17 10:16	DDE	TAL HOU

Client Sample ID: SJRP-SB17-26-27-04052017DUP — Lab Sample ID: 600-146305-2

Date Collected: 04/05/17 10:45 — **Matrix: Solid**
Date Received: 04/06/17 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.14 g	5.0 mL	420919	04/09/17 20:44	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421820	04/13/17 20:28	FKG	TAL NSH
Total/NA	Analysis	2540B		1			210305	04/07/17 17:18	B1K	TAL HOU

Client Sample ID: SJRP-SB17-26-27-04052017DUP — Lab Sample ID: 600-146305-2

Date Collected: 04/05/17 10:45 — **Matrix: Solid**
Date Received: 04/06/17 09:50 — **Percent Solids: 88.7**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.226 g	5 mL	210289	04/06/17 16:00	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210234	04/07/17 14:25	WS1	TAL HOU
Total/NA	Prep	3550C			25.71 g	1.00 mL	421100	04/10/17 11:39	MNM	TAL NSH
Total/NA	Analysis	8015C		1			421584	04/12/17 11:08	MDW	TAL NSH
Total/NA	Prep	3050B			1.01 g	50 mL	210973	04/18/17 08:52	DCL	TAL HOU
Total/NA	Analysis	6010B		1			211005	04/18/17 12:51	DCL	TAL HOU
Total/NA	Prep	3050B			1.01 g	50 mL	210973	04/18/17 08:52	DCL	TAL HOU
Total/NA	Analysis	6010B		5			211005	04/18/17 14:23	DCL	TAL HOU
Total/NA	Prep	7471A			.60 g	50 mL	210506	04/11/17 12:17	DDE	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Client Sample ID: SJRP-SB17-26-27-04052017DUP — Lab Sample ID: 600-146305-2

Date Collected: 04/05/17 10:45 — **Matrix: Solid**
Date Received: 04/06/17 09:50 — **Percent Solids: 88.7**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1			210702	04/13/17 10:18	DDE	TAL HOU

Client Sample ID: SJRP-SB17-21-22-04052017 — Lab Sample ID: 600-146305-3

Date Collected: 04/05/17 10:40 — **Matrix: Solid**
Date Received: 04/06/17 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.06 g	5.0 mL	420919	04/09/17 20:44	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421820	04/13/17 20:59	FKG	TAL NSH
Total/NA	Analysis	2540B		1			210305	04/07/17 17:18	B1K	TAL HOU

Client Sample ID: SJRP-SB17-21-22-04052017 — Lab Sample ID: 600-146305-3

Date Collected: 04/05/17 10:40 — **Matrix: Solid**
Date Received: 04/06/17 09:50 — **Percent Solids: 79.7**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.63 g	5 mL	210289	04/06/17 16:00	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210234	04/07/17 15:13	WS1	TAL HOU
Total/NA	Prep	3550C			25.12 g	1.00 mL	421100	04/10/17 11:39	MNM	TAL NSH
Total/NA	Analysis	8015C		1			421584	04/12/17 11:25	MDW	TAL NSH
Total/NA	Prep	3050B			1.02 g	50 mL	210973	04/18/17 08:52	DCL	TAL HOU
Total/NA	Analysis	6010B		1			211005	04/18/17 12:53	DCL	TAL HOU
Total/NA	Prep	3050B			1.02 g	50 mL	210973	04/18/17 08:52	DCL	TAL HOU
Total/NA	Analysis	6010B		10			211005	04/18/17 15:04	DCL	TAL HOU
Total/NA	Prep	7471A			.60 g	50 mL	210506	04/11/17 12:17	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210702	04/13/17 10:19	DDE	TAL HOU

Client Sample ID: SJRP-SB17-21-22-04052017DUP — Lab Sample ID: 600-146305-4

Date Collected: 04/05/17 10:40 — **Matrix: Solid**
Date Received: 04/06/17 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.54 g	5.0 mL	420919	04/09/17 20:44	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421820	04/13/17 21:29	FKG	TAL NSH
Total/NA	Analysis	2540B		1			210305	04/07/17 17:18	B1K	TAL HOU

Client Sample ID: SJRP-SB17-21-22-04052017DUP — Lab Sample ID: 600-146305-4

Date Collected: 04/05/17 10:40 — **Matrix: Solid**
Date Received: 04/06/17 09:50 — **Percent Solids: 85.2**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.284 g	5 mL	210289	04/06/17 16:00	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210234	04/07/17 15:38	WS1	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			25.59 g	1.00 mL	421100	04/10/17 11:39	MNM	TAL NSH
Total/NA	Analysis	8015C		1			421584	04/12/17 11:43	MDW	TAL NSH
Total/NA	Prep	3050B			1.06 g	50 mL	210973	04/18/17 08:52	DCL	TAL HOU
Total/NA	Analysis	6010B		1			211005	04/18/17 12:55	DCL	TAL HOU
Total/NA	Prep	3050B			1.06 g	50 mL	210973	04/18/17 08:52	DCL	TAL HOU
Total/NA	Analysis	6010B		10			211005	04/18/17 15:06	DCL	TAL HOU
Total/NA	Prep	7471A			.62 g	50 mL	210506	04/11/17 12:17	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210702	04/13/17 10:21	DDE	TAL HOU

Client Sample ID: SJRP-SB13-14-15-04052017

Lab Sample ID: 600-146305-5

Date Collected: 04/05/17 08:50

Matrix: Solid

Date Received: 04/06/17 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.64 g	5.0 mL	420919	04/09/17 20:44	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421820	04/13/17 21:59	FKG	TAL NSH
Total/NA	Analysis	2540B		1			210305	04/07/17 17:18	B1K	TAL HOU

Client Sample ID: SJRP-SB13-14-15-04052017

Lab Sample ID: 600-146305-5

Date Collected: 04/05/17 08:50

Matrix: Solid

Date Received: 04/06/17 09:50

Percent Solids: 85.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.71 g	5 mL	210289	04/06/17 16:00	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210234	04/07/17 16:02	WS1	TAL HOU
Total/NA	Prep	3550C			25.20 g	1.00 mL	421100	04/10/17 11:39	MNM	TAL NSH
Total/NA	Analysis	8015C		1			421584	04/12/17 12:00	MDW	TAL NSH
Total/NA	Prep	3050B			1.03 g	50 mL	210973	04/18/17 08:52	DCL	TAL HOU
Total/NA	Analysis	6010B		1			211005	04/18/17 13:02	DCL	TAL HOU
Total/NA	Prep	3050B			1.03 g	50 mL	210973	04/18/17 08:52	DCL	TAL HOU
Total/NA	Analysis	6010B		5			211005	04/18/17 14:29	DCL	TAL HOU
Total/NA	Prep	7471A			.61 g	50 mL	210506	04/11/17 12:17	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210702	04/13/17 10:23	DDE	TAL HOU

Client Sample ID: SJRP-SB13-18-19-04052017

Lab Sample ID: 600-146305-6

Date Collected: 04/05/17 09:10

Matrix: Solid

Date Received: 04/06/17 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.05 g	5.0 mL	420919	04/09/17 20:44	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421820	04/13/17 22:30	FKG	TAL NSH
Total/NA	Analysis	2540B		1			210305	04/07/17 17:18	B1K	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Client Sample ID: SJRP-SB13-18-19-04052017

Lab Sample ID: 600-146305-6

Date Collected: 04/05/17 09:10
Matrix: Solid
Date Received: 04/06/17 09:50
Percent Solids: 89.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.835 g	5 mL	210289	04/06/17 16:00	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210234	04/07/17 16:26	WS1	TAL HOU
Total/NA	Prep	3550C			25.45 g	1.00 mL	421100	04/10/17 11:39	MNM	TAL NSH
Total/NA	Analysis	8015C		1			421584	04/12/17 12:17	MDW	TAL NSH
Total/NA	Prep	3050B			1.01 g	50 mL	210973	04/18/17 08:52	DCL	TAL HOU
Total/NA	Analysis	6010B		1			211005	04/18/17 13:04	DCL	TAL HOU
Total/NA	Prep	3050B			1.01 g	50 mL	210973	04/18/17 08:52	DCL	TAL HOU
Total/NA	Analysis	6010B		5			211005	04/18/17 14:31	DCL	TAL HOU
Total/NA	Prep	3050B			1.01 g	50 mL	210973	04/18/17 08:52	DCL	TAL HOU
Total/NA	Analysis	6010B		10			211005	04/18/17 15:08	DCL	TAL HOU
Total/NA	Prep	7471A			.64 g	50 mL	210506	04/11/17 12:17	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210702	04/13/17 10:25	DDE	TAL HOU

Client Sample ID: SJRP-SB17-11-12-04052017

Lab Sample ID: 600-146305-7

Date Collected: 04/05/17 10:25
Matrix: Solid
Date Received: 04/06/17 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035	DL		6.919 g	5 mL	210488	04/06/17 16:00	KLV	TAL HOU
Total/NA	Analysis	8260B	DL	1	100 uL	5 mL	210489	04/11/17 17:03	KLV	TAL HOU
Total/NA	Prep	5030B			5.28 g	5.0 mL	420919	04/09/17 20:44	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	421820	04/13/17 23:00	FKG	TAL NSH
Total/NA	Analysis	2540B		1			210305	04/07/17 17:18	B1K	TAL HOU

Client Sample ID: SJRP-SB17-11-12-04052017

Lab Sample ID: 600-146305-7

Date Collected: 04/05/17 10:25
Matrix: Solid
Date Received: 04/06/17 09:50
Percent Solids: 75.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.877 g	5 mL	210289	04/06/17 16:00	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210347	04/10/17 19:56	WS1	TAL HOU
Total/NA	Prep	3550C			25.01 g	1.00 mL	421100	04/10/17 11:39	MNM	TAL NSH
Total/NA	Analysis	8015C		1			421584	04/12/17 12:34	MDW	TAL NSH
Total/NA	Prep	3050B			1.06 g	50 mL	210973	04/18/17 08:52	DCL	TAL HOU
Total/NA	Analysis	6010B		1			211005	04/18/17 13:06	DCL	TAL HOU
Total/NA	Prep	3050B			1.06 g	50 mL	210973	04/18/17 08:52	DCL	TAL HOU
Total/NA	Analysis	6010B		5			211005	04/18/17 14:33	DCL	TAL HOU
Total/NA	Prep	7471A			.62 g	50 mL	210506	04/11/17 12:17	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210702	04/13/17 10:27	DDE	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Client Sample ID: SJRP-TB-04052017

Lab Sample ID: 600-146305-8

Date Collected: 04/05/17 14:00
Matrix: Water
Date Received: 04/06/17 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	210376	04/10/17 14:24	KLV	TAL HOU

Client Sample ID: SJRP-EB-04052017

Lab Sample ID: 600-146305-9

Date Collected: 04/05/17 12:50
Matrix: Water
Date Received: 04/06/17 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	210376	04/10/17 14:53	KLV	TAL HOU
Total/NA	Analysis	8015C		1	5 mL	5 mL	420929	04/10/17 21:30	GWM	TAL NSH
Total/NA	Prep	3510C			250 mL	1.0 mL	420912	04/09/17 15:53	DHC	TAL NSH
Total/NA	Analysis	8015C		1			420970	04/10/17 17:03	GMH	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	210750	04/14/17 05:16	DCL	TAL HOU
Total/NA	Analysis	6010B		1			210785	04/14/17 14:25	DCL	TAL HOU
Total/NA	Prep	7470A			40 mL	40 mL	210705	04/13/17 11:35	DDE	TAL HOU
Total/NA	Analysis	7470A		1			210730	04/13/17 13:48	DDE	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146305-1

Laboratory: TestAmerica Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	16-046-0	08-04-17
Louisiana	NELAP	6	01967	06-30-17
Oklahoma	State Program	6	2015-050	08-31-17
Texas	NELAP	6	T104704223-17-21	10-31-17
USDA	Federal		P330-14-00192	06-06-17

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	A2LA		NA: NELAP & A2LA	12-31-17
A2LA	ISO/IEC 17025		0453.07	12-31-17
Alaska (UST)	State Program	10	UST-087	09-01-17
Arizona	State Program	9	AZ0473	05-05-17
Arkansas DEQ	State Program	6	88-0737	04-25-17
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-17
Florida	NELAP	4	E87358	06-30-17
Georgia	State Program	4	N/A	12-31-17
Illinois	NELAP	5	200010	12-09-17
Iowa	State Program	7	131	04-01-18
Kansas	NELAP	7	E-10229	10-31-17
Kentucky (UST)	State Program	4	19	06-30-17
Kentucky (WW)	State Program	4	90038	12-31-17
Louisiana	NELAP	6	30613	06-30-17
Maine	State Program	1	TN00032	11-03-17
Maryland	State Program	3	316	03-31-18
Massachusetts	State Program	1	M-TN032	06-30-17
Minnesota	NELAP	5	047-999-345	12-31-17
Mississippi	State Program	4	N/A	06-30-17
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-17
New Hampshire	NELAP	1	2963	10-09-17
New Jersey	NELAP	2	TN965	06-30-17
New York	NELAP	2	11342	03-31-18
North Carolina (WW/SW)	State Program	4	387	12-31-17
North Dakota	State Program	8	R-146	06-30-17
Ohio VAP	State Program	5	CL0033	07-10-17
Oklahoma	State Program	6	9412	08-31-17
Oregon	NELAP	10	TN200001	04-27-17
Pennsylvania	NELAP	3	68-00585	06-30-17
Rhode Island	State Program	1	LAO00268	12-30-17
South Carolina	State Program	4	84009 (001)	02-18-17 *
South Carolina (Do Not Use - DW)	State Program	4	84009 (002)	12-16-17
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-17
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-17
Virginia	NELAP	3	460152	06-14-17
Washington	State Program	10	C789	07-19-17

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc. TestAmerica Job ID: 600-146305-1
Project/Site: San Juan Site Characterization

Laboratory: TestAmerica Nashville (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
West Virginia DEP	State Program	3	219	02-28-18
Wisconsin	State Program	5	998020430	08-31-17
Wyoming (UST)	A2LA	8	453.07	12-31-17

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica

Client Information	Sampler: Katherine Moogakis	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-52002-15345.10
Client Contact: Jeffrey Minchak	Phone: 9043866573	E-Mail: cathy.upton@testamericainc.com		Page: Page 10 of 10
Company: CH2M Hill, Inc.				Job #:
Address: 3721 Rutledge Rd. NE Suite B-1	Due Date Requested:			
City: Albuquerque	TAT Requested (days):			
State, Zip: NM, 87109				
Phone: 281-721-8546(Tel)	PO #: Purchase Order Requested			
Email: Jeffrey.Minchak@ch2m.com	WO #: WD225383			
Project Name: Kinder Morgan Bloomfield, NM San Juan	Project #: 60005961-Analysis group BTEX/GRO/DRO/Metals			
Site: San Juan Site Characterization	SSOW#:			

Analysis Requested — Dallas . Ft Worth

560501

600-146305 Chain of Custody

Preservation Codes:
A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO - Diesel and Oil Range Organics	8015C_GRO - GRO Range (C6-C10)	6010B, 7471A - NMWQCC List Metals	8260B - 5035 BTEX	Moisture	Waters	6010B, 7470A - NMWQCC List Metals	8260B_LL - BTEX Only	8015C_GRO - GRO Range (C6-C10)	8015C_DRO - Diesel and Oil Range Organics		Total Number of containers	Special Instructions/Note:
Preservation Code:							N	N	N	N	N		D	A	A	N			
SJRP-SB17-26-27-04052017	4/5/17	1045	G	Solid	N	N	X	X	X	X	X							1	
SJRP-SB17-26-27-04052017DUP	4/5/17	1045	G	Solid	N	N	X	X	X	X	X							1	61 total
SJRP-SB17-21-22-04052017	4/5/17	1040	G	Solid	N	N	X	X	X	X	X							1	bottles
SJRP-SB17-21-22-04052017DUP	4/5/17	1040	G	Solid	N	N	X	X	X	X	X							1	2 coolers
SJRP-SB13-14-15-04052017	4/5/17	850	G	Solid	N	N	X	X	X	X	X							1	
SJRP-SB13-18-19-04052017	4/5/17	910	G	Solid	N	N	X	X	X	X	X							1	
SJRP-SB17-11-12-04052017	4/5/17	1025	G	Solid	N	N	X	X	X	X	X							1	
			G	Solid															
			G	Solid															
SJRP-TB-04052017	4/5/17	1400	G	Solid									X	X	X	X		3	
SJRP-EB-04052017	4/5/17	1250	G	Water									X	X	X	X		9	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	4/5/17 1630			4/6/17 950	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Loc: 600
146305

TestAmerica Houston

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Recei t

Date/Time Received: '17APR 6 9:50

JOB NUMBER: _____ CLIENT: CHEM

UNPACKED BY: _____ CARRIER/DRIVER: FE

Custody Seal Present: ☐ YES ☐ NO Number of Coolers Received: 2

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Them CF	Corrected Temp (°C)
RW	Y / N	Y / N	1.8	1075	-.2	1.6
BW	Y / N	Y / N	3.2			3.0
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☒ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☐ YES ☐ NO

pH paper Lot #_____

VOA headspace acceptable (5-6mm): ☒ YES ☐ NO ☐ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	☒	☐

COMMENTS:

FedEx TRK# 0221 6025 5771 6044 THU – 06 APR 10:30A PRIORITY OVERNIGHT

FedEx TRK# 0221 6025 5771 6055 THU – 06 APR 10:30A PRIORITY OVERNIGHT

HS-SA-WI-013

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TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-26348.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: cathy.upton@testamericainc.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):		Job #: 600-146305-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 4/18/2017			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: San Juan Site Characterization	Project #: 60005961			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO/3550C DRO/ORO	8015C_GRO/5030B_SolidNAC GRO Range (C8-C10)	8015C_GRO/5030B GRO Range (C6-C10)	8015C_DRO/3510C_LVI DRO/ORO	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
SJRP-SB17-26-27-04052017 (600-146305-1)	4/5/17	10:45 Central		Solid			X	X			2	
SJRP-SB17-26-27-04052017DUP (600-146305-2)	4/5/17	10:45 Central		Solid			X	X			2	
SJRP-SB17-21-22-04052017 (600-146305-3)	4/5/17	10:40 Central		Solid			X	X			2	
SJRP-SB17-21-22-04052017DUP (600-146305-4)	4/5/17	10:40 Central		Solid			X	X			2	
SJRP-SB13-14-15-04052017 (600-146305-5)	4/5/17	08:50 Central		Solid			X	X			2	
SJRP-SB13-18-19-04052017 (600-146305-6)	4/5/17	09:10 Central		Solid			X	X			2	
SJRP-SB17-11-12-04052017 (600-146305-7)	4/5/17	10:25 Central		Solid			X	X			2	
SJRP-EB-04052017 (600-146305-9)	4/5/17	12:50 Central		Water					X	X	5	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	4-7-17 1700	TAN		4-8-17 0915	TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.2

Received by OCD: 11/13/2025 11:14:36 AM

Released to Imaging: 11/14/2025 9:30:04 AM

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

Loc: 600
146305

COOLER RECEIPT FORM

Cooler Received/Opened On 4/8/2017 @ 0915

Time Samples Removed From Cooler 1229 Time Samples Placed In Storage_____ (2 Hour Window)

1. Tracking # 6665 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 31470366 pH Strip Lot_____ Chlorine Strip Lot_____

2. Temperature of rep. sample or temp blank when opened: 3.2 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where:_____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) HG

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) DA

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) DA

I certify that I attached a label with the unique LIMS number to each container (intial) DA

21. Were there Non-Conformance issues at login? YES NO Was a NCM generated? YES NO #600-188392

DA 4-8-17

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 12/15/15

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TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-26348.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: cathy.upton@testamericainc.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):		Job #: 600-146305-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 4/18/2017			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204	PO #:			
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	WO #:			
Email:	Project #: 60005961			
Project Name: San Juan Site Characterization	SSOW#:			
Site:				

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO/3550C DRO/ORO	8015C_GRO/5030B_SolidNAC GRO Range (C6-C10)	8015C_GRO/5030B GRO Range (C6-C10)	8015C_DRO/3510C_LVI DRO/ORO	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
SJRP-SB17-26-27-04052017 (600-146305-1)	4/5/17	10:45 Central		Solid			X	X			2	
SJRP-SB17-26-27-04052017DUP (600-146305-2)	4/5/17	10:45 Central		Solid			X	X			2	
SJRP-SB17-21-22-04052017 (600-146305-3)	4/5/17	10:40 Central		Solid			X	X			2	
SJRP-SB17-21-22-04052017DUP (600-146305-4)	4/5/17	10:40 Central		Solid			X	X			2	
SJRP-SB13-14-15-04052017 (600-146305-5)	4/5/17	08:50 Central		Solid			X	X			2	
SJRP-SB13-18-19-04052017 (600-146305-6)	4/5/17	09:10 Central		Solid			X	X			2	
SJRP-SB17-11-12-04052017 (600-146305-7)	4/5/17	10:25 Central		Solid			X	X			2	
SJRP-EB-04052017 (600-146305-9)	4/5/17	12:50 Central		Water					X	X	5	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		4-7-17 1700			4-8-17 0915	TAN
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.2

Received by OCD: 11/13/2025 11:14:36 AM

Released to Imaging: 11/14/2025 9:30:04 AM

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

Loc: 600
146305

COOLER RECEIPT FORM

Cooler Received/Opened On 4/8/2017 @ 0915

Time Samples Removed From Cooler 1229 Time Samples Placed In Storage _____ (2 Hour Window)

1. Tracking # 6665 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 31470366 pH Strip Lot _____ Chlorine Strip Lot _____

2. Temperature of rep. sample or temp blank when opened: 3.2 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) HG

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (intial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) DA

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) DA

I certify that I attached a label with the unique LIMS number to each container (intial) DA

21. Were there Non-Conformance issues at login? YES (NO) Was a NCM generated? YES (NO) #600-188392

DA 4-8-17

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 12/15/15

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-146305-1

Login Number: 146305

List Source: TestAmerica Houston

List Number: 1

Creator: Crafton, Tommie S

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.6 3.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-146305-1

Login Number: 146305
List Number: 2
Creator: Armstrong, Daniel

List Source: TestAmerica Nashville
List Creation: 04/08/17 01:07 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.2C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-146305-1

Login Number: 146305
List Number: 3
Creator: Armstrong, Daniel

List Source: TestAmerica Nashville
List Creation: 04/08/17 01:10 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.2C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-146488-1
Client Project/Site: San Juan Site Characterization
Revision: 1

For:
CH2M Hill Constructors, Inc.
14701 St. Mary's Lane
Suite 300
Houston, Texas 77079-2923

Attn: Mr. John Ynfante

Steve A Stepanski

Authorized for release by:
12/7/2020 4:33:48 PM
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Cathy Upton, Project Manager I
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LINKS

Review your project results through TotalAccess

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-146488-1
Project/Site: San Juan Site Characterization

Job ID: 600-146488-1

Laboratory: TestAmerica Houston

Narrative

CASE NARRATIVE

Client: CH2M Hill Constructors, Inc.

Project: San Juan Site Characterization

Report Number: 600-146488-1

COMMENT
This report was revised to a Level 2 deliverable per client's request.

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
Note: All samples that require thermal preservation are considered acceptable if the arrival temperature is within 2°C of the required temperature or method specified range. For samples with a specified temperature of 4°C, samples with a temperature ranging from just above freezing temperature of water to 6°C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

The samples were received on 04/11/2017; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.1º C and 1.9º C.

Receipt Exceptions

The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. Trip blank on COC was marked for 8015c_GRO Range (c6-c10). Assigned 8260 based off of history.

VOLATILE ORGANIC COMPOUNDS (GC-MS)-Soil
Samples SJRP-SB18-14-15-04102017 (600-146488-1), SJRP-SB-18-21-22-04102017 (600-146488-2), SJRP-SB15-14-15-04102017 (600-146488-3), SJRP-SB15-19-20-04102017 (600-146488-4), SJRP-SB16-14-15-04102017 (600-146488-5) and SJRP-SB16-20-21-04102017 (600-146488-6) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were prepared on 04/11/2017 and analyzed on 04/12/2017.

Surrogate recovery for the following samples was outside the upper control limit: SJRP-SB18-14-15-04102017 (600-146488-1), SJRP-SB15-14-15-04102017 (600-146488-3), SJRP-SB16-14-15-04102017 (600-146488-5) and SJRP-SB16-20-21-04102017 (600-146488-6). These samples did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-146488-1
Project/Site: San Juan Site Characterization

Job ID: 600-146488-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

VOLATILE ORGANIC COMPOUNDS (GC-MS)-Water
Samples SJRP-TB-04102017 (600-146488-7) and SJRP-EB-04102017 (600-146488-8) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/12/2017.

The following volatile sample was analyzed with significant headspace in the sample vial(s): SJRP-TB-04102017 (600-146488-7). Significant headspace is defined as a bubble greater than 6 mm in diameter.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GASOLINE RANGE ORGANICS (GRO)-Soil
Samples SJRP-SB18-14-15-04102017 (600-146488-1), SJRP-SB-18-21-22-04102017 (600-146488-2), SJRP-SB15-14-15-04102017 (600-146488-3), SJRP-SB15-19-20-04102017 (600-146488-4), SJRP-SB16-14-15-04102017 (600-146488-5) and SJRP-SB16-20-21-04102017 (600-146488-6) were analyzed for gasoline range organics (GRO) in accordance with EPA SW-846 Method 8015C - GRO. The samples were analyzed on 04/17/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GASOLINE RANGE ORGANICS (GRO)-Water
Sample SJRP-EB-04102017 (600-146488-8) was analyzed for gasoline range organics (GRO) in accordance with 8015C GRO. The samples were analyzed on 04/14/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DIESEL RANGE ORGANICS (DRO)-Soil
Samples SJRP-SB18-14-15-04102017 (600-146488-1), SJRP-SB-18-21-22-04102017 (600-146488-2), SJRP-SB15-14-15-04102017 (600-146488-3), SJRP-SB15-19-20-04102017 (600-146488-4), SJRP-SB16-14-15-04102017 (600-146488-5) and SJRP-SB16-20-21-04102017 (600-146488-6) were analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 04/15/2017 and 04/17/2017 and analyzed on 04/17/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DIESEL RANGE ORGANICS (DRO)-Water
Sample SJRP-EB-04102017 (600-146488-8) was analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 04/16/2017 and analyzed on 04/17/2017.

o-Terphenyl (Surr) failed the surrogate recovery criteria low for SJRP-EB-04102017 (600-146488-8). Re-extraction and/or re-analysis was performed with concurring results. The original analysis has been reported.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)-Soil
Samples SJRP-SB18-14-15-04102017 (600-146488-1), SJRP-SB-18-21-22-04102017 (600-146488-2), SJRP-SB15-14-15-04102017 (600-146488-3), SJRP-SB15-19-20-04102017 (600-146488-4), SJRP-SB16-14-15-04102017 (600-146488-5) and SJRP-SB16-20-21-04102017 (600-146488-6) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared and analyzed on 04/21/2017.

Manganese and Sodium were detected in method blank MB 600-211265/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-146488-1
Project/Site: San Juan Site Characterization

Job ID: 600-146488-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

Due to the high concentration of target analytes, sample SJRP-SB18-14-15-04102017MS (600-146488-1) in batch 600-211319 could not be evaluated for accuracy. The associated laboratory control sample (LCS) met acceptance criteria.

Refer to the QC report for details.

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Arsenic, Barium and Molybdenum exceeded the RPD limit for the duplicate of sample SJRP-SB18-14-15-04102017DU (600-146488-1).

Refer to the QC report for details.

The serial dilution performed for the following sample associated with batch 211319 was outside control limits for Barium 19% recovery, Chromium at 36% recovery and Nickel at 15% recovery: (600-146488-D-1-A SD).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)-Water

Sample SJRP-EB-04102017 (600-146488-8) was analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 04/13/2017 and analyzed on 04/14/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY-Soil

Samples SJRP-SB18-14-15-04102017 (600-146488-1), SJRP-SB-18-21-22-04102017 (600-146488-2), SJRP-SB15-14-15-04102017 (600-146488-3), SJRP-SB15-19-20-04102017 (600-146488-4), SJRP-SB16-14-15-04102017 (600-146488-5) and SJRP-SB16-20-21-04102017 (600-146488-6) were analyzed for total mercury in accordance with EPA SW-846 Method 7471A. The samples were prepared on 04/11/2017 and 04/14/2017 and analyzed on 04/13/2017 and 04/17/2017.

Mercury exceeded the RPD limit for the duplicate of sample SJRP-SB16-20-21-04102017DU (600-146488-6).

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY-Water

Sample SJRP-EB-04102017 (600-146488-8) was analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 04/12/2017 and analyzed on 04/13/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PERCENT SOLIDS

Samples SJRP-SB18-14-15-04102017 (600-146488-1), SJRP-SB-18-21-22-04102017 (600-146488-2), SJRP-SB15-14-15-04102017 (600-146488-3), SJRP-SB15-19-20-04102017 (600-146488-4), SJRP-SB16-14-15-04102017 (600-146488-5) and SJRP-SB16-20-21-04102017 (600-146488-6) were analyzed for percent solids in accordance with EPA SW846 Method 3550C. The samples were analyzed on 04/11/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL NSH
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL NSH
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU

Protocol References:

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-146488-1	SJRP-SB18-14-15-04102017	Solid	04/10/17 08:34	04/11/17 10:19
600-146488-2	SJRP-SB-18-21-22-04102017	Solid	04/10/17 08:48	04/11/17 10:19
600-146488-3	SJRP-SB15-14-15-04102017	Solid	04/10/17 09:45	04/11/17 10:19
600-146488-4	SJRP-SB15-19-20-04102017	Solid	04/10/17 09:55	04/11/17 10:19
600-146488-5	SJRP-SB16-14-15-04102017	Solid	04/10/17 11:15	04/11/17 10:19
600-146488-6	SJRP-SB16-20-21-04102017	Solid	04/10/17 11:35	04/11/17 10:19
600-146488-7	SJRP-TB-04102017	Water	04/10/17 11:45	04/11/17 10:19
600-146488-8	SJRP-EB-04102017	Water	04/10/17 10:45	04/11/17 10:19

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Client Sample ID: SJRP-SB18-14-15-04102017
Date Collected: 04/10/17 08:34
Date Received: 04/11/17 10:19

Lab Sample ID: 600-146488-1
Matrix: Solid
Percent Solids: 82.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000824	J	0.00236	0.000298	mg/Kg	☼	04/11/17 14:07	04/12/17 20:40	1
Ethylbenzene	0.000482	U	0.00236	0.000482	mg/Kg	☼	04/11/17 14:07	04/12/17 20:40	1
Toluene	0.000652	U	0.00236	0.000652	mg/Kg	☼	04/11/17 14:07	04/12/17 20:40	1
Xylenes, Total	0.000534	U	0.00236	0.000534	mg/Kg	☼	04/11/17 14:07	04/12/17 20:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*166*	*X*	*61 - 130*	*04/11/17 14:07*	*04/12/17 20:40*	*1*
Dibromofluoromethane	*143*	*X*	*68 - 140*	*04/11/17 14:07*	*04/12/17 20:40*	*1*
Toluene-d8 (Surr)	*107*		*50 - 130*	*04/11/17 14:07*	*04/12/17 20:40*	*1*
4-Bromofluorobenzene	*121*		*57 - 140*	*04/11/17 14:07*	*04/12/17 20:40*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.36	U	4.73	2.36	mg/Kg		04/14/17 08:32	04/17/17 13:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*69*		*50 - 150*	*04/14/17 08:32*	*04/17/17 13:17*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.97	U	5.94	2.97	mg/Kg	☼	04/15/17 09:25	04/17/17 16:42	1
ORO C24-C40	4.23	J	5.94	2.97	mg/Kg	☼	04/15/17 09:25	04/17/17 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*84*		*50 - 150*	*04/15/17 09:25*	*04/17/17 16:42*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	16200		28.1	0.338	mg/Kg	☼	04/21/17 10:18	04/21/17 14:21	1
Arsenic	5.98		1.13	0.245	mg/Kg	☼	04/21/17 10:18	04/21/17 14:21	1
Barium	161	F1	1.13	0.0338	mg/Kg	☼	04/21/17 10:18	04/21/17 14:21	1
Boron	1.62	J F1	22.5	0.434	mg/Kg	☼	04/21/17 10:18	04/21/17 14:21	1
Cadmium	0.186	J	0.281	0.0288	mg/Kg	☼	04/21/17 10:18	04/21/17 14:21	1
Calcium	2290	F1	113	0.972	mg/Kg	☼	04/21/17 10:18	04/21/17 14:21	1
Chromium	7.36		0.563	0.0569	mg/Kg	☼	04/21/17 10:18	04/21/17 14:21	1
Cobalt	6.98		0.563	0.0761	mg/Kg	☼	04/21/17 10:18	04/21/17 14:21	1
Iron	21300		22.5	2.85	mg/Kg	☼	04/21/17 10:18	04/21/17 14:21	1
Lead	19.3		0.563	0.118	mg/Kg	☼	04/21/17 10:18	04/21/17 14:21	1
Magnesium	4390		113	2.16	mg/Kg	☼	04/21/17 10:18	04/21/17 14:21	1
Manganese	112	B	1.69	0.0429	mg/Kg	☼	04/21/17 10:18	04/21/17 14:21	1
Molybdenum	1.40		0.563	0.153	mg/Kg	☼	04/21/17 10:18	04/21/17 14:21	1
Nickel	13.0		1.13	0.132	mg/Kg	☼	04/21/17 10:18	04/21/17 14:21	1
Potassium	1590		113	12.4	mg/Kg	☼	04/21/17 10:18	04/21/17 14:21	1
Selenium	0.309	J	2.25	0.291	mg/Kg	☼	04/21/17 10:18	04/21/17 14:21	1
Sodium	4690	B	113	0.997	mg/Kg	☼	04/21/17 10:18	04/21/17 14:21	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0409		0.0207	0.00435	mg/Kg	☼	04/11/17 12:17	04/13/17 10:40	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Client Sample ID: SJRP-SB18-14-15-04102017

Lab Sample ID: 600-146488-1
Date Collected: 04/10/17 08:34
Matrix: Solid
Date Received: 04/11/17 10:19
Percent Solids: 82.3

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17.7		1.0	1.0	%			04/11/17 15:37	1
Percent Solids	82.3		1.0	1.0	%			04/11/17 15:37	1

Client Sample ID: SJRP-SB-18-21-22-04102017

Lab Sample ID: 600-146488-2
Date Collected: 04/10/17 08:48
Matrix: Solid
Date Received: 04/11/17 10:19
Percent Solids: 85.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000521	U	0.00414	0.000521	mg/Kg	☼	04/11/17 14:07	04/12/17 21:08	1
Ethylbenzene	0.000844	U	0.00414	0.000844	mg/Kg	☼	04/11/17 14:07	04/12/17 21:08	1
Toluene	0.00114	U	0.00414	0.00114	mg/Kg	☼	04/11/17 14:07	04/12/17 21:08	1
Xylenes, Total	0.000935	U	0.00414	0.000935	mg/Kg	☼	04/11/17 14:07	04/12/17 21:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*61 - 130*	*04/11/17 14:07*	*04/12/17 21:08*	*1*
Dibromofluoromethane	*102*		*68 - 140*	*04/11/17 14:07*	*04/12/17 21:08*	*1*
Toluene-d8 (Surr)	*88*		*50 - 130*	*04/11/17 14:07*	*04/12/17 21:08*	*1*
4-Bromofluorobenzene	*108*		*57 - 140*	*04/11/17 14:07*	*04/12/17 21:08*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.38	U	4.75	2.38	mg/Kg		04/14/17 08:32	04/17/17 13:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*70*		*50 - 150*	*04/14/17 08:32*	*04/17/17 13:47*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3.00	J	5.75	2.88	mg/Kg	☼	04/17/17 11:16	04/17/17 16:59	1
ORO C24-C40	5.93		5.75	2.88	mg/Kg	☼	04/17/17 11:16	04/17/17 16:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*97*		*50 - 150*	*04/17/17 11:16*	*04/17/17 16:59*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11100		28.3	0.340	mg/Kg	☼	04/21/17 10:18	04/21/17 14:27	1
Arsenic	7.76		1.13	0.247	mg/Kg	☼	04/21/17 10:18	04/21/17 14:27	1
Barium	67.7		1.13	0.0340	mg/Kg	☼	04/21/17 10:18	04/21/17 14:27	1
Boron	1.35	J	22.6	0.437	mg/Kg	☼	04/21/17 10:18	04/21/17 14:27	1
Cadmium	0.175	J	0.283	0.0290	mg/Kg	☼	04/21/17 10:18	04/21/17 14:27	1
Calcium	9460		113	0.978	mg/Kg	☼	04/21/17 10:18	04/21/17 14:27	1
Chromium	5.92		0.566	0.0573	mg/Kg	☼	04/21/17 10:18	04/21/17 14:27	1
Cobalt	6.08		0.566	0.0765	mg/Kg	☼	04/21/17 10:18	04/21/17 14:27	1
Iron	35400		22.6	2.86	mg/Kg	☼	04/21/17 10:18	04/21/17 14:27	1
Lead	8.84		0.566	0.119	mg/Kg	☼	04/21/17 10:18	04/21/17 14:27	1
Magnesium	2830		113	2.17	mg/Kg	☼	04/21/17 10:18	04/21/17 14:27	1
Manganese	91.8	B	1.70	0.0431	mg/Kg	☼	04/21/17 10:18	04/21/17 14:27	1
Molybdenum	2.13		0.566	0.154	mg/Kg	☼	04/21/17 10:18	04/21/17 14:27	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Client Sample ID: SJRP-SB-18-21-22-04102017

Lab Sample ID: 600-146488-2
Date Collected: 04/10/17 08:48
Matrix: Solid
Date Received: 04/11/17 10:19
Percent Solids: 85.8

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	7.75		1.13	0.132	mg/Kg	☼	04/21/17 10:18	04/21/17 14:27	1
Potassium	1460		113	12.5	mg/Kg	☼	04/21/17 10:18	04/21/17 14:27	1
Selenium	0.293	U	2.26	0.293	mg/Kg	☼	04/21/17 10:18	04/21/17 14:27	1
Sodium	3760	B	113	1.00	mg/Kg	☼	04/21/17 10:18	04/21/17 14:27	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0259		0.0189	0.00398	mg/Kg	☼	04/11/17 12:17	04/13/17 10:42	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14.2		1.0	1.0	%			04/11/17 15:37	1
Percent Solids	85.8		1.0	1.0	%			04/11/17 15:37	1

Client Sample ID: SJRP-SB15-14-15-04102017

Lab Sample ID: 600-146488-3
Date Collected: 04/10/17 09:45
Matrix: Solid
Date Received: 04/11/17 10:19
Percent Solids: 82.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000551	U	0.00437	0.000551	mg/Kg	☼	04/11/17 14:07	04/12/17 21:37	1
Ethylbenzene	0.000892	U	0.00437	0.000892	mg/Kg	☼	04/11/17 14:07	04/12/17 21:37	1
Toluene	0.00121	U	0.00437	0.00121	mg/Kg	☼	04/11/17 14:07	04/12/17 21:37	1
Xylenes, Total	0.000989	U	0.00437	0.000989	mg/Kg	☼	04/11/17 14:07	04/12/17 21:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*159*	*X*	*61 - 130*	*04/11/17 14:07*	*04/12/17 21:37*	*1*
Dibromofluoromethane	*131*		*68 - 140*	*04/11/17 14:07*	*04/12/17 21:37*	*1*
Toluene-d8 (Surr)	*117*		*50 - 130*	*04/11/17 14:07*	*04/12/17 21:37*	*1*
4-Bromofluorobenzene	*118*		*57 - 140*	*04/11/17 14:07*	*04/12/17 21:37*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.34	U	4.68	2.34	mg/Kg		04/14/17 08:32	04/17/17 14:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*65*		*50 - 150*	*04/14/17 08:32*	*04/17/17 14:18*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.98	U	5.96	2.98	mg/Kg	☼	04/15/17 09:25	04/17/17 15:49	1
ORO C24-C40	2.98	U	5.96	2.98	mg/Kg	☼	04/15/17 09:25	04/17/17 15:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*86*		*50 - 150*	*04/15/17 09:25*	*04/17/17 15:49*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	17000		28.9	0.347	mg/Kg	☼	04/21/17 10:18	04/21/17 14:29	1
Arsenic	3.65		1.16	0.252	mg/Kg	☼	04/21/17 10:18	04/21/17 14:29	1
Barium	44.2		1.16	0.0347	mg/Kg	☼	04/21/17 10:18	04/21/17 14:29	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Client Sample ID: SJRP-SB15-14-15-04102017

Lab Sample ID: 600-146488-3
Date Collected: 04/10/17 09:45
Matrix: Solid
Date Received: 04/11/17 10:19
Percent Solids: 82.4

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2.17	J	23.1	0.446	mg/Kg	☼	04/21/17 10:18	04/21/17 14:29	1
Cadmium	0.0867	J	0.289	0.0296	mg/Kg	☼	04/21/17 10:18	04/21/17 14:29	1
Calcium	2260		116	0.998	mg/Kg	☼	04/21/17 10:18	04/21/17 14:29	1
Chromium	8.49		0.578	0.0585	mg/Kg	☼	04/21/17 10:18	04/21/17 14:29	1
Cobalt	7.35		0.578	0.0781	mg/Kg	☼	04/21/17 10:18	04/21/17 14:29	1
Iron	23600		23.1	2.92	mg/Kg	☼	04/21/17 10:18	04/21/17 14:29	1
Lead	13.6		0.578	0.121	mg/Kg	☼	04/21/17 10:18	04/21/17 14:29	1
Magnesium	4350		116	2.22	mg/Kg	☼	04/21/17 10:18	04/21/17 14:29	1
Manganese	123	B	1.73	0.0440	mg/Kg	☼	04/21/17 10:18	04/21/17 14:29	1
Molybdenum	0.670		0.578	0.157	mg/Kg	☼	04/21/17 10:18	04/21/17 14:29	1
Nickel	11.0		1.16	0.135	mg/Kg	☼	04/21/17 10:18	04/21/17 14:29	1
Potassium	1640		116	12.7	mg/Kg	☼	04/21/17 10:18	04/21/17 14:29	1
Selenium	0.299	U	2.31	0.299	mg/Kg	☼	04/21/17 10:18	04/21/17 14:29	1
Sodium	6820	B	116	1.02	mg/Kg	☼	04/21/17 10:18	04/21/17 14:29	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0257		0.0190	0.00401	mg/Kg	☼	04/11/17 12:17	04/13/17 10:44	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17.6		1.0	1.0	%			04/11/17 15:37	1
Percent Solids	82.4		1.0	1.0	%			04/11/17 15:37	1

Client Sample ID: SJRP-SB15-19-20-04102017

Lab Sample ID: 600-146488-4
Date Collected: 04/10/17 09:55
Matrix: Solid
Date Received: 04/11/17 10:19
Percent Solids: 83.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000634	U	0.00503	0.000634	mg/Kg	☼	04/11/17 14:07	04/12/17 22:05	1
Ethylbenzene	0.00103	U	0.00503	0.00103	mg/Kg	☼	04/11/17 14:07	04/12/17 22:05	1
Toluene	0.00139	U	0.00503	0.00139	mg/Kg	☼	04/11/17 14:07	04/12/17 22:05	1
Xylenes, Total	0.00114	U	0.00503	0.00114	mg/Kg	☼	04/11/17 14:07	04/12/17 22:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*61 - 130*	*04/11/17 14:07*	*04/12/17 22:05*	*1*
Dibromofluoromethane	*111*		*68 - 140*	*04/11/17 14:07*	*04/12/17 22:05*	*1*
Toluene-d8 (Surr)	*100*		*50 - 130*	*04/11/17 14:07*	*04/12/17 22:05*	*1*
4-Bromofluorobenzene	*98*		*57 - 140*	*04/11/17 14:07*	*04/12/17 22:05*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.46	U	4.91	2.46	mg/Kg		04/14/17 08:32	04/17/17 14:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*70*		*50 - 150*	*04/14/17 08:32*	*04/17/17 14:48*	*1*

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Client Sample ID: SJRP-SB15-19-20-04102017

Lab Sample ID: 600-146488-4
Date Collected: 04/10/17 09:55
Matrix: Solid
Date Received: 04/11/17 10:19
Percent Solids: 83.9

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.97	U	5.94	2.97	mg/Kg	☼	04/15/17 09:25	04/17/17 16:06	1
ORO C24-C40	2.97	U	5.94	2.97	mg/Kg	☼	04/15/17 09:25	04/17/17 16:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*76*		*50 - 150*	*04/15/17 09:25*	*04/17/17 16:06*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	13700		25.5	0.306	mg/Kg	☼	04/21/17 10:18	04/21/17 14:32	1
Arsenic	3.18		1.02	0.222	mg/Kg	☼	04/21/17 10:18	04/21/17 14:32	1
Barium	173		1.02	0.0306	mg/Kg	☼	04/21/17 10:18	04/21/17 14:32	1
Boron	1.75	J	20.4	0.393	mg/Kg	☼	04/21/17 10:18	04/21/17 14:32	1
Cadmium	0.438		0.255	0.0261	mg/Kg	☼	04/21/17 10:18	04/21/17 14:32	1
Calcium	3860		102	0.880	mg/Kg	☼	04/21/17 10:18	04/21/17 14:32	1
Chromium	7.58		0.509	0.0515	mg/Kg	☼	04/21/17 10:18	04/21/17 14:32	1
Cobalt	14.1		0.509	0.0689	mg/Kg	☼	04/21/17 10:18	04/21/17 14:32	1
Iron	21100		20.4	2.58	mg/Kg	☼	04/21/17 10:18	04/21/17 14:32	1
Lead	14.3		0.509	0.107	mg/Kg	☼	04/21/17 10:18	04/21/17 14:32	1
Magnesium	4710		102	1.96	mg/Kg	☼	04/21/17 10:18	04/21/17 14:32	1
Manganese	210	B	1.53	0.0388	mg/Kg	☼	04/21/17 10:18	04/21/17 14:32	1
Molybdenum	0.973		0.509	0.139	mg/Kg	☼	04/21/17 10:18	04/21/17 14:32	1
Nickel	19.8		1.02	0.119	mg/Kg	☼	04/21/17 10:18	04/21/17 14:32	1
Potassium	1400		102	11.2	mg/Kg	☼	04/21/17 10:18	04/21/17 14:32	1
Selenium	0.264	U	2.04	0.264	mg/Kg	☼	04/21/17 10:18	04/21/17 14:32	1
Sodium	3410	B	102	0.902	mg/Kg	☼	04/21/17 10:18	04/21/17 14:32	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0167	J	0.0196	0.00413	mg/Kg	☼	04/11/17 12:17	04/13/17 10:46	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.1		1.0	1.0	%			04/11/17 15:37	1
Percent Solids	83.9		1.0	1.0	%			04/11/17 15:37	1

Client Sample ID: SJRP-SB16-14-15-04102017

Lab Sample ID: 600-146488-5
Date Collected: 04/10/17 11:15
Matrix: Solid
Date Received: 04/11/17 10:19
Percent Solids: 80.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000560	U	0.00444	0.000560	mg/Kg	☼	04/11/17 14:07	04/12/17 22:33	1
Ethylbenzene	0.000906	U	0.00444	0.000906	mg/Kg	☼	04/11/17 14:07	04/12/17 22:33	1
Toluene	0.00123	U	0.00444	0.00123	mg/Kg	☼	04/11/17 14:07	04/12/17 22:33	1
Xylenes, Total	0.00100	U	0.00444	0.00100	mg/Kg	☼	04/11/17 14:07	04/12/17 22:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*170*	*X*	*61 - 130*	*04/11/17 14:07*	*04/12/17 22:33*	*1*
Dibromofluoromethane	*161*	*X*	*68 - 140*	*04/11/17 14:07*	*04/12/17 22:33*	*1*
Toluene-d8 (Surr)	*115*		*50 - 130*	*04/11/17 14:07*	*04/12/17 22:33*	*1*
4-Bromofluorobenzene	*114*		*57 - 140*	*04/11/17 14:07*	*04/12/17 22:33*	*1*

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.40	U	4.81	2.40	mg/Kg		04/14/17 08:32	04/17/17 15:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*69*		*50 - 150*	*04/14/17 08:32*	*04/17/17 15:19*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3.10	U	6.19	3.10	mg/Kg	☼	04/17/17 11:16	04/17/17 17:16	1
ORO C24-C40	**4.66**	**J**	6.19	3.10	mg/Kg	☼	04/17/17 11:16	04/17/17 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*99*		*50 - 150*	*04/17/17 11:16*	*04/17/17 17:16*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**13900**		27.7	0.333	mg/Kg	☼	04/21/17 10:18	04/21/17 14:34	1
Arsenic	**3.02**		1.11	0.242	mg/Kg	☼	04/21/17 10:18	04/21/17 14:34	1
Barium	**103**		1.11	0.0333	mg/Kg	☼	04/21/17 10:18	04/21/17 14:34	1
Boron	**1.98**	**J**	22.2	0.428	mg/Kg	☼	04/21/17 10:18	04/21/17 14:34	1
Cadmium	**0.0832**	**J**	0.277	0.0284	mg/Kg	☼	04/21/17 10:18	04/21/17 14:34	1
Calcium	**4850**		111	0.959	mg/Kg	☼	04/21/17 10:18	04/21/17 14:34	1
Chromium	**9.65**		0.555	0.0562	mg/Kg	☼	04/21/17 10:18	04/21/17 14:34	1
Cobalt	**7.51**		0.555	0.0750	mg/Kg	☼	04/21/17 10:18	04/21/17 14:34	1
Iron	**20600**		22.2	2.81	mg/Kg	☼	04/21/17 10:18	04/21/17 14:34	1
Lead	**10.4**		0.555	0.117	mg/Kg	☼	04/21/17 10:18	04/21/17 14:34	1
Magnesium	**3950**		111	2.13	mg/Kg	☼	04/21/17 10:18	04/21/17 14:34	1
Manganese	**138**	**B**	1.66	0.0423	mg/Kg	☼	04/21/17 10:18	04/21/17 14:34	1
Molybdenum	**0.954**		0.555	0.151	mg/Kg	☼	04/21/17 10:18	04/21/17 14:34	1
Nickel	**9.08**		1.11	0.130	mg/Kg	☼	04/21/17 10:18	04/21/17 14:34	1
Potassium	**1260**		111	12.2	mg/Kg	☼	04/21/17 10:18	04/21/17 14:34	1
Selenium	0.287	U	2.22	0.287	mg/Kg	☼	04/21/17 10:18	04/21/17 14:34	1
Sodium	**4790**	**B**	111	0.983	mg/Kg	☼	04/21/17 10:18	04/21/17 14:34	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00767**	**J**	0.0195	0.00411	mg/Kg	☼	04/11/17 12:17	04/13/17 10:47	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**19.5**		1.0	1.0	%			04/11/17 15:37	1
Percent Solids	**80.5**		1.0	1.0	%			04/11/17 15:37	1

Client Sample ID: SJRP-SB16-20-21-04102017 — **Lab Sample ID: 600-146488-6**
Date Collected: 04/10/17 11:35 — **Matrix: Solid**
Date Received: 04/11/17 10:19 — **Percent Solids: 84.0**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000537	U	0.00426	0.000537	mg/Kg	☼	04/11/17 14:07	04/12/17 23:01	1
Ethylbenzene	0.000869	U	0.00426	0.000869	mg/Kg	☼	04/11/17 14:07	04/12/17 23:01	1
Toluene	0.00118	U	0.00426	0.00118	mg/Kg	☼	04/11/17 14:07	04/12/17 23:01	1
Xylenes, Total	0.000963	U	0.00426	0.000963	mg/Kg	☼	04/11/17 14:07	04/12/17 23:01	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Client Sample ID: SJRP-SB16-20-21-04102017
Date Collected: 04/10/17 11:35
Date Received: 04/11/17 10:19

Lab Sample ID: 600-146488-6
Matrix: Solid
Percent Solids: 84.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	151	X	61 - 130	04/11/17 14:07	04/12/17 23:01	1
Dibromofluoromethane	148	X	68 - 140	04/11/17 14:07	04/12/17 23:01	1
Toluene-d8 (Surr)	118		50 - 130	04/11/17 14:07	04/12/17 23:01	1
4-Bromofluorobenzene	113		57 - 140	04/11/17 14:07	04/12/17 23:01	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.19	U	4.39	2.19	mg/Kg		04/14/17 08:32	04/17/17 15:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	65		50 - 150	04/14/17 08:32	04/17/17 15:49	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.96	U	5.92	2.96	mg/Kg	☼	04/15/17 09:25	04/17/17 16:24	1
ORO C24-C40	2.96	U	5.92	2.96	mg/Kg	☼	04/15/17 09:25	04/17/17 16:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	52		50 - 150	04/15/17 09:25	04/17/17 16:24	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	13800		27.8	0.334	mg/Kg	☼	04/21/17 10:18	04/21/17 14:36	1
Arsenic	3.00		1.11	0.243	mg/Kg	☼	04/21/17 10:18	04/21/17 14:36	1
Barium	49.4		1.11	0.0334	mg/Kg	☼	04/21/17 10:18	04/21/17 14:36	1
Boron	1.61	J	22.3	0.429	mg/Kg	☼	04/21/17 10:18	04/21/17 14:36	1
Cadmium	0.395		0.278	0.0285	mg/Kg	☼	04/21/17 10:18	04/21/17 14:36	1
Calcium	5540		111	0.961	mg/Kg	☼	04/21/17 10:18	04/21/17 14:36	1
Chromium	7.12		0.556	0.0563	mg/Kg	☼	04/21/17 10:18	04/21/17 14:36	1
Cobalt	18.3		0.556	0.0752	mg/Kg	☼	04/21/17 10:18	04/21/17 14:36	1
Iron	20800		22.3	2.81	mg/Kg	☼	04/21/17 10:18	04/21/17 14:36	1
Lead	10.9		0.556	0.117	mg/Kg	☼	04/21/17 10:18	04/21/17 14:36	1
Magnesium	4360		111	2.14	mg/Kg	☼	04/21/17 10:18	04/21/17 14:36	1
Manganese	317	B	1.67	0.0424	mg/Kg	☼	04/21/17 10:18	04/21/17 14:36	1
Molybdenum	0.612		0.556	0.151	mg/Kg	☼	04/21/17 10:18	04/21/17 14:36	1
Nickel	19.9		1.11	0.130	mg/Kg	☼	04/21/17 10:18	04/21/17 14:36	1
Potassium	1250		111	12.2	mg/Kg	☼	04/21/17 10:18	04/21/17 14:36	1
Selenium	0.288	U	2.23	0.288	mg/Kg	☼	04/21/17 10:18	04/21/17 14:36	1
Sodium	3510	B	111	0.986	mg/Kg	☼	04/21/17 10:18	04/21/17 14:36	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0190		0.0190	0.00400	mg/Kg	☼	04/14/17 09:52	04/17/17 11:05	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.0		1.0	1.0	%			04/11/17 15:37	1
Percent Solids	84.0		1.0	1.0	%			04/11/17 15:37	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Client Sample ID: SJRP-TB-04102017

Lab Sample ID: 600-146488-7
Date Collected: 04/10/17 11:45
Matrix: Water
Date Received: 04/11/17 10:19

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/12/17 14:33	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/12/17 14:33	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/12/17 14:33	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/12/17 14:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*50 - 134*		*04/12/17 14:33*	*1*
Dibromofluoromethane	*88*		*62 - 130*		*04/12/17 14:33*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*04/12/17 14:33*	*1*
4-Bromofluorobenzene	*98*		*67 - 139*		*04/12/17 14:33*	*1*

Client Sample ID: SJRP-EB-04102017

Lab Sample ID: 600-146488-8
Date Collected: 04/10/17 10:45
Matrix: Water
Date Received: 04/11/17 10:19

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/12/17 15:02	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/12/17 15:02	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/12/17 15:02	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/12/17 15:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*50 - 134*		*04/12/17 15:02*	*1*
Dibromofluoromethane	*88*		*62 - 130*		*04/12/17 15:02*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*04/12/17 15:02*	*1*
4-Bromofluorobenzene	*94*		*67 - 139*		*04/12/17 15:02*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			04/14/17 14:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*50 - 150*		*04/14/17 14:03*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0843	U	0.0926	0.0843	mg/L		04/16/17 10:48	04/17/17 15:11	1
ORO C24-C40	0.0843	U	0.0926	0.0843	mg/L		04/16/17 10:48	04/17/17 15:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*48*	*X*	*50 - 150*	*04/16/17 10:48*	*04/17/17 15:11*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		04/13/17 09:11	04/14/17 11:09	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		04/13/17 09:11	04/14/17 11:09	1
Barium	0.000530	U	0.0200	0.000530	mg/L		04/13/17 09:11	04/14/17 11:09	1
Boron	0.0116	U	0.200	0.0116	mg/L		04/13/17 09:11	04/14/17 11:09	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		04/13/17 09:11	04/14/17 11:09	1
Calcium	**0.0413**	**J**	1.00	0.0240	mg/L		04/13/17 09:11	04/14/17 11:09	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Client Sample ID: SJRP-EB-04102017
Date Collected: 04/10/17 10:45
Date Received: 04/11/17 10:19

Lab Sample ID: 600-146488-8
Matrix: Water

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/13/17 09:11	04/14/17 11:09	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		04/13/17 09:11	04/14/17 11:09	1
Iron	0.0270	U	0.400	0.0270	mg/L		04/13/17 09:11	04/14/17 11:09	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/13/17 09:11	04/14/17 11:09	1
Magnesium	0.0555	U	1.00	0.0555	mg/L		04/13/17 09:11	04/14/17 11:09	1
Manganese	**0.000755**	**J**	0.0100	0.000360	mg/L		04/13/17 09:11	04/14/17 11:09	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		04/13/17 09:11	04/14/17 11:09	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		04/13/17 09:11	04/14/17 11:09	1
Potassium	0.0374	U	1.00	0.0374	mg/L		04/13/17 09:11	04/14/17 11:09	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/13/17 09:11	04/14/17 11:09	1
Sodium	**0.196**	**J**	1.00	0.0214	mg/L		04/13/17 09:11	04/14/17 11:09	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000820	U	0.000200	0.0000820	mg/L		04/12/17 12:22	04/13/17 13:02	1

Definitions/Glossary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F3	Duplicate RPD exceeds the control limit
U	Indicates the analyte was analyzed for but not detected.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(61-130)	(68-140)	(50-130)	(57-140)
600-146488-1	SJRP-SB18-14-15-04102017	166 X	143 X	107	121
600-146488-2	SJRP-SB-18-21-22-04102017	115	102	88	108
600-146488-3	SJRP-SB15-14-15-04102017	159 X	131	117	118
600-146488-4	SJRP-SB15-19-20-04102017	115	111	100	98
600-146488-5	SJRP-SB16-14-15-04102017	170 X	161 X	115	114
600-146488-6	SJRP-SB16-20-21-04102017	151 X	148 X	118	113
LCS 600-210593/4	Lab Control Sample	124	126	114	121
LCSD 600-210593/5	Lab Control Sample Dup	102	104	105	108
MB 600-210593/7	Method Blank	104	111	128	110

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(50-134)	(62-130)	(70-130)	(67-139)
600-146488-7	SJRP-TB-04102017	91	88	91	98
600-146488-8	SJRP-EB-04102017	91	88	91	94
LCS 600-210595/4	Lab Control Sample	93	93	88	100
LCSD 600-210595/5	Lab Control Sample Dup	92	92	89	96
MB 600-210595/7	Method Blank	90	91	90	96

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(50-150)
600-146488-1	SJRP-SB18-14-15-04102017	69
600-146488-2	SJRP-SB-18-21-22-04102017	70
600-146488-3	SJRP-SB15-14-15-04102017	65
600-146488-4	SJRP-SB15-19-20-04102017	70
600-146488-5	SJRP-SB16-14-15-04102017	69
600-146488-6	SJRP-SB16-20-21-04102017	65
LCS 490-422198/2-A	Lab Control Sample	86
LCSD 490-422198/3-A	Lab Control Sample Dup	89
MB 490-422198/1-A	Method Blank	69

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Surrogate Legend
TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT1
Lab Sample ID	Client Sample ID	(50-150)
600-146488-1 MS	SJRP-SB18-14-15-04102017	263 X
600-146488-1 MSD	SJRP-SB18-14-15-04102017	240 X

Surrogate Legend
TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(50-150)
600-146488-8	SJRP-EB-04102017	97
600-146488-8 MS	SJRP-EB-04102017	98
600-146488-8 MSD	SJRP-EB-04102017	98
LCS 490-422247/4	Lab Control Sample	96
LCSD 490-422247/5	Lab Control Sample Dup	95
MB 490-422247/6	Method Blank	96

Surrogate Legend
TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		OTPH1
Lab Sample ID	Client Sample ID	(50-150)
600-146488-1	SJRP-SB18-14-15-04102017	84
600-146488-2	SJRP-SB-18-21-22-04102017	97
600-146488-3	SJRP-SB15-14-15-04102017	86
600-146488-4	SJRP-SB15-19-20-04102017	76
600-146488-5	SJRP-SB16-14-15-04102017	99
600-146488-6	SJRP-SB16-20-21-04102017	52
LCS 490-422478/2-A	Lab Control Sample	79
MB 490-422478/1-A	Method Blank	101

Surrogate Legend
OTPH = o-Terphenyl (Surr)

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		OTPH1
Lab Sample ID	Client Sample ID	(50-150)
600-146488-8	SJRP-EB-04102017	48 X

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		OTPH1							
Lab Sample ID	Client Sample ID	(50-150)							
LCS 490-422543/2-A	Lab Control Sample	56							
LCSD 490-422543/3-A	Lab Control Sample Dup	62							
MB 490-422543/1-A	Method Blank	61							

Surrogate Legend

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-210593/7
Matrix: Solid
Analysis Batch: 210593

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			04/12/17 15:00	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			04/12/17 15:00	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			04/12/17 15:00	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			04/12/17 15:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*61 - 130*		*04/12/17 15:00*	*1*
Dibromofluoromethane	*111*		*68 - 140*		*04/12/17 15:00*	*1*
Toluene-d8 (Surr)	*128*		*50 - 130*		*04/12/17 15:00*	*1*
4-Bromofluorobenzene	*110*		*57 - 140*		*04/12/17 15:00*	*1*

Lab Sample ID: LCS 600-210593/4
Matrix: Solid
Analysis Batch: 210593

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.04965		mg/Kg		99	70 - 131		
Ethylbenzene			0.0500	0.04741		mg/Kg		95	66 - 130		
Toluene			0.0500	0.04810		mg/Kg		96	67 - 130		
Xylenes, Total			0.100	0.09855		mg/Kg		99	63 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*124*		*61 - 130*
Dibromofluoromethane	*126*		*68 - 140*
Toluene-d8 (Surr)	*114*		*50 - 130*
4-Bromofluorobenzene	*121*		*57 - 140*

Lab Sample ID: LCSD 600-210593/5
Matrix: Solid
Analysis Batch: 210593

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.04531		mg/Kg		91	70 - 131	9	30
Ethylbenzene			0.0500	0.04615		mg/Kg		92	66 - 130	3	30
Toluene			0.0500	0.04534		mg/Kg		91	67 - 130	6	30
Xylenes, Total			0.100	0.09418		mg/Kg		94	63 - 130	5	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*61 - 130*
Dibromofluoromethane	*104*		*68 - 140*
Toluene-d8 (Surr)	*105*		*50 - 130*
4-Bromofluorobenzene	*108*		*57 - 140*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-210595/7
Matrix: Water
Analysis Batch: 210595

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/12/17 14:05	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/12/17 14:05	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/12/17 14:05	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/12/17 14:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*50 - 134*		*04/12/17 14:05*	*1*
Dibromofluoromethane	*91*		*62 - 130*		*04/12/17 14:05*	*1*
Toluene-d8 (Surr)	*90*		*70 - 130*		*04/12/17 14:05*	*1*
4-Bromofluorobenzene	*96*		*67 - 139*		*04/12/17 14:05*	*1*

Lab Sample ID: LCS 600-210595/4
Matrix: Water
Analysis Batch: 210595

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0100	0.01014		mg/L		101	70 - 130		
Ethylbenzene			0.0100	0.009862		mg/L		99	70 - 130		
Toluene			0.0100	0.009535		mg/L		95	70 - 130		
Xylenes, Total			0.0200	0.01928		mg/L		96	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*50 - 134*
Dibromofluoromethane	*93*		*62 - 130*
Toluene-d8 (Surr)	*88*		*70 - 130*
4-Bromofluorobenzene	*100*		*67 - 139*

Lab Sample ID: LCSD 600-210595/5
Matrix: Water
Analysis Batch: 210595

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0100	0.009602		mg/L		96	70 - 130	5	20
Ethylbenzene			0.0100	0.009188		mg/L		92	70 - 130	7	20
Toluene			0.0100	0.009073		mg/L		91	70 - 130	5	20
Xylenes, Total			0.0200	0.01778		mg/L		89	70 - 130	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*50 - 134*
Dibromofluoromethane	*92*		*62 - 130*
Toluene-d8 (Surr)	*89*		*70 - 130*
4-Bromofluorobenzene	*96*		*67 - 139*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 490-422198/1-A
Matrix: Solid
Analysis Batch: 422579

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 422198

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		04/14/17 08:32	04/17/17 12:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*69*		*50 - 150*	*04/14/17 08:32*	*04/17/17 12:16*	*1*

Lab Sample ID: LCS 490-422198/2-A
Matrix: Solid
Analysis Batch: 422579

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 422198

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	500	523.0		mg/Kg		105	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*86*		*50 - 150*

Lab Sample ID: LCSD 490-422198/3-A
Matrix: Solid
Analysis Batch: 422579

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 422198

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	500	475.8		mg/Kg		95	70 - 130	9	21

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*89*		*50 - 150*

Lab Sample ID: 600-146488-1 MS
Matrix: Solid
Analysis Batch: 422581

Client Sample ID: SJRP-SB18-14-15-04102017
Prep Type: Total/NA
Prep Batch: 422198

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*263*	*X*	*50 - 150*

Lab Sample ID: 600-146488-1 MSD
Matrix: Solid
Analysis Batch: 422581

Client Sample ID: SJRP-SB18-14-15-04102017
Prep Type: Total/NA
Prep Batch: 422198

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*240*	*X*	*50 - 150*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: MB 490-422247/6
Matrix: Water
Analysis Batch: 422247

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			04/14/17 13:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*50 - 150*		*04/14/17 13:04*	*1*

Lab Sample ID: LCS 490-422247/4
Matrix: Water
Analysis Batch: 422247

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C6-C10			1.00	0.9369		mg/L		94	66 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*96*		*50 - 150*

Lab Sample ID: LCSD 490-422247/5
Matrix: Water
Analysis Batch: 422247

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10			1.00	0.9194		mg/L		92	66 - 140	2	42

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*95*		*50 - 150*

Lab Sample ID: 600-146488-8 MS
Matrix: Water
Analysis Batch: 422247

Client Sample ID: SJRP-EB-04102017
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	1.00	1.048		mg/L		105	33 - 175		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*98*		*50 - 150*

Lab Sample ID: 600-146488-8 MSD
Matrix: Water
Analysis Batch: 422247

Client Sample ID: SJRP-EB-04102017
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	1.00	1.124		mg/L		112	33 - 175	7	42

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: 600-146488-8 MSD
Matrix: Water
Analysis Batch: 422247

Client Sample ID: SJRP-EB-04102017
Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene	*98*		*50 - 150*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Lab Sample ID: MB 490-422478/1-A
Matrix: Solid
Analysis Batch: 422583

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 422478

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.50	U	5.00	2.50	mg/Kg		04/15/17 09:25	04/17/17 13:12	1
ORO C24-C40	2.50	U	5.00	2.50	mg/Kg		04/15/17 09:25	04/17/17 13:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	*101*		*50 - 150*	*04/15/17 09:25*	*04/17/17 13:12*	*1*

Lab Sample ID: LCS 490-422478/2-A
Matrix: Solid
Analysis Batch: 422583

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 422478

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	40.0	24.33		mg/Kg		61	54 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	*79*		*50 - 150*

Lab Sample ID: MB 490-422543/1-A
Matrix: Water
Analysis Batch: 422585

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 422543

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0910	U	0.100	0.0910	mg/L		04/16/17 10:48	04/17/17 14:09	1
ORO C24-C40	0.0910	U	0.100	0.0910	mg/L		04/16/17 10:48	04/17/17 14:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	*61*		*50 - 150*	*04/16/17 10:48*	*04/17/17 14:09*	*1*

Lab Sample ID: LCS 490-422543/2-A
Matrix: Water
Analysis Batch: 422585

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 422543

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	0.800	0.5870		mg/L		73	46 - 132

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Lab Sample ID: LCS 490-422543/2-A
Matrix: Water
Analysis Batch: 422585

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 422543

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	56		50 - 150

Lab Sample ID: LCSD 490-422543/3-A
Matrix: Water
Analysis Batch: 422585

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 422543

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			0.800	0.5889		mg/L		74	46 - 132	0	31

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o-Terphenyl (Surr)	62		50 - 150

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-210673/1-A
Matrix: Water
Analysis Batch: 210785

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210673

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		04/13/17 09:11	04/14/17 10:17	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		04/13/17 09:11	04/14/17 10:17	1
Barium	0.000530	U	0.0200	0.000530	mg/L		04/13/17 09:11	04/14/17 10:17	1
Boron	0.0116	U	0.200	0.0116	mg/L		04/13/17 09:11	04/14/17 10:17	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		04/13/17 09:11	04/14/17 10:17	1
Calcium	0.0240	U	1.00	0.0240	mg/L		04/13/17 09:11	04/14/17 10:17	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/13/17 09:11	04/14/17 10:17	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		04/13/17 09:11	04/14/17 10:17	1
Iron	0.0270	U	0.400	0.0270	mg/L		04/13/17 09:11	04/14/17 10:17	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/13/17 09:11	04/14/17 10:17	1
Magnesium	0.0555	U	1.00	0.0555	mg/L		04/13/17 09:11	04/14/17 10:17	1
Manganese	0.000360	U	0.0100	0.000360	mg/L		04/13/17 09:11	04/14/17 10:17	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		04/13/17 09:11	04/14/17 10:17	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		04/13/17 09:11	04/14/17 10:17	1
Potassium	0.0374	U	1.00	0.0374	mg/L		04/13/17 09:11	04/14/17 10:17	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/13/17 09:11	04/14/17 10:17	1

Lab Sample ID: LCS 600-210673/2-A
Matrix: Water
Analysis Batch: 210785

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210673

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum			10.0	10.28		mg/L		103	80 - 120
Arsenic			1.00	1.033		mg/L		103	80 - 120
Barium			1.00	1.032		mg/L		103	80 - 120
Boron			1.00	1.026		mg/L		103	80 - 120
Cadmium			0.500	0.5185		mg/L		104	80 - 120

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCS 600-210673/2-A
Matrix: Water
Analysis Batch: 210785

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210673

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	10.0	10.42		mg/L		104	80 - 120
Chromium	1.00	1.027		mg/L		103	80 - 120
Cobalt	1.00	1.033		mg/L		103	80 - 120
Iron	10.0	10.48		mg/L		105	80 - 120
Lead	1.00	1.043		mg/L		104	80 - 120
Magnesium	10.0	10.28		mg/L		103	80 - 120
Manganese	1.00	1.049		mg/L		105	80 - 120
Molybdenum	1.00	1.041		mg/L		104	80 - 120
Nickel	1.00	1.041		mg/L		104	80 - 120
Potassium	10.0	10.97		mg/L		110	80 - 120
Selenium	1.00	1.051		mg/L		105	80 - 120

Lab Sample ID: MB 600-211265/1-A
Matrix: Solid
Analysis Batch: 211319

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 211265

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.300	U	25.0	0.300	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Barium	0.0300	U	1.00	0.0300	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Boron	0.386	U	20.0	0.386	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Calcium	0.864	U	100	0.864	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Cobalt	0.0676	U	0.500	0.0676	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Iron	2.53	U	20.0	2.53	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Lead	0.105	U	0.500	0.105	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Magnesium	1.92	U	100	1.92	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Manganese	0.1050	J	1.50	0.0381	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Molybdenum	0.136	U	0.500	0.136	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Nickel	0.117	U	1.00	0.117	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Potassium	11.0	U	100	11.0	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Selenium	0.259	U	2.00	0.259	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Sodium	2.975	J	100	0.886	mg/Kg		04/21/17 10:18	04/21/17 14:17	1

Lab Sample ID: LCSSRM 600-211265/2-A
Matrix: Solid
Analysis Batch: 211319

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211265

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	7590	7288		mg/Kg		96.0	34.9 - 151.5
Arsenic	97.5	99.08		mg/Kg		101.6	69.2 - 145.6
Barium	306	289.3		mg/Kg		94.5	82.7 - 117.0
Boron	116	115.0		mg/Kg		99.1	73.0 - 127.6
Cadmium	76.6	81.12		mg/Kg		105.9	73.2 - 126.8

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-211265/2-A
Matrix: Solid
Analysis Batch: 211319

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211265

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	5880	5990		mg/Kg		101.9	81.8 - 118.4
Chromium	103	98.95		mg/Kg		96.1	79.7 - 121.4
Cobalt	103	110.2		mg/Kg		107.0	83.3 - 116.5
Iron	14500	14180		mg/Kg		97.8	45.0 - 155.9
Lead	96.7	97.43		mg/Kg		100.8	81.7 - 117.9
Magnesium	2680	2510		mg/Kg		93.7	75.4 - 124.6
Manganese	400	364.4		mg/Kg		91.1	81.0 - 119.0
Molybdenum	94.9	98.91		mg/Kg		104.2	78.5 - 121.2
Nickel	153	164.7		mg/Kg		107.6	73.2 - 126.8
Potassium	2230	2101		mg/Kg		94.2	69.5 - 130.5
Selenium	161	166.5		mg/Kg		103.4	77.6 - 123.0
Sodium	370	347.5		mg/Kg		93.9	70.5 - 129.7

Lab Sample ID: 600-146488-1 MS
Matrix: Solid
Analysis Batch: 211319

Client Sample ID: SJRP-SB18-14-15-04102017
Prep Type: Total/NA
Prep Batch: 211265

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	16200		584	18280	4	mg/Kg	☼	361	75 - 125
Arsenic	5.98		58.4	59.13		mg/Kg	☼	91	75 - 125
Barium	161	F1	58.4	136.8	F1	mg/Kg	☼	-41	75 - 125
Boron	1.62	J F1	58.4	34.15	F1	mg/Kg	☼	56	75 - 125
Cadmium	0.186	J	29.2	29.11		mg/Kg	☼	99	75 - 125
Calcium	2290	F1	584	3035	F1	mg/Kg	☼	128	75 - 125
Chromium	7.36		58.4	60.77		mg/Kg	☼	91	75 - 125
Cobalt	6.98		58.4	66.78		mg/Kg	☼	102	75 - 125
Iron	21300		584	19920	4	mg/Kg	☼	-232	75 - 125
Lead	19.3		58.4	73.80		mg/Kg	☼	93	75 - 125
Magnesium	4390		584	5214	4	mg/Kg	☼	141	75 - 125
Manganese	112	B	58.4	162.5		mg/Kg	☼	87	75 - 125
Molybdenum	1.40		58.4	51.80		mg/Kg	☼	86	75 - 125
Nickel	13.0		58.4	71.69		mg/Kg	☼	100	75 - 125
Potassium	1590		584	2081		mg/Kg	☼	84	75 - 125
Selenium	0.309	J	58.4	54.13		mg/Kg	☼	92	75 - 125
Sodium	4690	B	584	5620	4	mg/Kg	☼	160	75 - 125

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-146488-1 DU
Matrix: Solid
Analysis Batch: 211319

Client Sample ID: SJRP-SB18-14-15-04102017
Prep Type: Total/NA
Prep Batch: 211265

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Aluminum	16200			15510		mg/Kg	☼			4	20
Arsenic	5.98			4.764	F3	mg/Kg	☼			23	20
Barium	161	F1		83.35	F3	mg/Kg	☼			63	20
Boron	1.62	J F1		1.468	J	mg/Kg	☼			10	20
Cadmium	0.186	J		0.1777	J	mg/Kg	☼			4	20
Calcium	2290	F1		2283		mg/Kg	☼			0.3	20
Chromium	7.36			6.856		mg/Kg	☼			7	20
Cobalt	6.98			7.315		mg/Kg	☼			5	20
Iron	21300			19710		mg/Kg	☼			8	20
Lead	19.3			16.99		mg/Kg	☼			13	20
Magnesium	4390			4247		mg/Kg	☼			3	20
Manganese	112	B		114.3		mg/Kg	☼			2	20
Molybdenum	1.40			0.7911	F3	mg/Kg	☼			56	20
Nickel	13.0			13.35		mg/Kg	☼			2	20
Potassium	1590			1494		mg/Kg	☼			6	20
Selenium	0.309	J		0.297	U	mg/Kg	☼			NC	20
Sodium	4690	B		4741		mg/Kg	☼			1	20

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Lab Sample ID: LB 600-210566/1-D
Matrix: Water
Analysis Batch: 210730

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210604

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000820	U	0.000200	0.0000820	mg/L		04/12/17 12:22	04/13/17 12:39	1

Lab Sample ID: MB 600-210604/7-A
Matrix: Water
Analysis Batch: 210730

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210604

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000820	U	0.000200	0.0000820	mg/L		04/12/17 12:22	04/13/17 12:10	1

Lab Sample ID: LCS 600-210604/8-A
Matrix: Water
Analysis Batch: 210730

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210604

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00300	0.003067		mg/L		102	70 - 130		

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-210506/7-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 210702 — **Prep Batch: 210506**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00325	U	0.0155	0.00325	mg/Kg		04/11/17 12:17	04/13/17 09:52	1

Lab Sample ID: LCSSRM 600-210506/8-A ^100 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 210702 — **Prep Batch: 210506**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	20.2	25.54		mg/Kg		126.4	70.8 - 129.2

Lab Sample ID: MB 600-210775/7-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 210908 — **Prep Batch: 210775**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00336	U	0.0159	0.00336	mg/Kg		04/14/17 09:52	04/17/17 11:01	1

Lab Sample ID: LCSSRM 600-210775/8-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 210908 — **Prep Batch: 210775**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	20.2	24.63		mg/Kg		121.9	70.8 - 129.2

Lab Sample ID: 600-146488-6 MS — **Client Sample ID: SJRP-SB16-20-21-04102017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 210908 — **Prep Batch: 210775**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0190		0.288	0.3183		mg/Kg	☼	104	75 - 125

Lab Sample ID: 600-146488-6 DU — **Client Sample ID: SJRP-SB16-20-21-04102017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 210908 — **Prep Batch: 210775**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.0190		0.01508	J F5	mg/Kg	☼	23	20

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

GC/MS VOA

Analysis Batch: 210593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146488-1	SJRP-SB18-14-15-04102017	Total/NA	Solid	8260B	210634
600-146488-2	SJRP-SB-18-21-22-04102017	Total/NA	Solid	8260B	210634
600-146488-3	SJRP-SB15-14-15-04102017	Total/NA	Solid	8260B	210634
600-146488-4	SJRP-SB15-19-20-04102017	Total/NA	Solid	8260B	210634
600-146488-5	SJRP-SB16-14-15-04102017	Total/NA	Solid	8260B	210634
600-146488-6	SJRP-SB16-20-21-04102017	Total/NA	Solid	8260B	210634
MB 600-210593/7	Method Blank	Total/NA	Solid	8260B	
LCS 600-210593/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-210593/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 210595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146488-7	SJRP-TB-04102017	Total/NA	Water	8260B	
600-146488-8	SJRP-EB-04102017	Total/NA	Water	8260B	
MB 600-210595/7	Method Blank	Total/NA	Water	8260B	
LCS 600-210595/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-210595/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Prep Batch: 210634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146488-1	SJRP-SB18-14-15-04102017	Total/NA	Solid	5035	
600-146488-2	SJRP-SB-18-21-22-04102017	Total/NA	Solid	5035	
600-146488-3	SJRP-SB15-14-15-04102017	Total/NA	Solid	5035	
600-146488-4	SJRP-SB15-19-20-04102017	Total/NA	Solid	5035	
600-146488-5	SJRP-SB16-14-15-04102017	Total/NA	Solid	5035	
600-146488-6	SJRP-SB16-20-21-04102017	Total/NA	Solid	5035	

GC VOA

Prep Batch: 422198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146488-1	SJRP-SB18-14-15-04102017	Total/NA	Solid	5030B	
600-146488-2	SJRP-SB-18-21-22-04102017	Total/NA	Solid	5030B	
600-146488-3	SJRP-SB15-14-15-04102017	Total/NA	Solid	5030B	
600-146488-4	SJRP-SB15-19-20-04102017	Total/NA	Solid	5030B	
600-146488-5	SJRP-SB16-14-15-04102017	Total/NA	Solid	5030B	
600-146488-6	SJRP-SB16-20-21-04102017	Total/NA	Solid	5030B	
MB 490-422198/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 490-422198/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 490-422198/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
600-146488-1 MS	SJRP-SB18-14-15-04102017	Total/NA	Solid	5030B	
600-146488-1 MSD	SJRP-SB18-14-15-04102017	Total/NA	Solid	5030B	

Analysis Batch: 422247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146488-8	SJRP-EB-04102017	Total/NA	Water	8015C	
MB 490-422247/6	Method Blank	Total/NA	Water	8015C	
LCS 490-422247/4	Lab Control Sample	Total/NA	Water	8015C	
LCSD 490-422247/5	Lab Control Sample Dup	Total/NA	Water	8015C	
600-146488-8 MS	SJRP-EB-04102017	Total/NA	Water	8015C	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

GC VOA (Continued)

Analysis Batch: 422247 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146488-8 MSD	SJRP-EB-04102017	Total/NA	Water	8015C	

Analysis Batch: 422579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146488-1	SJRP-SB18-14-15-04102017	Total/NA	Solid	8015C	422198
600-146488-2	SJRP-SB-18-21-22-04102017	Total/NA	Solid	8015C	422198
600-146488-3	SJRP-SB15-14-15-04102017	Total/NA	Solid	8015C	422198
600-146488-4	SJRP-SB15-19-20-04102017	Total/NA	Solid	8015C	422198
600-146488-5	SJRP-SB16-14-15-04102017	Total/NA	Solid	8015C	422198
600-146488-6	SJRP-SB16-20-21-04102017	Total/NA	Solid	8015C	422198
MB 490-422198/1-A	Method Blank	Total/NA	Solid	8015C	422198
LCS 490-422198/2-A	Lab Control Sample	Total/NA	Solid	8015C	422198
LCSD 490-422198/3-A	Lab Control Sample Dup	Total/NA	Solid	8015C	422198

Analysis Batch: 422581

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146488-1 MS	SJRP-SB18-14-15-04102017	Total/NA	Solid	8015C	422198
600-146488-1 MSD	SJRP-SB18-14-15-04102017	Total/NA	Solid	8015C	422198

GC Semi VOA

Prep Batch: 422478

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146488-1	SJRP-SB18-14-15-04102017	Total/NA	Solid	3550C	
600-146488-2	SJRP-SB-18-21-22-04102017	Total/NA	Solid	3550C	
600-146488-3	SJRP-SB15-14-15-04102017	Total/NA	Solid	3550C	
600-146488-4	SJRP-SB15-19-20-04102017	Total/NA	Solid	3550C	
600-146488-5	SJRP-SB16-14-15-04102017	Total/NA	Solid	3550C	
600-146488-6	SJRP-SB16-20-21-04102017	Total/NA	Solid	3550C	
MB 490-422478/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-422478/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Prep Batch: 422543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146488-8	SJRP-EB-04102017	Total/NA	Water	3510C	
MB 490-422543/1-A	Method Blank	Total/NA	Water	3510C	
LCS 490-422543/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 490-422543/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 422583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146488-1	SJRP-SB18-14-15-04102017	Total/NA	Solid	8015C	422478
600-146488-2	SJRP-SB-18-21-22-04102017	Total/NA	Solid	8015C	422478
600-146488-3	SJRP-SB15-14-15-04102017	Total/NA	Solid	8015C	422478
600-146488-4	SJRP-SB15-19-20-04102017	Total/NA	Solid	8015C	422478
600-146488-5	SJRP-SB16-14-15-04102017	Total/NA	Solid	8015C	422478
600-146488-6	SJRP-SB16-20-21-04102017	Total/NA	Solid	8015C	422478
MB 490-422478/1-A	Method Blank	Total/NA	Solid	8015C	422478
LCS 490-422478/2-A	Lab Control Sample	Total/NA	Solid	8015C	422478

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

GC Semi VOA (Continued)

Analysis Batch: 422585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146488-8	SJRP-EB-04102017	Total/NA	Water	8015C	422543
MB 490-422543/1-A	Method Blank	Total/NA	Water	8015C	422543
LCS 490-422543/2-A	Lab Control Sample	Total/NA	Water	8015C	422543
LCSD 490-422543/3-A	Lab Control Sample Dup	Total/NA	Water	8015C	422543

Metals

Prep Batch: 210506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146488-1	SJRP-SB18-14-15-04102017	Total/NA	Solid	7471A	
600-146488-2	SJRP-SB-18-21-22-04102017	Total/NA	Solid	7471A	
600-146488-3	SJRP-SB15-14-15-04102017	Total/NA	Solid	7471A	
600-146488-4	SJRP-SB15-19-20-04102017	Total/NA	Solid	7471A	
600-146488-5	SJRP-SB16-14-15-04102017	Total/NA	Solid	7471A	
MB 600-210506/7-A	Method Blank	Total/NA	Solid	7471A	
LCSSRM 600-210506/8-A ^100	Lab Control Sample	Total/NA	Solid	7471A	

Leach Batch: 210566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 600-210566/1-D	Method Blank	Total/NA	Water	1311	

Prep Batch: 210604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146488-8	SJRP-EB-04102017	Total/NA	Water	7470A	
LB 600-210566/1-D	Method Blank	Total/NA	Water	7470A	210566
MB 600-210604/7-A	Method Blank	Total/NA	Water	7470A	
LCS 600-210604/8-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 210673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146488-8	SJRP-EB-04102017	Total/NA	Water	3010A	
MB 600-210673/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-210673/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 210702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146488-1	SJRP-SB18-14-15-04102017	Total/NA	Solid	7471A	210506
600-146488-2	SJRP-SB-18-21-22-04102017	Total/NA	Solid	7471A	210506
600-146488-3	SJRP-SB15-14-15-04102017	Total/NA	Solid	7471A	210506
600-146488-4	SJRP-SB15-19-20-04102017	Total/NA	Solid	7471A	210506
600-146488-5	SJRP-SB16-14-15-04102017	Total/NA	Solid	7471A	210506
MB 600-210506/7-A	Method Blank	Total/NA	Solid	7471A	210506
LCSSRM 600-210506/8-A ^100	Lab Control Sample	Total/NA	Solid	7471A	210506

Analysis Batch: 210730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146488-8	SJRP-EB-04102017	Total/NA	Water	7470A	210604
LB 600-210566/1-D	Method Blank	Total/NA	Water	7470A	210604
MB 600-210604/7-A	Method Blank	Total/NA	Water	7470A	210604
LCS 600-210604/8-A	Lab Control Sample	Total/NA	Water	7470A	210604

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Metals (Continued)

Prep Batch: 210775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146488-6	SJRP-SB16-20-21-04102017	Total/NA	Solid	7471A	
MB 600-210775/7-A	Method Blank	Total/NA	Solid	7471A	
LCSSRM 600-210775/8-A	Lab Control Sample	Total/NA	Solid	7471A	
600-146488-6 MS	SJRP-SB16-20-21-04102017	Total/NA	Solid	7471A	
600-146488-6 DU	SJRP-SB16-20-21-04102017	Total/NA	Solid	7471A	

Analysis Batch: 210785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146488-8	SJRP-EB-04102017	Total/NA	Water	6010B	210673
MB 600-210673/1-A	Method Blank	Total/NA	Water	6010B	210673
LCS 600-210673/2-A	Lab Control Sample	Total/NA	Water	6010B	210673

Analysis Batch: 210908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146488-6	SJRP-SB16-20-21-04102017	Total/NA	Solid	7471A	210775
MB 600-210775/7-A	Method Blank	Total/NA	Solid	7471A	210775
LCSSRM 600-210775/8-A	Lab Control Sample	Total/NA	Solid	7471A	210775
600-146488-6 MS	SJRP-SB16-20-21-04102017	Total/NA	Solid	7471A	210775
600-146488-6 DU	SJRP-SB16-20-21-04102017	Total/NA	Solid	7471A	210775

Prep Batch: 211265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146488-1	SJRP-SB18-14-15-04102017	Total/NA	Solid	3050B	
600-146488-2	SJRP-SB-18-21-22-04102017	Total/NA	Solid	3050B	
600-146488-3	SJRP-SB15-14-15-04102017	Total/NA	Solid	3050B	
600-146488-4	SJRP-SB15-19-20-04102017	Total/NA	Solid	3050B	
600-146488-5	SJRP-SB16-14-15-04102017	Total/NA	Solid	3050B	
600-146488-6	SJRP-SB16-20-21-04102017	Total/NA	Solid	3050B	
MB 600-211265/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-211265/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-146488-1 MS	SJRP-SB18-14-15-04102017	Total/NA	Solid	3050B	
600-146488-1 DU	SJRP-SB18-14-15-04102017	Total/NA	Solid	3050B	

Analysis Batch: 211319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146488-1	SJRP-SB18-14-15-04102017	Total/NA	Solid	6010B	211265
600-146488-2	SJRP-SB-18-21-22-04102017	Total/NA	Solid	6010B	211265
600-146488-3	SJRP-SB15-14-15-04102017	Total/NA	Solid	6010B	211265
600-146488-4	SJRP-SB15-19-20-04102017	Total/NA	Solid	6010B	211265
600-146488-5	SJRP-SB16-14-15-04102017	Total/NA	Solid	6010B	211265
600-146488-6	SJRP-SB16-20-21-04102017	Total/NA	Solid	6010B	211265
MB 600-211265/1-A	Method Blank	Total/NA	Solid	6010B	211265
LCSSRM 600-211265/2-A	Lab Control Sample	Total/NA	Solid	6010B	211265
600-146488-1 MS	SJRP-SB18-14-15-04102017	Total/NA	Solid	6010B	211265
600-146488-1 DU	SJRP-SB18-14-15-04102017	Total/NA	Solid	6010B	211265

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

General Chemistry

Analysis Batch: 210531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146488-1	SJRP-SB18-14-15-04102017	Total/NA	Solid	2540B	
600-146488-2	SJRP-SB-18-21-22-04102017	Total/NA	Solid	2540B	
600-146488-3	SJRP-SB15-14-15-04102017	Total/NA	Solid	2540B	
600-146488-4	SJRP-SB15-19-20-04102017	Total/NA	Solid	2540B	
600-146488-5	SJRP-SB16-14-15-04102017	Total/NA	Solid	2540B	
600-146488-6	SJRP-SB16-20-21-04102017	Total/NA	Solid	2540B	

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Client Sample ID: SJRP-SB18-14-15-04102017 — **Lab Sample ID: 600-146488-1**
Date Collected: 04/10/17 08:34 — **Matrix: Solid**
Date Received: 04/11/17 10:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.29 g	5.0 mL	422198	04/14/17 08:32	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	422579	04/17/17 13:17	A1B	TAL NSH
Total/NA	Analysis	2540B		1			210531	04/11/17 15:37	B1K	TAL HOU

Client Sample ID: SJRP-SB18-14-15-04102017 — **Lab Sample ID: 600-146488-1**
Date Collected: 04/10/17 08:34 — **Matrix: Solid**
Date Received: 04/11/17 10:19 — **Percent Solids: 82.3**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			12.863 g	5 mL	210634	04/11/17 14:07	KLV	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210593	04/12/17 20:40	KLV	TAL HOU
Total/NA	Prep	3550C			25.59 g	1.00 mL	422478	04/15/17 09:25	MNM	TAL NSH
Total/NA	Analysis	8015C		1			422583	04/17/17 16:42	GMH	TAL NSH
Total/NA	Prep	3050B			1.08 g	50 mL	211265	04/21/17 10:18	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211319	04/21/17 14:21	DCL	TAL HOU
Total/NA	Prep	7471A			.60 g	50 mL	210506	04/11/17 12:17	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210702	04/13/17 10:40	DDE	TAL HOU

Client Sample ID: SJRP-SB-18-21-22-04102017 — **Lab Sample ID: 600-146488-2**
Date Collected: 04/10/17 08:48 — **Matrix: Solid**
Date Received: 04/11/17 10:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.26 g	5.0 mL	422198	04/14/17 08:32	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	422579	04/17/17 13:47	A1B	TAL NSH
Total/NA	Analysis	2540B		1			210531	04/11/17 15:37	B1K	TAL HOU

Client Sample ID: SJRP-SB-18-21-22-04102017 — **Lab Sample ID: 600-146488-2**
Date Collected: 04/10/17 08:48 — **Matrix: Solid**
Date Received: 04/11/17 10:19 — **Percent Solids: 85.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.048 g	5 mL	210634	04/11/17 14:07	KLV	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210593	04/12/17 21:08	KLV	TAL HOU
Total/NA	Prep	3550C			25.34 g	1.00 mL	422478	04/17/17 11:16	MNM	TAL NSH
Total/NA	Analysis	8015C		1			422583	04/17/17 16:59	GMH	TAL NSH
Total/NA	Prep	3050B			1.03 g	50 mL	211265	04/21/17 10:18	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211319	04/21/17 14:27	DCL	TAL HOU
Total/NA	Prep	7471A			.63 g	50 mL	210506	04/11/17 12:17	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210702	04/13/17 10:42	DDE	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Client Sample ID: SJRP-SB15-14-15-04102017 — Lab Sample ID: 600-146488-3

Date Collected: 04/10/17 09:45 — **Matrix: Solid**
Date Received: 04/11/17 10:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.34 g	5.0 mL	422198	04/14/17 08:32	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	422579	04/17/17 14:18	A1B	TAL NSH
Total/NA	Analysis	2540B		1			210531	04/11/17 15:37	B1K	TAL HOU

Client Sample ID: SJRP-SB15-14-15-04102017 — Lab Sample ID: 600-146488-3

Date Collected: 04/10/17 09:45 — **Matrix: Solid**
Date Received: 04/11/17 10:19 — **Percent Solids: 82.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.935 g	5 mL	210634	04/11/17 14:07	KLV	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210593	04/12/17 21:37	KLV	TAL HOU
Total/NA	Prep	3550C			25.46 g	1.00 mL	422478	04/15/17 09:25	MNM	TAL NSH
Total/NA	Analysis	8015C		1			422583	04/17/17 15:49	GMH	TAL NSH
Total/NA	Prep	3050B			1.05 g	50 mL	211265	04/21/17 10:18	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211319	04/21/17 14:29	DCL	TAL HOU
Total/NA	Prep	7471A			.65 g	50 mL	210506	04/11/17 12:17	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210702	04/13/17 10:44	DDE	TAL HOU

Client Sample ID: SJRP-SB15-19-20-04102017 — Lab Sample ID: 600-146488-4

Date Collected: 04/10/17 09:55 — **Matrix: Solid**
Date Received: 04/11/17 10:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.09 g	5.0 mL	422198	04/14/17 08:32	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	422579	04/17/17 14:48	A1B	TAL NSH
Total/NA	Analysis	2540B		1			210531	04/11/17 15:37	B1K	TAL HOU

Client Sample ID: SJRP-SB15-19-20-04102017 — Lab Sample ID: 600-146488-4

Date Collected: 04/10/17 09:55 — **Matrix: Solid**
Date Received: 04/11/17 10:19 — **Percent Solids: 83.9**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.919 g	5 mL	210634	04/11/17 14:07	KLV	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210593	04/12/17 22:05	KLV	TAL HOU
Total/NA	Prep	3550C			25.07 g	1.00 mL	422478	04/15/17 09:25	MNM	TAL NSH
Total/NA	Analysis	8015C		1			422583	04/17/17 16:06	GMH	TAL NSH
Total/NA	Prep	3050B			1.17 g	50 mL	211265	04/21/17 10:18	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211319	04/21/17 14:32	DCL	TAL HOU
Total/NA	Prep	7471A			.62 g	50 mL	210506	04/11/17 12:17	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210702	04/13/17 10:46	DDE	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Client Sample ID: SJRP-SB16-14-15-04102017 — **Lab Sample ID: 600-146488-5**
Date Collected: 04/10/17 11:15 — **Matrix: Solid**
Date Received: 04/11/17 10:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.20 g	5.0 mL	422198	04/14/17 08:32	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	422579	04/17/17 15:19	A1B	TAL NSH
Total/NA	Analysis	2540B		1			210531	04/11/17 15:37	B1K	TAL HOU

Client Sample ID: SJRP-SB16-14-15-04102017 — **Lab Sample ID: 600-146488-5**
Date Collected: 04/10/17 11:15 — **Matrix: Solid**
Date Received: 04/11/17 10:19 — **Percent Solids: 80.5**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.993 g	5 mL	210634	04/11/17 14:07	KLV	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210593	04/12/17 22:33	KLV	TAL HOU
Total/NA	Prep	3550C			25.08 g	1.00 mL	422478	04/17/17 11:16	MNM	TAL NSH
Total/NA	Analysis	8015C		1			422583	04/17/17 17:16	GMH	TAL NSH
Total/NA	Prep	3050B			1.12 g	50 mL	211265	04/21/17 10:18	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211319	04/21/17 14:34	DCL	TAL HOU
Total/NA	Prep	7471A			.65 g	50 mL	210506	04/11/17 12:17	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210702	04/13/17 10:47	DDE	TAL HOU

Client Sample ID: SJRP-SB16-20-21-04102017 — **Lab Sample ID: 600-146488-6**
Date Collected: 04/10/17 11:35 — **Matrix: Solid**
Date Received: 04/11/17 10:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.70 g	5.0 mL	422198	04/14/17 08:32	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	422579	04/17/17 15:49	A1B	TAL NSH
Total/NA	Analysis	2540B		1			210531	04/11/17 15:37	B1K	TAL HOU

Client Sample ID: SJRP-SB16-20-21-04102017 — **Lab Sample ID: 600-146488-6**
Date Collected: 04/10/17 11:35 — **Matrix: Solid**
Date Received: 04/11/17 10:19 — **Percent Solids: 84.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.985 g	5 mL	210634	04/11/17 14:07	KLV	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210593	04/12/17 23:01	KLV	TAL HOU
Total/NA	Prep	3550C			25.14 g	1.00 mL	422478	04/15/17 09:25	MNM	TAL NSH
Total/NA	Analysis	8015C		1			422583	04/17/17 16:24	GMH	TAL NSH
Total/NA	Prep	3050B			1.07 g	50 mL	211265	04/21/17 10:18	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211319	04/21/17 14:36	DCL	TAL HOU
Total/NA	Prep	7471A			.64 g	50 mL	210775	04/14/17 09:52	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210908	04/17/17 11:05	DDE	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Client Sample ID: SJRP-TB-04102017

Lab Sample ID: 600-146488-7

Date Collected: 04/10/17 11:45
Matrix: Water
Date Received: 04/11/17 10:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	210595	04/12/17 14:33	KLV	TAL HOU

Client Sample ID: SJRP-EB-04102017

Lab Sample ID: 600-146488-8

Date Collected: 04/10/17 10:45
Matrix: Water
Date Received: 04/11/17 10:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	210595	04/12/17 15:02	KLV	TAL HOU
Total/NA	Analysis	8015C		1	5 mL	5 mL	422247	04/14/17 14:03	GWM	TAL NSH
Total/NA	Prep	3510C			270 mL	1 mL	422543	04/16/17 10:48	JKG	TAL NSH
Total/NA	Analysis	8015C		1			422585	04/17/17 15:11	GMH	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	210673	04/13/17 09:11	JAH	TAL HOU
Total/NA	Analysis	6010B		1			210785	04/14/17 11:09	DCL	TAL HOU
Total/NA	Prep	7470A			40 mL	40 mL	210604	04/12/17 12:22	DDE	TAL HOU
Total/NA	Analysis	7470A		1			210730	04/13/17 13:02	DDE	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146488-1

Laboratory: TestAmerica Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	16-046-0	08-04-17
Louisiana	NELAP	6	01967	06-30-17
Oklahoma	State Program	6	2015-050	08-31-17
Texas	NELAP	6	T104704223-17-21	10-31-17
USDA	Federal		P330-14-00192	06-06-17

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	A2LA		NA: NELAP & A2LA	12-31-17
A2LA	ISO/IEC 17025		0453.07	12-31-17
Alaska (UST)	State Program	10	UST-087	09-01-17
Arizona	State Program	9	AZ0473	05-05-17
Arkansas DEQ	State Program	6	88-0737	04-25-17 *
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-17
Florida	NELAP	4	E87358	06-30-17
Georgia	State Program	4	N/A	12-31-17
Illinois	NELAP	5	200010	12-09-17
Iowa	State Program	7	131	04-01-18
Kansas	NELAP	7	E-10229	10-31-17
Kentucky (UST)	State Program	4	19	06-30-17
Kentucky (WW)	State Program	4	90038	12-31-17
Louisiana	NELAP	6	30613	06-30-17
Maine	State Program	1	TN00032	11-03-17
Maryland	State Program	3	316	03-31-18
Massachusetts	State Program	1	M-TN032	06-30-17
Minnesota	NELAP	5	047-999-345	12-31-17
Mississippi	State Program	4	N/A	06-30-17
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-17
New Hampshire	NELAP	1	2963	10-09-17
New Jersey	NELAP	2	TN965	06-30-17
New York	NELAP	2	11342	03-31-18
North Carolina (WW/SW)	State Program	4	387	12-31-17
North Dakota	State Program	8	R-146	06-30-17
Ohio VAP	State Program	5	CL0033	07-10-17
Oklahoma	State Program	6	9412	08-31-17
Oregon	NELAP	10	TN200001	04-27-17 *
Pennsylvania	NELAP	3	68-00585	06-30-17
Rhode Island	State Program	1	LAO00268	12-30-17
South Carolina	State Program	4	84009 (001)	02-18-17 *
South Carolina (Do Not Use - DW)	State Program	4	84009 (002)	12-16-17
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-17
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-17
Virginia	NELAP	3	460152	06-14-17
Washington	State Program	10	C789	07-19-17

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc. TestAmerica Job ID: 600-146488-1
Project/Site: San Juan Site Characterization

Laboratory: TestAmerica Nashville (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
West Virginia DEP	State Program	3	219	02-28-18
Wisconsin	State Program	5	998020430	08-31-17
Wyoming (UST)	A2LA	8	453.07	12-31-17

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica

Client Information	Sampler: Katherine Morris	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-52002-15345.10
Client Contact: Jeffrey Minchak	Phone: 9043826573	E-Mail: cathy.upton@testamericainc.com		Page: Page 10 of 10
Company: CH2M Hill, Inc.				Job #:
Address: 3721 Rutledge Rd. NE Suite B-1	Due Date Requested:			
City: Albuquerque	TAT Requested (days):			
State, Zip: NM, 87109				
Phone: 281-721-8546(Tel)	PO #: Purchase Order Requested			
Email: Jeffrey.Minchak@ch2m.com	WO #: WD225383			
Project Name: Kinder Morgan Bloomfield, NM San Juan	Project #: 60005961-Analysis group BTEX/GRO/DRO/Metals			
Site: San Juan Site Characterization	SSOW#:			

Analysis Requested — Dallas . Ft Worth

560501

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO - Diesel and Oil Range Organics	8015C_GRO - GRO Range (C6-C10)	6010B, 7471A - NMWQCC List Metals	8260B - 5035 BTEX	Moisture	Waters	6010B, 7470A - NMWQCC List Metals	8260B_LL - BTEX Only	8015C_GRO - GRO Range (C6-C10)	8015C_DRO - Diesel and Oil Range Organics	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	N	N	N	N		D	A	A	N	X	
STRP-SB18-14-15-04102017	4/10/17	834	G	Solid	N	N	X	X	X	X								
STRP-SB18-21-22-04102017	4/10/17	848	G	Solid	N	N	X	X	X	X								2 Coolers
STRP-SB15-14-15-04102017	4/10/17	945	G	Solid	N	N	X	X	X	X								
STRP-SB15-19-20-04102017	4/10/17	955	G	Solid	N	N	X	X	X	X								-
STRP-SB16-14-15-04102017	4/10/17	1115	G	Solid	N	N	X	X	X	X								
STRP-SB16-20-21-0410-2017	4/10/17	1135	G	Solid	N	N	X	X	X	X								
			G	Solid														
			G	Solid														
			G	Solid														
STRP-TB-04102017	4/10/17	1145	G	Solid											X			
STRP-FB-04102017	4/10/17	1045	G	Water									X	X	X	X		

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

600-146488 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 mont
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Mo

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 4/10/17 1300	Company	Received by:	Date/Time: 4/11/17 1019	Company TH
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Loc: 600
146488

TestAmerica Houston
TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Receipt Checklist

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Date/Time Received: '17APR11 10:19

JOB NUMBER: _____ CLIENT: CH2M

UNPACKED BY: SJ CARRIER/DRIVER: Fed Ex

Custody Seal Present: ☒ YES ☐ NO Number of Coolers Received: 2

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Them CF	Corrected Temp (°C)
B/W	Y / N	Y / N	2.2	549	-0.3	1.9
R/W	X / N	Y / N	0.4	549	-0.3	0.1
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N		SJ		
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☒ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☒ YES ☐ NO

pH paper Lot #_____

VOA headspace acceptable (5-6mm): ☒ YES ☐ NO ☐ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X	

COMMENTS:

FedEx
TRK# 0221 6025 5771 6066

SJ 4/11/17

SJ 4/11/17

HS-SA-WI-013 Rev. 3; 07/01/2014

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

600-146488 Chain of Custody

Cooler Received/Opened On 4/13/2017 @ 0945

Time Samples Removed From Cooler_____ Time Samples Placed In Storage_____ (2 Hour Window)

1. Tracking # 5383 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 17960357 pH Strip Lot_____ Chlorine Strip Lot_____

2. Temperature of rep. sample or temp blank when opened: 3.0 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where:_____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) DA

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA DA 4-13-17

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) DA

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA DA 4-13-17

18. Did you sign the custody papers in the appropriate place? YES...NO...NA DA 4-13-17

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) DA

I certify that I attached a label with the unique LIMS number to each container (intial) DA

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...# 600-188853

DA 4-13-17

BIS = Broken in shipment

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TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-26404.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: cathy.upton@testamericainc.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):		Job #: 600-146488-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 4/21/2017			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: San Juan Site Characterization	Project #: 60005961			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO/3550C DRO/ORO	8015C_GRO/5030B_SolidNAC GRO Range (C6-C10)	8015C_DRO/3510C_LVI DRO/ORO	8015C_GRO/5030B GRO Range (C6-C10)	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
SJRP-SB18-14-15-04102017 (600-146488-1)	4/10/17	08:34 Mountain		Solid			X	X			2	
SJRP-SB-18-21-22-04102017 (600-146488-2)	4/10/17	08:48 Mountain		Solid			X	X			2	
SJRP-SB15-14-15-04102017 (600-146488-3)	4/10/17	09:45 Mountain		Solid			X	X			2	
SJRP-SB15-19-20-04102017 (600-146488-4)	4/10/17	09:55 Mountain		Solid			X	X			2	
SJRP-SB16-14-15-04102017 (600-146488-5)	4/10/17	11:15 Mountain		Solid			X	X			2	
SJRP-SB16-20-21-04102017 (600-146488-6)	4/10/17	11:35 Mountain		Solid			X	X			2	
SJRP-EB-04102017 (600-146488-8)	4/10/17	10:45 Mountain		Water					X	X	6	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 4/13/17 1200	Company	Received by:	Date/Time: 4-13-17 0945	Company TAN	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.7

12/7/2020 (Rev. 1)
Page 45 of 50
Received by OCD: 11/13/2025 11:14:36 AM
Released to Imaging: 11/14/2025 9:30:04 AM

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

Loc: 600
146488

COOLER RECEIPT FORM

Cooler Received/Opened On 4/13/2017 @ 0945

Time Samples Removed From Cooler 1704 Time Samples Placed In Storage_____ (2 Hour Window)

1. Tracking # 5545 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 17960357 pH Strip Lot_____ Chlorine Strip Lot_____

2. Temperature of rep. sample or temp blank when opened: 1.7 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where:_____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) _____

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES..NO..NA DA 4-13-17

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) DA

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) DA

I certify that I attached a label with the unique LIMS number to each container (intial) DA

21. Were there Non-Conformance issues at login? YES..NO Was a NCM generated? YES..NO..#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 12/15/15

12/7/2020 (Rev. 1)

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc. Job Number: 600-146488-1

Login Number: 146488 **List Source: TestAmerica Houston**
List Number: 1
Creator: Justus, Sherry E

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	1.9, 0.1
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-146488-1

Login Number: 146488
List Number: 2
Creator: Armstrong, Daniel

List Source: TestAmerica Nashville
List Creation: 04/13/17 02:43 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.0C
COC is present.	False	Refer to Job Narrative for details.
COC is filled out in ink and legible.	N/A	
COC is filled out with all pertinent information.	N/A	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-146488-1

Login Number: 146488
List Number: 3
Creator: Armstrong, Daniel

List Source: TestAmerica Nashville
List Creation: 04/13/17 02:47 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.0C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-146488-1

Login Number: 146488
List Number: 4
Creator: Armstrong, Daniel

List Source: TestAmerica Nashville
List Creation: 04/13/17 06:25 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.7C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-146590-1
Client Project/Site: San Juan Site Characterization
Revision: 1

For:
CH2M Hill Constructors, Inc.
14701 St. Mary's Lane
Suite 300
Houston, Texas 77079-2923

Attn: Mr. John Ynfante

Steve A Stepanski

Authorized for release by:
12/7/2020 4:36:15 PM
Steve Stepanski, Project Mgmt. Assistant
(713)690-4444
steve.stepanski@Eurofinset.com

Designee for

Cathy Upton, Project Manager I
(713)690-4444
cathy.upton@testamericainc.com

LINKS
Review your project results through TotalAccess
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Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

Job ID: 600-146590-1

Job ID: 600-146590-1

Laboratory: TestAmerica Houston

Narrative

CASE NARRATIVE

Client: CH2M Hill Constructors, Inc.

Project: San Juan Site Characterization

Report Number: 600-146590-1

COMMENT
This report was revised to a Level 2 deliverable per client's request.

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
Note: All samples that require thermal preservation are considered acceptable if the arrival temperature is within 2°C of the required temperature or method specified range. For samples with a specified temperature of 4°C, samples with a temperature ranging from just above freezing temperature of water to 6°C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

The samples were received on 04/12/2017; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 3.0º C, 3.1º C and 3.8º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)-Soil
Samples SJRP-SB07-14-15-04112017 (600-146590-1), SJRP-SB07-14-15-04112017 dup (600-146590-2), SJRP-SB07-20-21-04112017 (600-146590-3), SJRP-MW14-15-16-04102017 (600-146590-4), SJRP-MW14-20-21-04102017 (600-146590-5), SJRP-MW14-25-26-04102017 (600-146590-6), SJRP-SB12-19-20-04102017 (600-146590-7), SJRP-SB12-25-26-04102017 (600-146590-8), SJRP-SB04-14-15-04112017 (600-146590-9), SJRP-SB04-19-20-04112017 (600-146590-10), SJRP-SB08-13-14-04112017 (600-146590-12), SJRP-SB08-29-30-04112017 (600-146590-13), SJRP-SB03-10-11-04112017 (600-146590-14) and SJRP-SB03-13-14-04112017 (600-146590-15) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were prepared on 04/12/2017 and analyzed on 04/13/2017, 04/18/2017 and 04/19/2017.

The following samples were not frozen within the holding time due to laboratory oversight of the fact that some of the samples were collected on 4/10/17: SJRP-MW14-15-16-04102017 (600-146590-4), SJRP-MW14-20-21-04102017 (600-146590-5), SJRP-MW14-25-26-04102017 (600-146590-6) and SJRP-SB12-19-20-04102017 (600-146590-7).

Internal standard (1,4-Dichlorobenzene-d4) response for the following sample was outside acceptance criteria: SJRP-SB08-29-30-04112017 (600-146590-13). This ISTD does not correspond to any of the requested target compounds; therefore, the data have been reported.

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-146590-1
Project/Site: San Juan Site Characterization

Job ID: 600-146590-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GC-MS)-Water
Sample SJRP-TB-04112017 (600-146590-11) was analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/17/2017.

The following volatile sample was analyzed with significant headspace in the sample vial(s): SJRP-TB-04112017 (600-146590-11). Significant headspace is defined as a bubble greater than 6 mm in diameter.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GASOLINE RANGE ORGANICS (GRO)
Samples SJRP-SB07-14-15-04112017 (600-146590-1), SJRP-SB07-14-15-04112017 dup (600-146590-2), SJRP-SB07-20-21-04112017 (600-146590-3), SJRP-MW14-15-16-04102017 (600-146590-4), SJRP-MW14-20-21-04102017 (600-146590-5), SJRP-MW14-25-26-04102017 (600-146590-6), SJRP-SB12-19-20-04102017 (600-146590-7), SJRP-SB12-25-26-04102017 (600-146590-8), SJRP-SB04-14-15-04112017 (600-146590-9), SJRP-SB04-19-20-04112017 (600-146590-10), SJRP-SB08-13-14-04112017 (600-146590-12), SJRP-SB08-29-30-04112017 (600-146590-13), SJRP-SB03-10-11-04112017 (600-146590-14) and SJRP-SB03-13-14-04112017 (600-146590-15) were analyzed for gasoline range organics (GRO) in accordance with EPA SW-846 Method 8015C - GRO. The samples were analyzed on 04/22/2017.

Gasoline Range Organics (GRO)-C6-C10 exceeded the RPD limit for the MSD of sample SJRP-SB07-14-15-04112017MSD (600-146590-1) in batch 490-424225.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DIESEL RANGE ORGANICS (DRO)
Samples SJRP-SB07-14-15-04112017 (600-146590-1), SJRP-SB07-14-15-04112017 dup (600-146590-2), SJRP-SB07-20-21-04112017 (600-146590-3), SJRP-MW14-15-16-04102017 (600-146590-4), SJRP-MW14-20-21-04102017 (600-146590-5), SJRP-MW14-25-26-04102017 (600-146590-6), SJRP-SB12-19-20-04102017 (600-146590-7), SJRP-SB12-25-26-04102017 (600-146590-8), SJRP-SB04-14-15-04112017 (600-146590-9), SJRP-SB04-19-20-04112017 (600-146590-10), SJRP-SB08-13-14-04112017 (600-146590-12), SJRP-SB08-29-30-04112017 (600-146590-13), SJRP-SB03-10-11-04112017 (600-146590-14) and SJRP-SB03-13-14-04112017 (600-146590-15) were analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 04/16/2017 and analyzed on 04/19/2017 and 04/20/2017.

Sample SJRP-SB08-13-14-04112017 (600-146590-12)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)
Samples SJRP-SB07-14-15-04112017 (600-146590-1), SJRP-SB07-14-15-04112017 dup (600-146590-2), SJRP-SB07-20-21-04112017 (600-146590-3), SJRP-MW14-15-16-04102017 (600-146590-4), SJRP-MW14-20-21-04102017 (600-146590-5), SJRP-MW14-25-26-04102017 (600-146590-6), SJRP-SB12-19-20-04102017 (600-146590-7), SJRP-SB12-25-26-04102017 (600-146590-8), SJRP-SB04-14-15-04112017 (600-146590-9), SJRP-SB04-19-20-04112017 (600-146590-10), SJRP-SB08-13-14-04112017 (600-146590-12), SJRP-SB08-29-30-04112017 (600-146590-13), SJRP-SB03-10-11-04112017 (600-146590-14) and SJRP-SB03-13-14-04112017 (600-146590-15) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared and analyzed on 04/21/2017.

Manganese and Sodium were detected in method blank MB 600-211265/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-146590-1
Project/Site: San Juan Site Characterization

Job ID: 600-146590-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

Refer to the QC report for details.

Due to the high concentration of target analytes, sample SJRP-SB03-13-14-04112017MS (600-146590-15) in batch 600-211319 could not be evaluated for accuracy. The associated laboratory control sample (LCS) met acceptance criteria.

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

Arsenic and Calcium exceeded the RPD limit for the duplicate of sample SJRP-SB03-13-14-04112017DU (600-146590-15).

Refer to the QC report for details.

Samples SJRP-SB07-14-15-04112017 (600-146590-1)[5X], SJRP-SB07-14-15-04112017 dup (600-146590-2)[5X] and SJRP-MW14-15-16-04102017 (600-146590-4)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY

Samples SJRP-SB07-14-15-04112017 (600-146590-1), SJRP-SB07-14-15-04112017 dup (600-146590-2), SJRP-SB07-20-21-04112017 (600-146590-3), SJRP-MW14-15-16-04102017 (600-146590-4), SJRP-MW14-20-21-04102017 (600-146590-5), SJRP-MW14-25-26-04102017 (600-146590-6), SJRP-SB12-19-20-04102017 (600-146590-7), SJRP-SB12-25-26-04102017 (600-146590-8), SJRP-SB04-14-15-04112017 (600-146590-9), SJRP-SB04-19-20-04112017 (600-146590-10), SJRP-SB08-13-14-04112017 (600-146590-12), SJRP-SB08-29-30-04112017 (600-146590-13), SJRP-SB03-10-11-04112017 (600-146590-14) and SJRP-SB03-13-14-04112017 (600-146590-15) were analyzed for total mercury in accordance with EPA SW-846 Method 7471A. The samples were prepared on 04/14/2017 and analyzed on 04/17/2017.

Mercury exceeded the RPD limit for the duplicate of sample SJRP-SB03-13-14-04112017DU (600-146590-15).

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PERCENT SOLIDS

Samples SJRP-SB07-14-15-04112017 (600-146590-1), SJRP-SB07-14-15-04112017 dup (600-146590-2), SJRP-SB07-20-21-04112017 (600-146590-3), SJRP-MW14-15-16-04102017 (600-146590-4), SJRP-MW14-20-21-04102017 (600-146590-5), SJRP-MW14-25-26-04102017 (600-146590-6), SJRP-SB12-19-20-04102017 (600-146590-7), SJRP-SB12-25-26-04102017 (600-146590-8), SJRP-SB04-14-15-04112017 (600-146590-9), SJRP-SB04-19-20-04112017 (600-146590-10), SJRP-SB08-13-14-04112017 (600-146590-12), SJRP-SB08-29-30-04112017 (600-146590-13), SJRP-SB03-10-11-04112017 (600-146590-14) and SJRP-SB03-13-14-04112017 (600-146590-15) were analyzed for percent solids in accordance with EPA SW846 Method 3550C. The samples were analyzed on 04/14/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL NSH
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL NSH
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU

Protocol References:

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-146590-1	SJRP-SB07-14-15-04112017	Solid	04/11/17 08:30	04/12/17 10:03
600-146590-2	SJRP-SB07-14-15-04112017 dup	Solid	04/11/17 08:30	04/12/17 10:03
600-146590-3	SJRP-SB07-20-21-04112017	Solid	04/11/17 08:45	04/12/17 10:03
600-146590-4	SJRP-MW14-15-16-04102017	Solid	04/10/17 13:45	04/12/17 10:03
600-146590-5	SJRP-MW14-20-21-04102017	Solid	04/10/17 14:05	04/12/17 10:03
600-146590-6	SJRP-MW14-25-26-04102017	Solid	04/10/17 14:15	04/12/17 10:03
600-146590-7	SJRP-SB12-19-20-04102017	Solid	04/10/17 15:07	04/12/17 10:03
600-146590-8	SJRP-SB12-25-26-04102017	Solid	04/10/17 16:15	04/12/17 10:03
600-146590-9	SJRP-SB04-14-15-04112017	Solid	04/11/17 09:45	04/12/17 10:03
600-146590-10	SJRP-SB04-19-20-04112017	Solid	04/11/17 09:58	04/12/17 10:03
600-146590-11	SJRP-TB-04112017	Water	04/11/17 08:35	04/12/17 10:03
600-146590-12	SJRP-SB08-13-14-04112017	Solid	04/11/17 11:45	04/12/17 10:03
600-146590-13	SJRP-SB08-29-30-04112017	Solid	04/11/17 12:20	04/12/17 10:03
600-146590-14	SJRP-SB03-10-11-04112017	Solid	04/11/17 13:25	04/12/17 10:03
600-146590-15	SJRP-SB03-13-14-04112017	Solid	04/11/17 13:35	04/12/17 10:03

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Client Sample ID: SJRP-SB07-14-15-04112017
Date Collected: 04/11/17 08:30
Date Received: 04/12/17 10:03

Lab Sample ID: 600-146590-1
Matrix: Solid
Percent Solids: 87.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000894	U	0.00709	0.000894	mg/Kg	☼	04/12/17 16:30	04/13/17 13:20	1
Ethylbenzene	**0.00880**		0.00709	0.00145	mg/Kg	☼	04/12/17 16:30	04/13/17 13:20	1
Toluene	0.00196	U	0.00709	0.00196	mg/Kg	☼	04/12/17 16:30	04/13/17 13:20	1
Xylenes, Total	**0.00910**		0.00709	0.00160	mg/Kg	☼	04/12/17 16:30	04/13/17 13:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*61 - 130*	*04/12/17 16:30*	*04/13/17 13:20*	*1*
Dibromofluoromethane	*96*		*68 - 140*	*04/12/17 16:30*	*04/13/17 13:20*	*1*
Toluene-d8 (Surr)	*93*		*50 - 130*	*04/12/17 16:30*	*04/13/17 13:20*	*1*
4-Bromofluorobenzene	*107*		*57 - 140*	*04/12/17 16:30*	*04/13/17 13:20*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.84	U	5.68	2.84	mg/Kg	☼	04/17/17 13:49	04/22/17 14:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*69*		*50 - 150*	*04/17/17 13:49*	*04/22/17 14:22*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**3.55**	**J**	5.53	2.77	mg/Kg	☼	04/16/17 13:32	04/19/17 17:14	1
ORO C24-C40	**6.05**		5.53	2.77	mg/Kg	☼	04/16/17 13:32	04/19/17 17:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*90*		*50 - 150*	*04/16/17 13:32*	*04/19/17 17:14*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**15600**		25.0	0.300	mg/Kg	☼	04/21/17 10:18	04/21/17 14:44	1
Arsenic	**7.09**		0.999	0.218	mg/Kg	☼	04/21/17 10:18	04/21/17 14:44	1
Barium	**436**		4.99	0.150	mg/Kg	☼	04/21/17 10:18	04/21/17 17:48	5
Boron	**0.999**	**J**	20.0	0.385	mg/Kg	☼	04/21/17 10:18	04/21/17 14:44	1
Cadmium	**0.345**		0.250	0.0256	mg/Kg	☼	04/21/17 10:18	04/21/17 14:44	1
Calcium	**5660**		99.9	0.863	mg/Kg	☼	04/21/17 10:18	04/21/17 14:44	1
Chromium	**8.01**		0.499	0.0505	mg/Kg	☼	04/21/17 10:18	04/21/17 14:44	1
Cobalt	**11.1**		0.499	0.0675	mg/Kg	☼	04/21/17 10:18	04/21/17 14:44	1
Iron	**27400**		20.0	2.53	mg/Kg	☼	04/21/17 10:18	04/21/17 14:44	1
Lead	**13.6**		0.499	0.105	mg/Kg	☼	04/21/17 10:18	04/21/17 14:44	1
Magnesium	**3720**		99.9	1.92	mg/Kg	☼	04/21/17 10:18	04/21/17 14:44	1
Manganese	**204**	**B**	1.50	0.0380	mg/Kg	☼	04/21/17 10:18	04/21/17 14:44	1
Molybdenum	**2.91**		0.499	0.136	mg/Kg	☼	04/21/17 10:18	04/21/17 14:44	1
Nickel	**29.6**		0.999	0.117	mg/Kg	☼	04/21/17 10:18	04/21/17 14:44	1
Potassium	**1230**		99.9	11.0	mg/Kg	☼	04/21/17 10:18	04/21/17 14:44	1
Selenium	0.259	U	2.00	0.259	mg/Kg	☼	04/21/17 10:18	04/21/17 14:44	1
Sodium	**2930**	**B**	99.9	0.885	mg/Kg	☼	04/21/17 10:18	04/21/17 14:44	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0327**		0.0194	0.00408	mg/Kg	☼	04/14/17 09:52	04/17/17 11:29	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Client Sample ID: SJRP-SB07-14-15-04112017

Lab Sample ID: 600-146590-1
Date Collected: 04/11/17 08:30
Matrix: Solid
Date Received: 04/12/17 10:03
Percent Solids: 87.8

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**12.2**		1.0	1.0	%			04/14/17 16:07	1
Percent Solids	**87.8**		1.0	1.0	%			04/14/17 16:07	1

Client Sample ID: SJRP-SB07-14-15-04112017 dup

Lab Sample ID: 600-146590-2
Date Collected: 04/11/17 08:30
Matrix: Solid
Date Received: 04/12/17 10:03
Percent Solids: 87.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000767	U	0.00609	0.000767	mg/Kg	☼	04/12/17 16:30	04/13/17 13:44	1
Ethylbenzene	**0.00747**		0.00609	0.00124	mg/Kg	☼	04/12/17 16:30	04/13/17 13:44	1
Toluene	0.00168	U	0.00609	0.00168	mg/Kg	☼	04/12/17 16:30	04/13/17 13:44	1
Xylenes, Total	**0.00890**		0.00609	0.00138	mg/Kg	☼	04/12/17 16:30	04/13/17 13:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*61 - 130*	*04/12/17 16:30*	*04/13/17 13:44*	*1*
Dibromofluoromethane	*92*		*68 - 140*	*04/12/17 16:30*	*04/13/17 13:44*	*1*
Toluene-d8 (Surr)	*96*		*50 - 130*	*04/12/17 16:30*	*04/13/17 13:44*	*1*
4-Bromofluorobenzene	*106*		*57 - 140*	*04/12/17 16:30*	*04/13/17 13:44*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.01	U	6.02	3.01	mg/Kg	☼	04/17/17 13:49	04/22/17 14:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*66*		*50 - 150*	*04/17/17 13:49*	*04/22/17 14:52*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**20.1**		5.62	2.81	mg/Kg	☼	04/16/17 13:32	04/19/17 17:30	1
ORO C24-C40	**3.98**	**J**	5.62	2.81	mg/Kg	☼	04/16/17 13:32	04/19/17 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*100*		*50 - 150*	*04/16/17 13:32*	*04/19/17 17:30*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**15100**		24.7	0.296	mg/Kg	☼	04/21/17 10:18	04/21/17 14:46	1
Arsenic	**11.9**		0.987	0.215	mg/Kg	☼	04/21/17 10:18	04/21/17 14:46	1
Barium	**348**		4.94	0.148	mg/Kg	☼	04/21/17 10:18	04/21/17 17:50	5
Boron	**1.74**	**J**	19.7	0.381	mg/Kg	☼	04/21/17 10:18	04/21/17 14:46	1
Cadmium	**0.163**	**J**	0.247	0.0253	mg/Kg	☼	04/21/17 10:18	04/21/17 14:46	1
Calcium	**7110**		98.7	0.853	mg/Kg	☼	04/21/17 10:18	04/21/17 14:46	1
Chromium	**8.21**		0.494	0.0500	mg/Kg	☼	04/21/17 10:18	04/21/17 14:46	1
Cobalt	**10.6**		0.494	0.0667	mg/Kg	☼	04/21/17 10:18	04/21/17 14:46	1
Iron	**26400**		19.7	2.50	mg/Kg	☼	04/21/17 10:18	04/21/17 14:46	1
Lead	**14.6**		0.494	0.104	mg/Kg	☼	04/21/17 10:18	04/21/17 14:46	1
Magnesium	**3630**		98.7	1.90	mg/Kg	☼	04/21/17 10:18	04/21/17 14:46	1
Manganese	**167**	**B**	1.48	0.0376	mg/Kg	☼	04/21/17 10:18	04/21/17 14:46	1
Molybdenum	**2.88**		0.494	0.134	mg/Kg	☼	04/21/17 10:18	04/21/17 14:46	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Client Sample ID: SJRP-SB07-14-15-04112017 dup

Lab Sample ID: 600-146590-2
Date Collected: 04/11/17 08:30
Matrix: Solid
Date Received: 04/12/17 10:03
Percent Solids: 87.3

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	18.0		0.987	0.116	mg/Kg	☼	04/21/17 10:18	04/21/17 14:46	1
Potassium	1930		98.7	10.9	mg/Kg	☼	04/21/17 10:18	04/21/17 14:46	1
Selenium	0.256	U	1.97	0.256	mg/Kg	☼	04/21/17 10:18	04/21/17 14:46	1
Sodium	4190	B	98.7	0.875	mg/Kg	☼	04/21/17 10:18	04/21/17 14:46	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0367		0.0180	0.00378	mg/Kg	☼	04/14/17 09:52	04/17/17 11:31	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.7		1.0	1.0	%			04/14/17 16:07	1
Percent Solids	87.3		1.0	1.0	%			04/14/17 16:07	1

Client Sample ID: SJRP-SB07-20-21-04112017

Lab Sample ID: 600-146590-3
Date Collected: 04/11/17 08:45
Matrix: Solid
Date Received: 04/12/17 10:03
Percent Solids: 81.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000720	U	0.00571	0.000720	mg/Kg	☼	04/12/17 16:30	04/13/17 14:09	1
Ethylbenzene	0.00175	J	0.00571	0.00117	mg/Kg	☼	04/12/17 16:30	04/13/17 14:09	1
Toluene	0.00158	U	0.00571	0.00158	mg/Kg	☼	04/12/17 16:30	04/13/17 14:09	1
Xylenes, Total	0.00129	U	0.00571	0.00129	mg/Kg	☼	04/12/17 16:30	04/13/17 14:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*61 - 130*	*04/12/17 16:30*	*04/13/17 14:09*	*1*
Dibromofluoromethane	*93*		*68 - 140*	*04/12/17 16:30*	*04/13/17 14:09*	*1*
Toluene-d8 (Surr)	*98*		*50 - 130*	*04/12/17 16:30*	*04/13/17 14:09*	*1*
4-Bromofluorobenzene	*106*		*57 - 140*	*04/12/17 16:30*	*04/13/17 14:09*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.22	U	6.45	3.22	mg/Kg	☼	04/17/17 13:49	04/22/17 15:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*66*		*50 - 150*	*04/17/17 13:49*	*04/22/17 15:22*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	19.9		6.11	3.06	mg/Kg	☼	04/16/17 13:32	04/19/17 17:47	1
ORO C24-C40	9.47		6.11	3.06	mg/Kg	☼	04/16/17 13:32	04/19/17 17:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*85*		*50 - 150*	*04/16/17 13:32*	*04/19/17 17:47*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19000		27.5	0.330	mg/Kg	☼	04/21/17 10:18	04/21/17 14:48	1
Arsenic	6.44		1.10	0.240	mg/Kg	☼	04/21/17 10:18	04/21/17 14:48	1
Barium	50.8		1.10	0.0330	mg/Kg	☼	04/21/17 10:18	04/21/17 14:48	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Client Sample ID: SJRP-SB07-20-21-04112017

Lab Sample ID: 600-146590-3
Date Collected: 04/11/17 08:45
Matrix: Solid
Date Received: 04/12/17 10:03
Percent Solids: 81.8

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1.94	J	22.0	0.425	mg/Kg	☼	04/21/17 10:18	04/21/17 14:48	1
Cadmium	0.149	J	0.275	0.0282	mg/Kg	☼	04/21/17 10:18	04/21/17 14:48	1
Calcium	2230		110	0.952	mg/Kg	☼	04/21/17 10:18	04/21/17 14:48	1
Chromium	8.39		0.551	0.0557	mg/Kg	☼	04/21/17 10:18	04/21/17 14:48	1
Cobalt	9.59		0.551	0.0745	mg/Kg	☼	04/21/17 10:18	04/21/17 14:48	1
Iron	23500		22.0	2.79	mg/Kg	☼	04/21/17 10:18	04/21/17 14:48	1
Lead	17.1		0.551	0.116	mg/Kg	☼	04/21/17 10:18	04/21/17 14:48	1
Magnesium	4500		110	2.11	mg/Kg	☼	04/21/17 10:18	04/21/17 14:48	1
Manganese	140	B	1.65	0.0420	mg/Kg	☼	04/21/17 10:18	04/21/17 14:48	1
Molybdenum	1.92		0.551	0.150	mg/Kg	☼	04/21/17 10:18	04/21/17 14:48	1
Nickel	15.2		1.10	0.129	mg/Kg	☼	04/21/17 10:18	04/21/17 14:48	1
Potassium	1780		110	12.1	mg/Kg	☼	04/21/17 10:18	04/21/17 14:48	1
Selenium	0.512	J	2.20	0.285	mg/Kg	☼	04/21/17 10:18	04/21/17 14:48	1
Sodium	6210	B	110	0.976	mg/Kg	☼	04/21/17 10:18	04/21/17 14:48	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0294		0.0198	0.00417	mg/Kg	☼	04/14/17 09:52	04/17/17 11:33	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18.2		1.0	1.0	%			04/14/17 16:07	1
Percent Solids	81.8		1.0	1.0	%			04/14/17 16:07	1

Client Sample ID: SJRP-MW14-15-16-04102017

Lab Sample ID: 600-146590-4
Date Collected: 04/10/17 13:45
Matrix: Solid
Date Received: 04/12/17 10:03
Percent Solids: 86.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000685	U H	0.00544	0.000685	mg/Kg	☼	04/12/17 16:30	04/13/17 14:33	1
Ethylbenzene	0.00111	U H	0.00544	0.00111	mg/Kg	☼	04/12/17 16:30	04/13/17 14:33	1
Toluene	0.00150	U H	0.00544	0.00150	mg/Kg	☼	04/12/17 16:30	04/13/17 14:33	1
Xylenes, Total	0.00123	U H	0.00544	0.00123	mg/Kg	☼	04/12/17 16:30	04/13/17 14:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*61 - 130*	*04/12/17 16:30*	*04/13/17 14:33*	*1*
Dibromofluoromethane	*90*		*68 - 140*	*04/12/17 16:30*	*04/13/17 14:33*	*1*
Toluene-d8 (Surr)	*93*		*50 - 130*	*04/12/17 16:30*	*04/13/17 14:33*	*1*
4-Bromofluorobenzene	*107*		*57 - 140*	*04/12/17 16:30*	*04/13/17 14:33*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.88	U	5.75	2.88	mg/Kg	☼	04/17/17 13:49	04/22/17 15:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*55*		*50 - 150*	*04/17/17 13:49*	*04/22/17 15:52*	*1*

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Client Sample ID: SJRP-MW14-15-16-04102017

Lab Sample ID: 600-146590-4
Date Collected: 04/10/17 13:45
Matrix: Solid
Date Received: 04/12/17 10:03
Percent Solids: 86.9

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	7.18		5.56	2.78	mg/Kg	☼	04/16/17 13:32	04/19/17 18:03	1
ORO C24-C40	3.46	J	5.56	2.78	mg/Kg	☼	04/16/17 13:32	04/19/17 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*83*		*50 - 150*	*04/16/17 13:32*	*04/19/17 18:03*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	14900		24.6	0.295	mg/Kg	☼	04/21/17 10:18	04/21/17 14:50	1
Arsenic	3.98		0.983	0.214	mg/Kg	☼	04/21/17 10:18	04/21/17 14:50	1
Barium	62.2		0.983	0.0295	mg/Kg	☼	04/21/17 10:18	04/21/17 14:50	1
Boron	4.05	J	19.7	0.380	mg/Kg	☼	04/21/17 10:18	04/21/17 14:50	1
Cadmium	0.723		0.246	0.0252	mg/Kg	☼	04/21/17 10:18	04/21/17 14:50	1
Calcium	19400		98.3	0.850	mg/Kg	☼	04/21/17 10:18	04/21/17 14:50	1
Chromium	7.86		0.492	0.0498	mg/Kg	☼	04/21/17 10:18	04/21/17 14:50	1
Cobalt	7.44		0.492	0.0665	mg/Kg	☼	04/21/17 10:18	04/21/17 14:50	1
Iron	21000		19.7	2.49	mg/Kg	☼	04/21/17 10:18	04/21/17 14:50	1
Lead	12.8		0.492	0.103	mg/Kg	☼	04/21/17 10:18	04/21/17 14:50	1
Magnesium	3950		98.3	1.89	mg/Kg	☼	04/21/17 10:18	04/21/17 14:50	1
Manganese	695	B	7.37	0.187	mg/Kg	☼	04/21/17 10:18	04/21/17 17:52	5
Molybdenum	0.836		0.492	0.134	mg/Kg	☼	04/21/17 10:18	04/21/17 14:50	1
Nickel	16.1		0.983	0.115	mg/Kg	☼	04/21/17 10:18	04/21/17 14:50	1
Potassium	1300		98.3	10.8	mg/Kg	☼	04/21/17 10:18	04/21/17 14:50	1
Selenium	0.255	U	1.97	0.255	mg/Kg	☼	04/21/17 10:18	04/21/17 14:50	1
Sodium	2940	B	98.3	0.871	mg/Kg	☼	04/21/17 10:18	04/21/17 14:50	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0256		0.0178	0.00374	mg/Kg	☼	04/14/17 09:52	04/17/17 11:16	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	13.1		1.0	1.0	%			04/14/17 16:07	1
Percent Solids	86.9		1.0	1.0	%			04/14/17 16:07	1

Client Sample ID: SJRP-MW14-20-21-04102017

Lab Sample ID: 600-146590-5
Date Collected: 04/10/17 14:05
Matrix: Solid
Date Received: 04/12/17 10:03
Percent Solids: 82.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.265		0.226	0.0285	mg/Kg		04/12/17 16:30	04/18/17 17:20	1
Ethylbenzene	0.950		0.226	0.0461	mg/Kg		04/12/17 16:30	04/18/17 17:20	1
Toluene	0.0624	U	0.226	0.0624	mg/Kg		04/12/17 16:30	04/18/17 17:20	1
Xylenes, Total	1.15		0.226	0.0511	mg/Kg		04/12/17 16:30	04/18/17 17:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*61 - 130*	*04/12/17 16:30*	*04/18/17 17:20*	*1*
Dibromofluoromethane	*102*		*68 - 140*	*04/12/17 16:30*	*04/18/17 17:20*	*1*
Toluene-d8 (Surr)	*92*		*50 - 130*	*04/12/17 16:30*	*04/18/17 17:20*	*1*
4-Bromofluorobenzene	*72*		*57 - 140*	*04/12/17 16:30*	*04/18/17 17:20*	*1*

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	22.4		6.48	3.24	mg/Kg	☼	04/17/17 13:49	04/22/17 16:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*62*		*50 - 150*	*04/17/17 13:49*	*04/22/17 16:22*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	24.5		5.86	2.93	mg/Kg	☼	04/16/17 13:32	04/19/17 18:19	1
ORO C24-C40	4.02	J	5.86	2.93	mg/Kg	☼	04/16/17 13:32	04/19/17 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*66*		*50 - 150*	*04/16/17 13:32*	*04/19/17 18:19*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	16600		28.5	0.341	mg/Kg	☼	04/21/17 10:18	04/21/17 14:52	1
Arsenic	3.41		1.14	0.248	mg/Kg	☼	04/21/17 10:18	04/21/17 14:52	1
Barium	24.3		1.14	0.0341	mg/Kg	☼	04/21/17 10:18	04/21/17 14:52	1
Boron	1.18	J	22.8	0.439	mg/Kg	☼	04/21/17 10:18	04/21/17 14:52	1
Cadmium	0.131	J	0.285	0.0291	mg/Kg	☼	04/21/17 10:18	04/21/17 14:52	1
Calcium	2390		114	0.983	mg/Kg	☼	04/21/17 10:18	04/21/17 14:52	1
Chromium	7.51		0.569	0.0576	mg/Kg	☼	04/21/17 10:18	04/21/17 14:52	1
Cobalt	15.2		0.569	0.0769	mg/Kg	☼	04/21/17 10:18	04/21/17 14:52	1
Iron	19400		22.8	2.88	mg/Kg	☼	04/21/17 10:18	04/21/17 14:52	1
Lead	17.9		0.569	0.120	mg/Kg	☼	04/21/17 10:18	04/21/17 14:52	1
Magnesium	4030		114	2.19	mg/Kg	☼	04/21/17 10:18	04/21/17 14:52	1
Manganese	137	B	1.71	0.0434	mg/Kg	☼	04/21/17 10:18	04/21/17 14:52	1
Molybdenum	0.751		0.569	0.155	mg/Kg	☼	04/21/17 10:18	04/21/17 14:52	1
Nickel	18.5		1.14	0.133	mg/Kg	☼	04/21/17 10:18	04/21/17 14:52	1
Potassium	1550		114	12.5	mg/Kg	☼	04/21/17 10:18	04/21/17 14:52	1
Selenium	0.295	U	2.28	0.295	mg/Kg	☼	04/21/17 10:18	04/21/17 14:52	1
Sodium	6570	B	114	1.01	mg/Kg	☼	04/21/17 10:18	04/21/17 14:52	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0389		0.0198	0.00418	mg/Kg	☼	04/14/17 09:52	04/17/17 11:18	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17.1		1.0	1.0	%			04/14/17 16:07	1
Percent Solids	82.9		1.0	1.0	%			04/14/17 16:07	1

Client Sample ID: SJRP-MW14-25-26-04102017 — **Lab Sample ID: 600-146590-6**
Date Collected: 04/10/17 14:15 — **Matrix: Solid**
Date Received: 04/12/17 10:03 — **Percent Solids: 89.4**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0240	H	0.00690	0.000869	mg/Kg	☼	04/12/17 16:30	04/13/17 15:21	1
Ethylbenzene	0.00719	H	0.00690	0.00141	mg/Kg	☼	04/12/17 16:30	04/13/17 15:21	1
Toluene	0.0157	H	0.00690	0.00190	mg/Kg	☼	04/12/17 16:30	04/13/17 15:21	1
Xylenes, Total	0.0380	H	0.00690	0.00156	mg/Kg	☼	04/12/17 16:30	04/13/17 15:21	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Client Sample ID: SJRP-MW14-25-26-04102017
Date Collected: 04/10/17 14:15
Date Received: 04/12/17 10:03

Lab Sample ID: 600-146590-6
Matrix: Solid
Percent Solids: 89.4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83		61 - 130	04/12/17 16:30	04/13/17 15:21	1
Dibromofluoromethane	85		68 - 140	04/12/17 16:30	04/13/17 15:21	1
Toluene-d8 (Surr)	95		50 - 130	04/12/17 16:30	04/13/17 15:21	1
4-Bromofluorobenzene	104		57 - 140	04/12/17 16:30	04/13/17 15:21	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.95	U	5.90	2.95	mg/Kg	☼	04/17/17 13:49	04/22/17 16:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	58		50 - 150	04/17/17 13:49	04/22/17 16:52	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	5.78		5.56	2.78	mg/Kg	☼	04/16/17 13:32	04/19/17 18:36	1
ORO C24-C40	5.18	J	5.56	2.78	mg/Kg	☼	04/16/17 13:32	04/19/17 18:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	101		50 - 150	04/16/17 13:32	04/19/17 18:36	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	17600		25.0	0.299	mg/Kg	☼	04/21/17 10:18	04/21/17 14:54	1
Arsenic	3.14		0.998	0.218	mg/Kg	☼	04/21/17 10:18	04/21/17 14:54	1
Barium	44.7		0.998	0.0299	mg/Kg	☼	04/21/17 10:18	04/21/17 14:54	1
Boron	1.88	J	20.0	0.385	mg/Kg	☼	04/21/17 10:18	04/21/17 14:54	1
Cadmium	0.0799	J	0.250	0.0256	mg/Kg	☼	04/21/17 10:18	04/21/17 14:54	1
Calcium	3720		99.8	0.862	mg/Kg	☼	04/21/17 10:18	04/21/17 14:54	1
Chromium	6.23		0.499	0.0505	mg/Kg	☼	04/21/17 10:18	04/21/17 14:54	1
Cobalt	10.4		0.499	0.0675	mg/Kg	☼	04/21/17 10:18	04/21/17 14:54	1
Iron	23900		20.0	2.53	mg/Kg	☼	04/21/17 10:18	04/21/17 14:54	1
Lead	13.5		0.499	0.105	mg/Kg	☼	04/21/17 10:18	04/21/17 14:54	1
Magnesium	4170		99.8	1.92	mg/Kg	☼	04/21/17 10:18	04/21/17 14:54	1
Manganese	171	B	1.50	0.0380	mg/Kg	☼	04/21/17 10:18	04/21/17 14:54	1
Molybdenum	1.58		0.499	0.136	mg/Kg	☼	04/21/17 10:18	04/21/17 14:54	1
Nickel	11.4		0.998	0.117	mg/Kg	☼	04/21/17 10:18	04/21/17 14:54	1
Potassium	1450		99.8	11.0	mg/Kg	☼	04/21/17 10:18	04/21/17 14:54	1
Selenium	0.259	U	2.00	0.259	mg/Kg	☼	04/21/17 10:18	04/21/17 14:54	1
Sodium	8460	B	99.8	0.884	mg/Kg	☼	04/21/17 10:18	04/21/17 14:54	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0216		0.0190	0.00400	mg/Kg	☼	04/14/17 09:52	04/17/17 11:24	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.6		1.0	1.0	%			04/14/17 16:07	1
Percent Solids	89.4		1.0	1.0	%			04/14/17 16:07	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Client Sample ID: SJRP-SB12-19-20-04102017
Date Collected: 04/10/17 15:07
Date Received: 04/12/17 10:03

Lab Sample ID: 600-146590-7
Matrix: Solid
Percent Solids: 83.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.252		0.249	0.0314	mg/Kg		04/12/17 16:30	04/18/17 17:49	1
Ethylbenzene	1.04		0.249	0.0508	mg/Kg		04/12/17 16:30	04/18/17 17:49	1
Toluene	0.0687	U	0.249	0.0687	mg/Kg		04/12/17 16:30	04/18/17 17:49	1
Xylenes, Total	7.29		0.249	0.0563	mg/Kg		04/12/17 16:30	04/18/17 17:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*61 - 130*	*04/12/17 16:30*	*04/18/17 17:49*	*1*
Dibromofluoromethane	*112*		*68 - 140*	*04/12/17 16:30*	*04/18/17 17:49*	*1*
Toluene-d8 (Surr)	*96*		*50 - 130*	*04/12/17 16:30*	*04/18/17 17:49*	*1*
4-Bromofluorobenzene	*88*		*57 - 140*	*04/12/17 16:30*	*04/18/17 17:49*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	279		6.56	3.28	mg/Kg	☼	04/17/17 13:49	04/22/17 17:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*63*		*50 - 150*	*04/17/17 13:49*	*04/22/17 17:22*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	32.4		5.81	2.91	mg/Kg	☼	04/16/17 13:32	04/19/17 18:52	1
ORO C24-C40	4.79	J	5.81	2.91	mg/Kg	☼	04/16/17 13:32	04/19/17 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*55*		*50 - 150*	*04/16/17 13:32*	*04/19/17 18:52*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	19900		25.5	0.306	mg/Kg	☼	04/21/17 10:18	04/21/17 14:57	1
Arsenic	3.67		1.02	0.222	mg/Kg	☼	04/21/17 10:18	04/21/17 14:57	1
Barium	134		1.02	0.0306	mg/Kg	☼	04/21/17 10:18	04/21/17 14:57	1
Boron	2.29	J	20.4	0.394	mg/Kg	☼	04/21/17 10:18	04/21/17 14:57	1
Cadmium	0.0969	J	0.255	0.0261	mg/Kg	☼	04/21/17 10:18	04/21/17 14:57	1
Calcium	2330		102	0.882	mg/Kg	☼	04/21/17 10:18	04/21/17 14:57	1
Chromium	8.93		0.510	0.0516	mg/Kg	☼	04/21/17 10:18	04/21/17 14:57	1
Cobalt	7.36		0.510	0.0690	mg/Kg	☼	04/21/17 10:18	04/21/17 14:57	1
Iron	22400		20.4	2.58	mg/Kg	☼	04/21/17 10:18	04/21/17 14:57	1
Lead	16.2		0.510	0.107	mg/Kg	☼	04/21/17 10:18	04/21/17 14:57	1
Magnesium	4780		102	1.96	mg/Kg	☼	04/21/17 10:18	04/21/17 14:57	1
Manganese	139	B	1.53	0.0389	mg/Kg	☼	04/21/17 10:18	04/21/17 14:57	1
Molybdenum	1.01		0.510	0.139	mg/Kg	☼	04/21/17 10:18	04/21/17 14:57	1
Nickel	11.3		1.02	0.119	mg/Kg	☼	04/21/17 10:18	04/21/17 14:57	1
Potassium	1800		102	11.2	mg/Kg	☼	04/21/17 10:18	04/21/17 14:57	1
Selenium	0.264	U	2.04	0.264	mg/Kg	☼	04/21/17 10:18	04/21/17 14:57	1
Sodium	7790	B	102	0.904	mg/Kg	☼	04/21/17 10:18	04/21/17 14:57	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0293		0.0189	0.00398	mg/Kg	☼	04/14/17 09:52	04/17/17 11:25	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Client Sample ID: SJRP-SB12-19-20-04102017

Lab Sample ID: 600-146590-7
Date Collected: 04/10/17 15:07
Matrix: Solid
Date Received: 04/12/17 10:03
Percent Solids: 83.1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.9		1.0	1.0	%			04/14/17 16:07	1
Percent Solids	83.1		1.0	1.0	%			04/14/17 16:07	1

Client Sample ID: SJRP-SB12-25-26-04102017

Lab Sample ID: 600-146590-8
Date Collected: 04/10/17 16:15
Matrix: Solid
Date Received: 04/12/17 10:03
Percent Solids: 89.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0280		0.00627	0.000790	mg/Kg	☼	04/12/17 16:30	04/13/17 16:17	1
Ethylbenzene	0.0121		0.00627	0.00128	mg/Kg	☼	04/12/17 16:30	04/13/17 16:17	1
Toluene	0.00826		0.00627	0.00173	mg/Kg	☼	04/12/17 16:30	04/13/17 16:17	1
Xylenes, Total	0.105		0.00627	0.00142	mg/Kg	☼	04/12/17 16:30	04/13/17 16:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*74*		*61 - 130*	*04/12/17 16:30*	*04/13/17 16:17*	*1*
Dibromofluoromethane	*78*		*68 - 140*	*04/12/17 16:30*	*04/13/17 16:17*	*1*
Toluene-d8 (Surr)	*101*		*50 - 130*	*04/12/17 16:30*	*04/13/17 16:17*	*1*
4-Bromofluorobenzene	*107*		*57 - 140*	*04/12/17 16:30*	*04/13/17 16:17*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.05	U	6.10	3.05	mg/Kg	☼	04/17/17 13:49	04/22/17 17:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*63*		*50 - 150*	*04/17/17 13:49*	*04/22/17 17:52*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	6.37		5.45	2.72	mg/Kg	☼	04/16/17 13:32	04/19/17 19:09	1
ORO C24-C40	10.1		5.45	2.72	mg/Kg	☼	04/16/17 13:32	04/19/17 19:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*69*		*50 - 150*	*04/16/17 13:32*	*04/19/17 19:09*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	17200		26.4	0.317	mg/Kg	☼	04/21/17 10:18	04/21/17 14:59	1
Arsenic	4.40		1.06	0.230	mg/Kg	☼	04/21/17 10:18	04/21/17 14:59	1
Barium	126		1.06	0.0317	mg/Kg	☼	04/21/17 10:18	04/21/17 14:59	1
Boron	2.13	J	21.1	0.408	mg/Kg	☼	04/21/17 10:18	04/21/17 14:59	1
Cadmium	0.158	J	0.264	0.0270	mg/Kg	☼	04/21/17 10:18	04/21/17 14:59	1
Calcium	5410		106	0.912	mg/Kg	☼	04/21/17 10:18	04/21/17 14:59	1
Chromium	7.38		0.528	0.0534	mg/Kg	☼	04/21/17 10:18	04/21/17 14:59	1
Cobalt	12.0		0.528	0.0714	mg/Kg	☼	04/21/17 10:18	04/21/17 14:59	1
Iron	24300		21.1	2.67	mg/Kg	☼	04/21/17 10:18	04/21/17 14:59	1
Lead	12.9		0.528	0.111	mg/Kg	☼	04/21/17 10:18	04/21/17 14:59	1
Magnesium	4750		106	2.03	mg/Kg	☼	04/21/17 10:18	04/21/17 14:59	1
Manganese	219	B	1.58	0.0402	mg/Kg	☼	04/21/17 10:18	04/21/17 14:59	1
Molybdenum	2.78		0.528	0.144	mg/Kg	☼	04/21/17 10:18	04/21/17 14:59	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Client Sample ID: SJRP-SB12-25-26-04102017

Lab Sample ID: 600-146590-8
Date Collected: 04/10/17 16:15
Matrix: Solid
Date Received: 04/12/17 10:03
Percent Solids: 89.4

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	14.9		1.06	0.124	mg/Kg	☼	04/21/17 10:18	04/21/17 14:59	1
Potassium	1550		106	11.6	mg/Kg	☼	04/21/17 10:18	04/21/17 14:59	1
Selenium	0.273	U	2.11	0.273	mg/Kg	☼	04/21/17 10:18	04/21/17 14:59	1
Sodium	9150	B	106	0.935	mg/Kg	☼	04/21/17 10:18	04/21/17 14:59	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0223		0.0173	0.00364	mg/Kg	☼	04/14/17 09:52	04/17/17 11:27	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.6		1.0	1.0	%			04/14/17 16:07	1
Percent Solids	89.4		1.0	1.0	%			04/14/17 16:07	1

Client Sample ID: SJRP-SB04-14-15-04112017

Lab Sample ID: 600-146590-9
Date Collected: 04/11/17 09:45
Matrix: Solid
Date Received: 04/12/17 10:03
Percent Solids: 86.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000758	U	0.00602	0.000758	mg/Kg	☼	04/12/17 16:30	04/13/17 12:06	1
Ethylbenzene	0.00123	U	0.00602	0.00123	mg/Kg	☼	04/12/17 16:30	04/13/17 12:06	1
Toluene	0.00166	U	0.00602	0.00166	mg/Kg	☼	04/12/17 16:30	04/13/17 12:06	1
Xylenes, Total	0.00136	U	0.00602	0.00136	mg/Kg	☼	04/12/17 16:30	04/13/17 12:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*61 - 130*	*04/12/17 16:30*	*04/13/17 12:06*	*1*
Dibromofluoromethane	*96*		*68 - 140*	*04/12/17 16:30*	*04/13/17 12:06*	*1*
Toluene-d8 (Surr)	*96*		*50 - 130*	*04/12/17 16:30*	*04/13/17 12:06*	*1*
4-Bromofluorobenzene	*109*		*57 - 140*	*04/12/17 16:30*	*04/13/17 12:06*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.89	U	5.79	2.89	mg/Kg	☼	04/17/17 13:49	04/22/17 18:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*66*		*50 - 150*	*04/17/17 13:49*	*04/22/17 18:22*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3.01	J	5.70	2.85	mg/Kg	☼	04/16/17 13:32	04/19/17 19:25	1
ORO C24-C40	7.32		5.70	2.85	mg/Kg	☼	04/16/17 13:32	04/19/17 19:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*83*		*50 - 150*	*04/16/17 13:32*	*04/19/17 19:25*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	16900		26.4	0.317	mg/Kg	☼	04/21/17 10:18	04/21/17 15:01	1
Arsenic	3.60		1.06	0.230	mg/Kg	☼	04/21/17 10:18	04/21/17 15:01	1
Barium	58.7		1.06	0.0317	mg/Kg	☼	04/21/17 10:18	04/21/17 15:01	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Client Sample ID: SJRP-SB04-14-15-04112017

Lab Sample ID: 600-146590-9
Date Collected: 04/11/17 09:45
Matrix: Solid
Date Received: 04/12/17 10:03
Percent Solids: 86.9

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1.66	J	21.1	0.407	mg/Kg	☼	04/21/17 10:18	04/21/17 15:01	1
Cadmium	0.280		0.264	0.0270	mg/Kg	☼	04/21/17 10:18	04/21/17 15:01	1
Calcium	10300		106	0.912	mg/Kg	☼	04/21/17 10:18	04/21/17 15:01	1
Chromium	16.1		0.528	0.0534	mg/Kg	☼	04/21/17 10:18	04/21/17 15:01	1
Cobalt	11.7		0.528	0.0713	mg/Kg	☼	04/21/17 10:18	04/21/17 15:01	1
Iron	27800		21.1	2.67	mg/Kg	☼	04/21/17 10:18	04/21/17 15:01	1
Lead	14.4		0.528	0.111	mg/Kg	☼	04/21/17 10:18	04/21/17 15:01	1
Magnesium	6280		106	2.03	mg/Kg	☼	04/21/17 10:18	04/21/17 15:01	1
Manganese	327	B	1.58	0.0402	mg/Kg	☼	04/21/17 10:18	04/21/17 15:01	1
Molybdenum	2.25		0.528	0.143	mg/Kg	☼	04/21/17 10:18	04/21/17 15:01	1
Nickel	20.5		1.06	0.123	mg/Kg	☼	04/21/17 10:18	04/21/17 15:01	1
Potassium	1460		106	11.6	mg/Kg	☼	04/21/17 10:18	04/21/17 15:01	1
Selenium	0.273	U	2.11	0.273	mg/Kg	☼	04/21/17 10:18	04/21/17 15:01	1
Sodium	3270	B	106	0.935	mg/Kg	☼	04/21/17 10:18	04/21/17 15:01	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0279		0.0180	0.00380	mg/Kg	☼	04/14/17 09:52	04/17/17 11:35	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	13.1		1.0	1.0	%			04/14/17 16:07	1
Percent Solids	86.9		1.0	1.0	%			04/14/17 16:07	1

Client Sample ID: SJRP-SB04-19-20-04112017

Lab Sample ID: 600-146590-10
Date Collected: 04/11/17 09:58
Matrix: Solid
Date Received: 04/12/17 10:03
Percent Solids: 83.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00480	J	0.00529	0.000667	mg/Kg	☼	04/12/17 16:30	04/13/17 12:31	1
Ethylbenzene	0.00108	U	0.00529	0.00108	mg/Kg	☼	04/12/17 16:30	04/13/17 12:31	1
Toluene	0.00146	U	0.00529	0.00146	mg/Kg	☼	04/12/17 16:30	04/13/17 12:31	1
Xylenes, Total	0.00120	U	0.00529	0.00120	mg/Kg	☼	04/12/17 16:30	04/13/17 12:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*61 - 130*	*04/12/17 16:30*	*04/13/17 12:31*	*1*
Dibromofluoromethane	*88*		*68 - 140*	*04/12/17 16:30*	*04/13/17 12:31*	*1*
Toluene-d8 (Surr)	*96*		*50 - 130*	*04/12/17 16:30*	*04/13/17 12:31*	*1*
4-Bromofluorobenzene	*108*		*57 - 140*	*04/12/17 16:30*	*04/13/17 12:31*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.01	U	6.01	3.01	mg/Kg	☼	04/17/17 13:49	04/22/17 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*63*		*50 - 150*	*04/17/17 13:49*	*04/22/17 18:52*	*1*

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Client Sample ID: SJRP-SB04-19-20-04112017

Lab Sample ID: 600-146590-10
Date Collected: 04/11/17 09:58
Matrix: Solid
Date Received: 04/12/17 10:03
Percent Solids: 83.4

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3.19	J	5.82	2.91	mg/Kg	☼	04/16/17 13:32	04/19/17 19:42	1
ORO C24-C40	8.77		5.82	2.91	mg/Kg	☼	04/16/17 13:32	04/19/17 19:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*99*		*50 - 150*	*04/16/17 13:32*	*04/19/17 19:42*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8700		29.7	0.356	mg/Kg	☼	04/21/17 10:18	04/21/17 15:03	1
Arsenic	15.1		1.19	0.259	mg/Kg	☼	04/21/17 10:18	04/21/17 15:03	1
Barium	130		1.19	0.0356	mg/Kg	☼	04/21/17 10:18	04/21/17 15:03	1
Boron	2.72	J	23.8	0.458	mg/Kg	☼	04/21/17 10:18	04/21/17 15:03	1
Cadmium	0.0304	U	0.297	0.0304	mg/Kg	☼	04/21/17 10:18	04/21/17 15:03	1
Calcium	6280		119	1.03	mg/Kg	☼	04/21/17 10:18	04/21/17 15:03	1
Chromium	4.63		0.594	0.0601	mg/Kg	☼	04/21/17 10:18	04/21/17 15:03	1
Cobalt	7.64		0.594	0.0803	mg/Kg	☼	04/21/17 10:18	04/21/17 15:03	1
Iron	20800		23.8	3.00	mg/Kg	☼	04/21/17 10:18	04/21/17 15:03	1
Lead	21.8		0.594	0.125	mg/Kg	☼	04/21/17 10:18	04/21/17 15:03	1
Magnesium	1510		119	2.28	mg/Kg	☼	04/21/17 10:18	04/21/17 15:03	1
Manganese	61.2	B	1.78	0.0453	mg/Kg	☼	04/21/17 10:18	04/21/17 15:03	1
Molybdenum	3.21		0.594	0.162	mg/Kg	☼	04/21/17 10:18	04/21/17 15:03	1
Nickel	15.0		1.19	0.139	mg/Kg	☼	04/21/17 10:18	04/21/17 15:03	1
Potassium	1140		119	13.1	mg/Kg	☼	04/21/17 10:18	04/21/17 15:03	1
Selenium	0.873	J	2.38	0.308	mg/Kg	☼	04/21/17 10:18	04/21/17 15:03	1
Sodium	5650	B	119	1.05	mg/Kg	☼	04/21/17 10:18	04/21/17 15:03	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0589		0.0201	0.00422	mg/Kg	☼	04/14/17 09:52	04/17/17 11:36	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.6		1.0	1.0	%			04/14/17 16:07	1
Percent Solids	83.4		1.0	1.0	%			04/14/17 16:07	1

Client Sample ID: SJRP-TB-04112017

Lab Sample ID: 600-146590-11
Date Collected: 04/11/17 08:35
Matrix: Water
Date Received: 04/12/17 10:03

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/17/17 23:31	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/17/17 23:31	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/17/17 23:31	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/17/17 23:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*76*		*50 - 134*		*04/17/17 23:31*	*1*
Dibromofluoromethane	*76*		*62 - 130*		*04/17/17 23:31*	*1*
Toluene-d8 (Surr)	*89*		*70 - 130*		*04/17/17 23:31*	*1*
4-Bromofluorobenzene	*109*		*67 - 139*		*04/17/17 23:31*	*1*

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Client Sample ID: SJRP-SB08-13-14-04112017
Date Collected: 04/11/17 11:45
Date Received: 04/12/17 10:03

Lab Sample ID: 600-146590-12
Matrix: Solid
Percent Solids: 82.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.237	J	0.486	0.134	mg/Kg		04/12/17 16:30	04/18/17 18:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*61 - 130*	*04/12/17 16:30*	*04/18/17 18:18*	*1*
Dibromofluoromethane	*97*		*68 - 140*	*04/12/17 16:30*	*04/18/17 18:18*	*1*
Toluene-d8 (Surr)	*94*		*50 - 130*	*04/12/17 16:30*	*04/18/17 18:18*	*1*
4-Bromofluorobenzene	*66*		*57 - 140*	*04/12/17 16:30*	*04/18/17 18:18*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	26.8		4.86	0.613	mg/Kg		04/12/17 16:30	04/19/17 14:44	10
Ethylbenzene	50.1		4.86	0.992	mg/Kg		04/12/17 16:30	04/19/17 14:44	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*61 - 130*	*04/12/17 16:30*	*04/19/17 14:44*	*10*
Dibromofluoromethane	*105*		*68 - 140*	*04/12/17 16:30*	*04/19/17 14:44*	*10*
Toluene-d8 (Surr)	*104*		*50 - 130*	*04/12/17 16:30*	*04/19/17 14:44*	*10*
4-Bromofluorobenzene	*80*		*57 - 140*	*04/12/17 16:30*	*04/19/17 14:44*	*10*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	528		48.6	11.0	mg/Kg		04/12/17 16:30	04/19/17 15:12	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*61 - 130*	*04/12/17 16:30*	*04/19/17 15:12*	*100*
Dibromofluoromethane	*101*		*68 - 140*	*04/12/17 16:30*	*04/19/17 15:12*	*100*
Toluene-d8 (Surr)	*86*		*50 - 130*	*04/12/17 16:30*	*04/19/17 15:12*	*100*
4-Bromofluorobenzene	*72*		*57 - 140*	*04/12/17 16:30*	*04/19/17 15:12*	*100*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	1750		6.94	3.47	mg/Kg	☼	04/17/17 13:49	04/22/17 22:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*65*		*50 - 150*	*04/17/17 13:49*	*04/22/17 22:21*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	390		30.2	15.1	mg/Kg	☼	04/16/17 13:32	04/20/17 12:05	5
ORO C24-C40	28.0		6.04	3.02	mg/Kg	☼	04/16/17 13:32	04/19/17 19:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*89*		*50 - 150*	*04/16/17 13:32*	*04/19/17 19:58*	*1*
o-Terphenyl (Surr)	*68*		*50 - 150*	*04/16/17 13:32*	*04/20/17 12:05*	*5*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	14600		27.9	0.334	mg/Kg	☼	04/21/17 10:18	04/21/17 15:11	1
Arsenic	6.50		1.11	0.243	mg/Kg	☼	04/21/17 10:18	04/21/17 15:11	1
Barium	47.7		1.11	0.0334	mg/Kg	☼	04/21/17 10:18	04/21/17 15:11	1
Boron	2.59	J	22.3	0.430	mg/Kg	☼	04/21/17 10:18	04/21/17 15:11	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Client Sample ID: SJRP-SB08-13-14-04112017

Lab Sample ID: 600-146590-12
Date Collected: 04/11/17 11:45
Matrix: Solid
Date Received: 04/12/17 10:03
Percent Solids: 82.3

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.446		0.279	0.0285	mg/Kg	☼	04/21/17 10:18	04/21/17 15:11	1
Calcium	5990		111	0.963	mg/Kg	☼	04/21/17 10:18	04/21/17 15:11	1
Chromium	13.5		0.557	0.0564	mg/Kg	☼	04/21/17 10:18	04/21/17 15:11	1
Cobalt	12.0		0.557	0.0754	mg/Kg	☼	04/21/17 10:18	04/21/17 15:11	1
Iron	28700		22.3	2.82	mg/Kg	☼	04/21/17 10:18	04/21/17 15:11	1
Lead	17.2		0.557	0.117	mg/Kg	☼	04/21/17 10:18	04/21/17 15:11	1
Magnesium	3480		111	2.14	mg/Kg	☼	04/21/17 10:18	04/21/17 15:11	1
Manganese	288	B	1.67	0.0425	mg/Kg	☼	04/21/17 10:18	04/21/17 15:11	1
Molybdenum	5.40		0.557	0.152	mg/Kg	☼	04/21/17 10:18	04/21/17 15:11	1
Nickel	32.5		1.11	0.130	mg/Kg	☼	04/21/17 10:18	04/21/17 15:11	1
Potassium	1720		111	12.3	mg/Kg	☼	04/21/17 10:18	04/21/17 15:11	1
Selenium	0.881	J	2.23	0.289	mg/Kg	☼	04/21/17 10:18	04/21/17 15:11	1
Sodium	5170	B	111	0.988	mg/Kg	☼	04/21/17 10:18	04/21/17 15:11	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0530		0.0188	0.00395	mg/Kg	☼	04/14/17 09:52	04/17/17 11:38	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17.7		1.0	1.0	%			04/14/17 16:07	1
Percent Solids	82.3		1.0	1.0	%			04/14/17 16:07	1

Client Sample ID: SJRP-SB08-29-30-04112017

Lab Sample ID: 600-146590-13
Date Collected: 04/11/17 12:20
Matrix: Solid
Date Received: 04/12/17 10:03
Percent Solids: 86.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	4.25		1.04	0.131	mg/Kg		04/12/17 16:30	04/18/17 18:46	4
Ethylbenzene	1.37		1.04	0.212	mg/Kg		04/12/17 16:30	04/18/17 18:46	4
Toluene	1.23		1.04	0.286	mg/Kg		04/12/17 16:30	04/18/17 18:46	4
Xylenes, Total	11.4		1.04	0.234	mg/Kg		04/12/17 16:30	04/18/17 18:46	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*61 - 130*	*04/12/17 16:30*	*04/18/17 18:46*	*4*
Dibromofluoromethane	*99*		*68 - 140*	*04/12/17 16:30*	*04/18/17 18:46*	*4*
Toluene-d8 (Surr)	*99*		*50 - 130*	*04/12/17 16:30*	*04/18/17 18:46*	*4*
4-Bromofluorobenzene	*89*		*57 - 140*	*04/12/17 16:30*	*04/18/17 18:46*	*4*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.21	U	6.42	3.21	mg/Kg	☼	04/17/17 13:49	04/22/17 19:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*67*		*50 - 150*	*04/17/17 13:49*	*04/22/17 19:22*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3.64	J	5.69	2.84	mg/Kg	☼	04/16/17 13:32	04/19/17 20:15	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Client Sample ID: SJRP-SB08-29-30-04112017

Lab Sample ID: 600-146590-13
Date Collected: 04/11/17 12:20
Matrix: Solid
Date Received: 04/12/17 10:03
Percent Solids: 86.2

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ORO C24-C40	7.14		5.69	2.84	mg/Kg	☼	04/16/17 13:32	04/19/17 20:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*96*		*50 - 150*	*04/16/17 13:32*	*04/19/17 20:15*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	16300		27.9	0.335	mg/Kg	☼	04/21/17 10:18	04/21/17 15:13	1
Arsenic	6.40		1.12	0.243	mg/Kg	☼	04/21/17 10:18	04/21/17 15:13	1
Barium	95.1		1.12	0.0335	mg/Kg	☼	04/21/17 10:18	04/21/17 15:13	1
Boron	2.36	J	22.3	0.431	mg/Kg	☼	04/21/17 10:18	04/21/17 15:13	1
Cadmium	0.0781	J	0.279	0.0286	mg/Kg	☼	04/21/17 10:18	04/21/17 15:13	1
Calcium	4120		112	0.964	mg/Kg	☼	04/21/17 10:18	04/21/17 15:13	1
Chromium	5.39		0.558	0.0565	mg/Kg	☼	04/21/17 10:18	04/21/17 15:13	1
Cobalt	12.1		0.558	0.0754	mg/Kg	☼	04/21/17 10:18	04/21/17 15:13	1
Iron	19200		22.3	2.82	mg/Kg	☼	04/21/17 10:18	04/21/17 15:13	1
Lead	20.8		0.558	0.117	mg/Kg	☼	04/21/17 10:18	04/21/17 15:13	1
Magnesium	2920		112	2.14	mg/Kg	☼	04/21/17 10:18	04/21/17 15:13	1
Manganese	122	B	1.67	0.0425	mg/Kg	☼	04/21/17 10:18	04/21/17 15:13	1
Molybdenum	2.58		0.558	0.152	mg/Kg	☼	04/21/17 10:18	04/21/17 15:13	1
Nickel	17.1		1.12	0.131	mg/Kg	☼	04/21/17 10:18	04/21/17 15:13	1
Potassium	1400		112	12.3	mg/Kg	☼	04/21/17 10:18	04/21/17 15:13	1
Selenium	0.289	U	2.23	0.289	mg/Kg	☼	04/21/17 10:18	04/21/17 15:13	1
Sodium	9990	B	112	0.989	mg/Kg	☼	04/21/17 10:18	04/21/17 15:13	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0332		0.0185	0.00390	mg/Kg	☼	04/14/17 09:52	04/17/17 11:40	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	13.8		1.0	1.0	%			04/14/17 16:07	1
Percent Solids	86.2		1.0	1.0	%			04/14/17 16:07	1

Client Sample ID: SJRP-SB03-10-11-04112017

Lab Sample ID: 600-146590-14
Date Collected: 04/11/17 13:25
Matrix: Solid
Date Received: 04/12/17 10:03
Percent Solids: 80.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2.59		0.264	0.0333	mg/Kg		04/12/17 16:30	04/18/17 19:15	1
Ethylbenzene	3.20		0.264	0.0539	mg/Kg		04/12/17 16:30	04/18/17 19:15	1
Toluene	0.0729	U	0.264	0.0729	mg/Kg		04/12/17 16:30	04/18/17 19:15	1
Xylenes, Total	5.36		0.264	0.0597	mg/Kg		04/12/17 16:30	04/18/17 19:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*61 - 130*	*04/12/17 16:30*	*04/18/17 19:15*	*1*
Dibromofluoromethane	*98*		*68 - 140*	*04/12/17 16:30*	*04/18/17 19:15*	*1*
Toluene-d8 (Surr)	*91*		*50 - 130*	*04/12/17 16:30*	*04/18/17 19:15*	*1*
4-Bromofluorobenzene	*73*		*57 - 140*	*04/12/17 16:30*	*04/18/17 19:15*	*1*

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Client Sample ID: SJRP-SB03-10-11-04112017

Lab Sample ID: 600-146590-14
Date Collected: 04/11/17 13:25
Matrix: Solid
Date Received: 04/12/17 10:03
Percent Solids: 80.4

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	24.2		7.11	3.56	mg/Kg	☼	04/17/17 13:49	04/22/17 22:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*62*		*50 - 150*	*04/17/17 13:49*	*04/22/17 22:51*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.463		0.0613	0.0307	mg/Kg	☼	04/16/17 13:32	04/19/17 20:31	1
ORO C24-C40	0.0590	J	0.0613	0.0307	mg/Kg	☼	04/16/17 13:32	04/19/17 20:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*68*		*50 - 150*	*04/16/17 13:32*	*04/19/17 20:31*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	14900		30.8	0.370	mg/Kg	☼	04/21/17 10:18	04/21/17 15:16	1
Arsenic	14.5		1.23	0.269	mg/Kg	☼	04/21/17 10:18	04/21/17 15:16	1
Barium	74.0		1.23	0.0370	mg/Kg	☼	04/21/17 10:18	04/21/17 15:16	1
Boron	1.66	J	24.6	0.475	mg/Kg	☼	04/21/17 10:18	04/21/17 15:16	1
Cadmium	0.0862	J	0.308	0.0315	mg/Kg	☼	04/21/17 10:18	04/21/17 15:16	1
Calcium	3170		123	1.06	mg/Kg	☼	04/21/17 10:18	04/21/17 15:16	1
Chromium	6.49		0.616	0.0623	mg/Kg	☼	04/21/17 10:18	04/21/17 15:16	1
Cobalt	10.1		0.616	0.0833	mg/Kg	☼	04/21/17 10:18	04/21/17 15:16	1
Iron	24200		24.6	3.12	mg/Kg	☼	04/21/17 10:18	04/21/17 15:16	1
Lead	20.8		0.616	0.129	mg/Kg	☼	04/21/17 10:18	04/21/17 15:16	1
Magnesium	3630		123	2.37	mg/Kg	☼	04/21/17 10:18	04/21/17 15:16	1
Manganese	88.1	B	1.85	0.0469	mg/Kg	☼	04/21/17 10:18	04/21/17 15:16	1
Molybdenum	2.39		0.616	0.168	mg/Kg	☼	04/21/17 10:18	04/21/17 15:16	1
Nickel	11.6		1.23	0.144	mg/Kg	☼	04/21/17 10:18	04/21/17 15:16	1
Potassium	1730		123	13.6	mg/Kg	☼	04/21/17 10:18	04/21/17 15:16	1
Selenium	0.548	J	2.46	0.319	mg/Kg	☼	04/21/17 10:18	04/21/17 15:16	1
Sodium	8460	B	123	1.09	mg/Kg	☼	04/21/17 10:18	04/21/17 15:16	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0415		0.0198	0.00418	mg/Kg	☼	04/14/17 09:52	04/17/17 11:46	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19.6		1.0	1.0	%			04/14/17 16:07	1
Percent Solids	80.4		1.0	1.0	%			04/14/17 16:07	1

Client Sample ID: SJRP-SB03-13-14-04112017

Lab Sample ID: 600-146590-15
Date Collected: 04/11/17 13:35
Matrix: Solid
Date Received: 04/12/17 10:03
Percent Solids: 85.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.99		0.233	0.0294	mg/Kg		04/12/17 16:30	04/18/17 19:43	1
Ethylbenzene	2.73		0.233	0.0476	mg/Kg		04/12/17 16:30	04/18/17 19:43	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Client Sample ID: SJRP-SB03-13-14-04112017
Date Collected: 04/11/17 13:35
Date Received: 04/12/17 10:03

Lab Sample ID: 600-146590-15
Matrix: Solid
Percent Solids: 85.3

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		61 - 130	04/12/17 16:30	04/18/17 19:43	1
Dibromofluoromethane	113		68 - 140	04/12/17 16:30	04/18/17 19:43	1
Toluene-d8 (Surr)	95		50 - 130	04/12/17 16:30	04/18/17 19:43	1
4-Bromofluorobenzene	104		57 - 140	04/12/17 16:30	04/18/17 19:43	1

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	15.1		2.33	0.644	mg/Kg		04/12/17 16:30	04/19/17 15:40	10
Xylenes, Total	38.4		2.33	0.528	mg/Kg		04/12/17 16:30	04/19/17 15:40	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	121		61 - 130	04/12/17 16:30	04/19/17 15:40	10
Dibromofluoromethane	116		68 - 140	04/12/17 16:30	04/19/17 15:40	10
Toluene-d8 (Surr)	94		50 - 130	04/12/17 16:30	04/19/17 15:40	10
4-Bromofluorobenzene	96		57 - 140	04/12/17 16:30	04/19/17 15:40	10

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	746		5.91	2.96	mg/Kg	☼	04/17/17 13:49	04/22/17 23:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	63		50 - 150	04/17/17 13:49	04/22/17 23:21	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	25.8		5.64	2.82	mg/Kg	☼	04/16/17 13:32	04/19/17 20:48	1
ORO C24-C40	4.37	J	5.64	2.82	mg/Kg	☼	04/16/17 13:32	04/19/17 20:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	87		50 - 150	04/16/17 13:32	04/19/17 20:48	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11500		27.9	0.335	mg/Kg	☼	04/21/17 10:18	04/21/17 15:18	1
Arsenic	23.6		1.12	0.243	mg/Kg	☼	04/21/17 10:18	04/21/17 15:18	1
Barium	45.6		1.12	0.0335	mg/Kg	☼	04/21/17 10:18	04/21/17 15:18	1
Boron	1.32	J F1	22.3	0.431	mg/Kg	☼	04/21/17 10:18	04/21/17 15:18	1
Cadmium	0.0286	U	0.279	0.0286	mg/Kg	☼	04/21/17 10:18	04/21/17 15:18	1
Calcium	2310	F1	112	0.964	mg/Kg	☼	04/21/17 10:18	04/21/17 15:18	1
Chromium	5.56		0.558	0.0565	mg/Kg	☼	04/21/17 10:18	04/21/17 15:18	1
Cobalt	4.80		0.558	0.0754	mg/Kg	☼	04/21/17 10:18	04/21/17 15:18	1
Iron	18300		22.3	2.82	mg/Kg	☼	04/21/17 10:18	04/21/17 15:18	1
Lead	14.9		0.558	0.117	mg/Kg	☼	04/21/17 10:18	04/21/17 15:18	1
Magnesium	2920		112	2.14	mg/Kg	☼	04/21/17 10:18	04/21/17 15:18	1
Manganese	53.7	B	1.67	0.0425	mg/Kg	☼	04/21/17 10:18	04/21/17 15:18	1
Molybdenum	0.882		0.558	0.152	mg/Kg	☼	04/21/17 10:18	04/21/17 15:18	1
Nickel	5.30		1.12	0.131	mg/Kg	☼	04/21/17 10:18	04/21/17 15:18	1
Potassium	1280		112	12.3	mg/Kg	☼	04/21/17 10:18	04/21/17 15:18	1
Selenium	0.289	U	2.23	0.289	mg/Kg	☼	04/21/17 10:18	04/21/17 15:18	1
Sodium	6640	B	112	0.989	mg/Kg	☼	04/21/17 10:18	04/21/17 15:18	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Client Sample ID: SJRP-SB03-13-14-04112017 **Lab Sample ID: 600-146590-15**
Date Collected: 04/11/17 13:35 **Matrix: Solid**
Date Received: 04/12/17 10:03 **Percent Solids: 85.3**

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0205		0.0193	0.00406	mg/Kg	☼	04/14/17 09:52	04/17/17 11:48	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14.7		1.0	1.0	%			04/14/17 16:07	1
Percent Solids	85.3		1.0	1.0	%			04/14/17 16:07	1

Definitions/Glossary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
H	Sample was prepped or analyzed beyond the specified holding time

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F2	MS/MSD RPD exceeds control limits

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
F3	Duplicate RPD exceeds the control limit
L	A negative instrument reading had an absolute value greater than the reporting limit
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(61-130)	(68-140)	(50-130)	(57-140)
600-146590-1	SJRP-SB07-14-15-04112017	102	96	93	107
600-146590-2	SJRP-SB07-14-15-04112017 dup	101	92	96	106
600-146590-3	SJRP-SB07-20-21-04112017	103	93	98	106
600-146590-4	SJRP-MW14-15-16-04102017	99	90	93	107
600-146590-5	SJRP-MW14-20-21-04102017	104	102	92	72
600-146590-6	SJRP-MW14-25-26-04102017	83	85	95	104
600-146590-7	SJRP-SB12-19-20-04102017	116	112	96	88
600-146590-8	SJRP-SB12-25-26-04102017	74	78	101	107
600-146590-9	SJRP-SB04-14-15-04112017	100	96	96	109
600-146590-10	SJRP-SB04-19-20-04112017	100	88	96	108
600-146590-12	SJRP-SB08-13-14-04112017	101	97	94	66
600-146590-12 - DL2	SJRP-SB08-13-14-04112017	106	101	86	72
600-146590-12 - DL	SJRP-SB08-13-14-04112017	100	105	104	80
600-146590-13	SJRP-SB08-29-30-04112017	120	99	99	89
600-146590-14	SJRP-SB03-10-11-04112017	101	98	91	73
600-146590-15	SJRP-SB03-13-14-04112017	119	113	95	104
600-146590-15 - DL	SJRP-SB03-13-14-04112017	121	116	94	96
LCS 600-210668/3	Lab Control Sample	103	94	103	113
LCS 600-210994/1-A	Lab Control Sample	115	115	108	84
LCSD 600-210668/4	Lab Control Sample Dup	101	97	104	114
LCSD 600-210994/2-A	Lab Control Sample Dup	111	111	106	68
MB 600-210668/6	Method Blank	107	92	91	103
MB 600-210994/3-A	Method Blank	100	106	98	73

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(50-134)	(62-130)	(70-130)	(67-139)
600-146590-11	SJRP-TB-04112017	76	76	89	109
LCS 600-210885/12	Lab Control Sample	76	80	92	101
LCSD 600-210885/13	Lab Control Sample Dup	76	85	92	105
MB 600-210885/15	Method Blank	80	82	91	107

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TFT2 (50-150)							
600-146590-1	SJRP-SB07-14-15-04112017	69							
600-146590-1 MS	SJRP-SB07-14-15-04112017	74							
600-146590-1 MSD	SJRP-SB07-14-15-04112017	71							
600-146590-2	SJRP-SB07-14-15-04112017 dup	66							
600-146590-3	SJRP-SB07-20-21-04112017	66							
600-146590-4	SJRP-MW14-15-16-04102017	55							
600-146590-5	SJRP-MW14-20-21-04102017	62							
600-146590-6	SJRP-MW14-25-26-04102017	58							
600-146590-7	SJRP-SB12-19-20-04102017	63							
600-146590-8	SJRP-SB12-25-26-04102017	63							
600-146590-9	SJRP-SB04-14-15-04112017	66							
600-146590-10	SJRP-SB04-19-20-04112017	63							
600-146590-12	SJRP-SB08-13-14-04112017	65							
600-146590-13	SJRP-SB08-29-30-04112017	67							
600-146590-14	SJRP-SB03-10-11-04112017	62							
600-146590-15	SJRP-SB03-13-14-04112017	63							
LCS 490-423251/2-A	Lab Control Sample	86							
LCS 490-423706/2-A	Lab Control Sample	82							
LCSD 490-423251/3-A	Lab Control Sample Dup	82							
LCSD 490-423706/3-A	Lab Control Sample Dup	79							
MB 490-422754/1-A	Method Blank	66							
MB 490-423251/1-A	Method Blank	60							
MB 490-423706/1-A	Method Blank	58							

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	OTPH1 (50-150)							
600-146590-1	SJRP-SB07-14-15-04112017	90							
600-146590-2	SJRP-SB07-14-15-04112017 dup	100							
600-146590-3	SJRP-SB07-20-21-04112017	85							
600-146590-4	SJRP-MW14-15-16-04102017	83							
600-146590-5	SJRP-MW14-20-21-04102017	66							
600-146590-6	SJRP-MW14-25-26-04102017	101							
600-146590-7	SJRP-SB12-19-20-04102017	55							
600-146590-8	SJRP-SB12-25-26-04102017	69							
600-146590-9	SJRP-SB04-14-15-04112017	83							
600-146590-10	SJRP-SB04-19-20-04112017	99							
600-146590-12	SJRP-SB08-13-14-04112017	89							
600-146590-12	SJRP-SB08-13-14-04112017	68							
600-146590-13	SJRP-SB08-29-30-04112017	96							
600-146590-14	SJRP-SB03-10-11-04112017	68							
600-146590-15	SJRP-SB03-13-14-04112017	87							

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
		OTPH1								
Lab Sample ID	Client Sample ID	(50-150)								
LCS 490-422551/2-A	Lab Control Sample	91								
MB 490-422551/1-A	Method Blank	115								

Surrogate Legend

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-210668/6
Matrix: Solid
Analysis Batch: 210668

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			04/13/17 10:54	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			04/13/17 10:54	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			04/13/17 10:54	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			04/13/17 10:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*61 - 130*		*04/13/17 10:54*	*1*
Dibromofluoromethane	*92*		*68 - 140*		*04/13/17 10:54*	*1*
Toluene-d8 (Surr)	*91*		*50 - 130*		*04/13/17 10:54*	*1*
4-Bromofluorobenzene	*103*		*57 - 140*		*04/13/17 10:54*	*1*

Lab Sample ID: LCS 600-210668/3
Matrix: Solid
Analysis Batch: 210668

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.04638		mg/Kg		93	70 - 131		
Ethylbenzene			0.0500	0.04501		mg/Kg		90	66 - 130		
Toluene			0.0500	0.04521		mg/Kg		90	67 - 130		
Xylenes, Total			0.100	0.08998		mg/Kg		90	63 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*61 - 130*
Dibromofluoromethane	*94*		*68 - 140*
Toluene-d8 (Surr)	*103*		*50 - 130*
4-Bromofluorobenzene	*113*		*57 - 140*

Lab Sample ID: LCSD 600-210668/4
Matrix: Solid
Analysis Batch: 210668

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.04902		mg/Kg		98	70 - 131	6	30
Ethylbenzene			0.0500	0.04625		mg/Kg		93	66 - 130	3	30
Toluene			0.0500	0.04673		mg/Kg		93	67 - 130	3	30
Xylenes, Total			0.100	0.09094		mg/Kg		91	63 - 130	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*61 - 130*
Dibromofluoromethane	*97*		*68 - 140*
Toluene-d8 (Surr)	*104*		*50 - 130*
4-Bromofluorobenzene	*114*		*57 - 140*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-210885/15
Matrix: Water
Analysis Batch: 210885

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/17/17 17:33	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/17/17 17:33	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/17/17 17:33	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/17/17 17:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*50 - 134*		*04/17/17 17:33*	*1*
Dibromofluoromethane	*82*		*62 - 130*		*04/17/17 17:33*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*04/17/17 17:33*	*1*
4-Bromofluorobenzene	*107*		*67 - 139*		*04/17/17 17:33*	*1*

Lab Sample ID: LCS 600-210885/12
Matrix: Water
Analysis Batch: 210885

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0100	0.01072		mg/L		107	70 - 130		
Ethylbenzene			0.0100	0.01076		mg/L		108	70 - 130		
Toluene			0.0100	0.01092		mg/L		109	70 - 130		
Xylenes, Total			0.0200	0.02238		mg/L		112	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*76*		*50 - 134*
Dibromofluoromethane	*80*		*62 - 130*
Toluene-d8 (Surr)	*92*		*70 - 130*
4-Bromofluorobenzene	*101*		*67 - 139*

Lab Sample ID: LCSD 600-210885/13
Matrix: Water
Analysis Batch: 210885

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0100	0.01162		mg/L		116	70 - 130	8	20
Ethylbenzene			0.0100	0.01178		mg/L		118	70 - 130	9	20
Toluene			0.0100	0.01176		mg/L		118	70 - 130	7	20
Xylenes, Total			0.0200	0.02408		mg/L		120	70 - 130	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*76*		*50 - 134*
Dibromofluoromethane	*85*		*62 - 130*
Toluene-d8 (Surr)	*92*		*70 - 130*
4-Bromofluorobenzene	*105*		*67 - 139*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-210994/3-A
Matrix: Solid
Analysis Batch: 210997

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210994

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0788	U	0.625	0.0788	mg/Kg		04/18/17 11:00	04/18/17 14:51	1
Ethylbenzene	0.128	U	0.625	0.128	mg/Kg		04/18/17 11:00	04/18/17 14:51	1
Toluene	0.173	U	0.625	0.173	mg/Kg		04/18/17 11:00	04/18/17 14:51	1
Xylenes, Total	0.141	U	0.625	0.141	mg/Kg		04/18/17 11:00	04/18/17 14:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*61 - 130*	*04/18/17 11:00*	*04/18/17 14:51*	*1*
Dibromofluoromethane	*106*		*68 - 140*	*04/18/17 11:00*	*04/18/17 14:51*	*1*
Toluene-d8 (Surr)	*98*		*50 - 130*	*04/18/17 11:00*	*04/18/17 14:51*	*1*
4-Bromofluorobenzene	*73*		*57 - 140*	*04/18/17 11:00*	*04/18/17 14:51*	*1*

Lab Sample ID: LCS 600-210994/1-A
Matrix: Solid
Analysis Batch: 210997

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210994

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	6.25	7.028		mg/Kg		112	70 - 131
Ethylbenzene	6.25	6.769		mg/Kg		108	66 - 130
Toluene	6.25	6.526		mg/Kg		104	67 - 130
Xylenes, Total	12.5	13.10		mg/Kg		105	63 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*115*		*61 - 130*
Dibromofluoromethane	*115*		*68 - 140*
Toluene-d8 (Surr)	*108*		*50 - 130*
4-Bromofluorobenzene	*84*		*57 - 140*

Lab Sample ID: LCSD 600-210994/2-A
Matrix: Solid
Analysis Batch: 210997

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 210994

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	6.25	7.701		mg/Kg		123	70 - 131	9	30
Ethylbenzene	6.25	7.235		mg/Kg		116	66 - 130	7	30
Toluene	6.25	6.974		mg/Kg		112	67 - 130	7	30
Xylenes, Total	12.5	13.92		mg/Kg		111	63 - 130	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*111*		*61 - 130*
Dibromofluoromethane	*111*		*68 - 140*
Toluene-d8 (Surr)	*106*		*50 - 130*
4-Bromofluorobenzene	*68*		*57 - 140*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 490-422754/1-A
Matrix: Solid
Analysis Batch: 424225

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 422754

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.25	U	4.50	2.25	mg/Kg		04/17/17 13:49	04/22/17 13:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*66*		*50 - 150*	*04/17/17 13:49*	*04/22/17 13:22*	*1*

Lab Sample ID: 600-146590-1 MS
Matrix: Solid
Analysis Batch: 424225

Client Sample ID: SJRP-SB07-14-15-04112017
Prep Type: Total/NA
Prep Batch: 422754

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	2.84	U	568	474.9		mg/Kg	☼	84	56 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*74*		*50 - 150*

Lab Sample ID: 600-146590-1 MSD
Matrix: Solid
Analysis Batch: 424225

Client Sample ID: SJRP-SB07-14-15-04112017
Prep Type: Total/NA
Prep Batch: 422754

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	2.84	U	568	328.2	F2	mg/Kg	☼	58	56 - 130	37	21

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*71*		*50 - 150*

Lab Sample ID: MB 490-423251/1-A
Matrix: Solid
Analysis Batch: 424225

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 423251

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		04/19/17 09:25	04/23/17 11:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*60*		*50 - 150*	*04/19/17 09:25*	*04/23/17 11:17*	*1*

Lab Sample ID: LCS 490-423251/2-A
Matrix: Solid
Analysis Batch: 424225

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 423251

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	500	525.8		mg/Kg		105	70 - 130

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: LCS 490-423251/2-A
Matrix: Solid
Analysis Batch: 424225

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 423251

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	86		50 - 150

Lab Sample ID: LCSD 490-423251/3-A
Matrix: Solid
Analysis Batch: 424225

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 423251

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10			500	505.7		mg/Kg		101	70 - 130	4	21

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	82		50 - 150

Lab Sample ID: MB 490-423706/1-A
Matrix: Solid
Analysis Batch: 424225

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 423706

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		04/20/17 12:03	04/22/17 13:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	58		50 - 150	04/20/17 12:03	04/22/17 13:52	1

Lab Sample ID: LCS 490-423706/2-A
Matrix: Solid
Analysis Batch: 424225

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 423706

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10			500	491.1		mg/Kg		98	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	82		50 - 150

Lab Sample ID: LCSD 490-423706/3-A
Matrix: Solid
Analysis Batch: 424225

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 423706

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10			500	538.1		mg/Kg		108	70 - 130	9	21

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	79		50 - 150

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Lab Sample ID: MB 490-422551/1-A
Matrix: Solid
Analysis Batch: 423223

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 422551

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.50	U	5.00	2.50	mg/Kg		04/16/17 13:32	04/19/17 15:34	1
ORO C24-C40	2.50	U	5.00	2.50	mg/Kg		04/16/17 13:32	04/19/17 15:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*115*		*50 - 150*	*04/16/17 13:32*	*04/19/17 15:34*	*1*

Lab Sample ID: LCS 490-422551/2-A
Matrix: Solid
Analysis Batch: 423223

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 422551

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	40.0	28.99		mg/Kg		72	54 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*91*		*50 - 150*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-211265/1-A
Matrix: Solid
Analysis Batch: 211319

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 211265

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.300	U	25.0	0.300	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Barium	0.0300	U	1.00	0.0300	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Boron	0.386	U	20.0	0.386	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Calcium	0.864	U	100	0.864	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Cobalt	0.0676	U	0.500	0.0676	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Iron	2.53	U	20.0	2.53	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Lead	0.105	U	0.500	0.105	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Magnesium	1.92	U	100	1.92	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Manganese	0.1050	J	1.50	0.0381	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Molybdenum	0.136	U	0.500	0.136	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Nickel	0.117	U	1.00	0.117	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Potassium	11.0	U	100	11.0	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Selenium	0.259	U	2.00	0.259	mg/Kg		04/21/17 10:18	04/21/17 14:17	1
Sodium	2.975	J	100	0.886	mg/Kg		04/21/17 10:18	04/21/17 14:17	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-211265/2-A
Matrix: Solid
Analysis Batch: 211319

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211265

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	7590	7288		mg/Kg		96.0	34.9 - 151.5
Arsenic	97.5	99.08		mg/Kg		101.6	69.2 - 145.6
Barium	306	289.3		mg/Kg		94.5	82.7 - 117.0
Boron	116	115.0		mg/Kg		99.1	73.0 - 127.6
Cadmium	76.6	81.12		mg/Kg		105.9	73.2 - 126.8
Calcium	5880	5990		mg/Kg		101.9	81.8 - 118.4
Chromium	103	98.95		mg/Kg		96.1	79.7 - 121.4
Cobalt	103	110.2		mg/Kg		107.0	83.3 - 116.5
Iron	14500	14180		mg/Kg		97.8	45.0 - 155.9
Lead	96.7	97.43		mg/Kg		100.8	81.7 - 117.9
Magnesium	2680	2510		mg/Kg		93.7	75.4 - 124.6
Manganese	400	364.4		mg/Kg		91.1	81.0 - 119.0
Molybdenum	94.9	98.91		mg/Kg		104.2	78.5 - 121.2
Nickel	153	164.7		mg/Kg		107.6	73.2 - 126.8
Potassium	2230	2101		mg/Kg		94.2	69.5 - 130.5
Selenium	161	166.5		mg/Kg		103.4	77.6 - 123.0
Sodium	370	347.5		mg/Kg		93.9	70.5 - 129.7

Lab Sample ID: 600-146590-15 MS
Matrix: Solid
Analysis Batch: 211319

Client Sample ID: SJRP-SB03-13-14-04112017
Prep Type: Total/NA
Prep Batch: 211265

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	11500		580	15320	4	mg/Kg	☼	650	75 - 125
Arsenic	23.6		58.0	89.28		mg/Kg	☼	113	75 - 125
Barium	45.6		58.0	103.7		mg/Kg	☼	100	75 - 125
Boron	1.32	J F1	58.0	37.50	F1	mg/Kg	☼	62	75 - 125
Cadmium	0.0286	U	29.0	29.21		mg/Kg	☼	101	75 - 125
Calcium	2310	F1	580	3995	F1	mg/Kg	☼	290	75 - 125
Chromium	5.56		58.0	62.48		mg/Kg	☼	98	75 - 125
Cobalt	4.80		58.0	63.93		mg/Kg	☼	102	75 - 125
Iron	18300		580	22960	4	mg/Kg	☼	795	75 - 125
Lead	14.9		58.0	76.17		mg/Kg	☼	106	75 - 125
Magnesium	2920		580	3809	4	mg/Kg	☼	153	75 - 125
Manganese	53.7	B	58.0	112.9		mg/Kg	☼	102	75 - 125

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-146590-15 MS — **Client Sample ID: SJRP-SB03-13-14-04112017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211319 — **Prep Batch: 211265**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Molybdenum	0.882		58.0	52.88		mg/Kg	☼	90	75 - 125
Nickel	5.30		58.0	64.34		mg/Kg	☼	102	75 - 125
Potassium	1280		580	1916		mg/Kg	☼	109	75 - 125
Selenium	0.289	U	58.0	56.67		mg/Kg	☼	98	75 - 125
Sodium	6640	B	580	7281	4	mg/Kg	☼	110	75 - 125

Lab Sample ID: 600-146590-15 DU — **Client Sample ID: SJRP-SB03-13-14-04112017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211319 — **Prep Batch: 211265**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	11500		10940		mg/Kg	☼	5	20
Arsenic	23.6		37.15	F3	mg/Kg	☼	44	20
Barium	45.6		48.74		mg/Kg	☼	7	20
Boron	1.32	J F1	1.410	J	mg/Kg	☼	7	20
Cadmium	0.0286	U	0.0283	U L	mg/Kg	☼	NC	20
Calcium	2310	F1	3477	F3	mg/Kg	☼	40	20
Chromium	5.56		6.047		mg/Kg	☼	8	20
Cobalt	4.80		4.682		mg/Kg	☼	2	20
Iron	18300		21440		mg/Kg	☼	16	20
Lead	14.9		15.90		mg/Kg	☼	6	20
Magnesium	2920		2762		mg/Kg	☼	6	20
Manganese	53.7	B	63.35		mg/Kg	☼	16	20
Molybdenum	0.882		1.006		mg/Kg	☼	13	20
Nickel	5.30		5.644		mg/Kg	☼	6	20
Potassium	1280		1279		mg/Kg	☼	0.4	20
Selenium	0.289	U	0.286	U	mg/Kg	☼	NC	20
Sodium	6640	B	6406		mg/Kg	☼	4	20

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-210775/7-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 210908 — **Prep Batch: 210775**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00336	U	0.0159	0.00336	mg/Kg		04/14/17 09:52	04/17/17 11:01	1

Lab Sample ID: LCSSRM 600-210775/8-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 210908 — **Prep Batch: 210775**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	20.2	24.63		mg/Kg		121.9	70.8 - 129.2

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) (Continued)

Lab Sample ID: 600-146590-15 MS
Matrix: Solid
Analysis Batch: 210908

Client Sample ID: SJRP-SB03-13-14-04112017
Prep Type: Total/NA
Prep Batch: 210775

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0205		0.266	0.3020		mg/Kg	☼	106	75 - 125

Lab Sample ID: 600-146590-15 DU
Matrix: Solid
Analysis Batch: 210908

Client Sample ID: SJRP-SB03-13-14-04112017
Prep Type: Total/NA
Prep Batch: 210775

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.0205		0.01430	J F5	mg/Kg	☼	36	20

Method: 2540B - Percent Moisture

Lab Sample ID: 600-146590-10 DU
Matrix: Solid
Analysis Batch: 210814

Client Sample ID: SJRP-SB04-19-20-04112017
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	16.6		17.2		%		3	20
Percent Solids	83.4		82.8		%		0.7	20

Lab Sample ID: 600-146590-14 DU
Matrix: Solid
Analysis Batch: 210814

Client Sample ID: SJRP-SB03-10-11-04112017
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	19.6		19.5		%		0.6	20
Percent Solids	80.4		80.5		%		0.1	20

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

GC/MS VOA

Analysis Batch: 210668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146590-1	SJRP-SB07-14-15-04112017	Total/NA	Solid	8260B	210699
600-146590-2	SJRP-SB07-14-15-04112017 dup	Total/NA	Solid	8260B	210699
600-146590-3	SJRP-SB07-20-21-04112017	Total/NA	Solid	8260B	210699
600-146590-4	SJRP-MW14-15-16-04102017	Total/NA	Solid	8260B	210699
600-146590-6	SJRP-MW14-25-26-04102017	Total/NA	Solid	8260B	210699
600-146590-8	SJRP-SB12-25-26-04102017	Total/NA	Solid	8260B	210699
600-146590-9	SJRP-SB04-14-15-04112017	Total/NA	Solid	8260B	210699
600-146590-10	SJRP-SB04-19-20-04112017	Total/NA	Solid	8260B	210699
MB 600-210668/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-210668/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-210668/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 210699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146590-1	SJRP-SB07-14-15-04112017	Total/NA	Solid	5035	
600-146590-2	SJRP-SB07-14-15-04112017 dup	Total/NA	Solid	5035	
600-146590-3	SJRP-SB07-20-21-04112017	Total/NA	Solid	5035	
600-146590-4	SJRP-MW14-15-16-04102017	Total/NA	Solid	5035	
600-146590-6	SJRP-MW14-25-26-04102017	Total/NA	Solid	5035	
600-146590-8	SJRP-SB12-25-26-04102017	Total/NA	Solid	5035	
600-146590-9	SJRP-SB04-14-15-04112017	Total/NA	Solid	5035	
600-146590-10	SJRP-SB04-19-20-04112017	Total/NA	Solid	5035	

Analysis Batch: 210885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146590-11	SJRP-TB-04112017	Total/NA	Water	8260B	
MB 600-210885/15	Method Blank	Total/NA	Water	8260B	
LCS 600-210885/12	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-210885/13	Lab Control Sample Dup	Total/NA	Water	8260B	

Prep Batch: 210895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146590-5	SJRP-MW14-20-21-04102017	Total/NA	Solid	5035	
600-146590-7	SJRP-SB12-19-20-04102017	Total/NA	Solid	5035	
600-146590-12 - DL2	SJRP-SB08-13-14-04112017	Total/NA	Solid	5035	
600-146590-12 - DL	SJRP-SB08-13-14-04112017	Total/NA	Solid	5035	
600-146590-12	SJRP-SB08-13-14-04112017	Total/NA	Solid	5035	
600-146590-13	SJRP-SB08-29-30-04112017	Total/NA	Solid	5035	
600-146590-14	SJRP-SB03-10-11-04112017	Total/NA	Solid	5035	
600-146590-15	SJRP-SB03-13-14-04112017	Total/NA	Solid	5035	
600-146590-15 - DL	SJRP-SB03-13-14-04112017	Total/NA	Solid	5035	

Prep Batch: 210994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-210994/3-A	Method Blank	Total/NA	Solid	5030B	
LCS 600-210994/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 600-210994/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 210997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146590-5	SJRP-MW14-20-21-04102017	Total/NA	Solid	8260B	210895

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

GC/MS VOA (Continued)

Analysis Batch: 210997 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146590-7	SJRP-SB12-19-20-04102017	Total/NA	Solid	8260B	210895
600-146590-12	SJRP-SB08-13-14-04112017	Total/NA	Solid	8260B	210895
600-146590-13	SJRP-SB08-29-30-04112017	Total/NA	Solid	8260B	210895
600-146590-14	SJRP-SB03-10-11-04112017	Total/NA	Solid	8260B	210895
600-146590-15	SJRP-SB03-13-14-04112017	Total/NA	Solid	8260B	210895
MB 600-210994/3-A	Method Blank	Total/NA	Solid	8260B	210994
LCS 600-210994/1-A	Lab Control Sample	Total/NA	Solid	8260B	210994
LCSD 600-210994/2-A	Lab Control Sample Dup	Total/NA	Solid	8260B	210994

Analysis Batch: 211078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146590-12 - DL	SJRP-SB08-13-14-04112017	Total/NA	Solid	8260B	210895
600-146590-12 - DL2	SJRP-SB08-13-14-04112017	Total/NA	Solid	8260B	210895
600-146590-15 - DL	SJRP-SB03-13-14-04112017	Total/NA	Solid	8260B	210895

GC VOA

Prep Batch: 422754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146590-1	SJRP-SB07-14-15-04112017	Total/NA	Solid	5030B	
600-146590-2	SJRP-SB07-14-15-04112017 dup	Total/NA	Solid	5030B	
600-146590-3	SJRP-SB07-20-21-04112017	Total/NA	Solid	5030B	
600-146590-4	SJRP-MW14-15-16-04102017	Total/NA	Solid	5030B	
600-146590-5	SJRP-MW14-20-21-04102017	Total/NA	Solid	5030B	
600-146590-6	SJRP-MW14-25-26-04102017	Total/NA	Solid	5030B	
600-146590-7	SJRP-SB12-19-20-04102017	Total/NA	Solid	5030B	
600-146590-8	SJRP-SB12-25-26-04102017	Total/NA	Solid	5030B	
600-146590-9	SJRP-SB04-14-15-04112017	Total/NA	Solid	5030B	
600-146590-10	SJRP-SB04-19-20-04112017	Total/NA	Solid	5030B	
600-146590-12	SJRP-SB08-13-14-04112017	Total/NA	Solid	5030B	
600-146590-13	SJRP-SB08-29-30-04112017	Total/NA	Solid	5030B	
600-146590-14	SJRP-SB03-10-11-04112017	Total/NA	Solid	5030B	
600-146590-15	SJRP-SB03-13-14-04112017	Total/NA	Solid	5030B	
MB 490-422754/1-A	Method Blank	Total/NA	Solid	5030B	
600-146590-1 MS	SJRP-SB07-14-15-04112017	Total/NA	Solid	5030B	
600-146590-1 MSD	SJRP-SB07-14-15-04112017	Total/NA	Solid	5030B	

Prep Batch: 423251

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-423251/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 490-423251/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 490-423251/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Prep Batch: 423706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-423706/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 490-423706/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 490-423706/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

GC VOA (Continued)

Analysis Batch: 424225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146590-1	SJRP-SB07-14-15-04112017	Total/NA	Solid	8015C	422754
600-146590-2	SJRP-SB07-14-15-04112017 dup	Total/NA	Solid	8015C	422754
600-146590-3	SJRP-SB07-20-21-04112017	Total/NA	Solid	8015C	422754
600-146590-4	SJRP-MW14-15-16-04102017	Total/NA	Solid	8015C	422754
600-146590-5	SJRP-MW14-20-21-04102017	Total/NA	Solid	8015C	422754
600-146590-6	SJRP-MW14-25-26-04102017	Total/NA	Solid	8015C	422754
600-146590-7	SJRP-SB12-19-20-04102017	Total/NA	Solid	8015C	422754
600-146590-8	SJRP-SB12-25-26-04102017	Total/NA	Solid	8015C	422754
600-146590-9	SJRP-SB04-14-15-04112017	Total/NA	Solid	8015C	422754
600-146590-10	SJRP-SB04-19-20-04112017	Total/NA	Solid	8015C	422754
600-146590-12	SJRP-SB08-13-14-04112017	Total/NA	Solid	8015C	422754
600-146590-13	SJRP-SB08-29-30-04112017	Total/NA	Solid	8015C	422754
600-146590-14	SJRP-SB03-10-11-04112017	Total/NA	Solid	8015C	422754
600-146590-15	SJRP-SB03-13-14-04112017	Total/NA	Solid	8015C	422754
MB 490-422754/1-A	Method Blank	Total/NA	Solid	8015C	422754
MB 490-423251/1-A	Method Blank	Total/NA	Solid	8015C	423251
MB 490-423706/1-A	Method Blank	Total/NA	Solid	8015C	423706
LCS 490-423251/2-A	Lab Control Sample	Total/NA	Solid	8015C	423251
LCS 490-423706/2-A	Lab Control Sample	Total/NA	Solid	8015C	423706
LCSD 490-423251/3-A	Lab Control Sample Dup	Total/NA	Solid	8015C	423251
LCSD 490-423706/3-A	Lab Control Sample Dup	Total/NA	Solid	8015C	423706
600-146590-1 MS	SJRP-SB07-14-15-04112017	Total/NA	Solid	8015C	422754
600-146590-1 MSD	SJRP-SB07-14-15-04112017	Total/NA	Solid	8015C	422754

GC Semi VOA

Prep Batch: 422551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146590-1	SJRP-SB07-14-15-04112017	Total/NA	Solid	3550C	
600-146590-2	SJRP-SB07-14-15-04112017 dup	Total/NA	Solid	3550C	
600-146590-3	SJRP-SB07-20-21-04112017	Total/NA	Solid	3550C	
600-146590-4	SJRP-MW14-15-16-04102017	Total/NA	Solid	3550C	
600-146590-5	SJRP-MW14-20-21-04102017	Total/NA	Solid	3550C	
600-146590-6	SJRP-MW14-25-26-04102017	Total/NA	Solid	3550C	
600-146590-7	SJRP-SB12-19-20-04102017	Total/NA	Solid	3550C	
600-146590-8	SJRP-SB12-25-26-04102017	Total/NA	Solid	3550C	
600-146590-9	SJRP-SB04-14-15-04112017	Total/NA	Solid	3550C	
600-146590-10	SJRP-SB04-19-20-04112017	Total/NA	Solid	3550C	
600-146590-12	SJRP-SB08-13-14-04112017	Total/NA	Solid	3550C	
600-146590-13	SJRP-SB08-29-30-04112017	Total/NA	Solid	3550C	
600-146590-14	SJRP-SB03-10-11-04112017	Total/NA	Solid	3550C	
600-146590-15	SJRP-SB03-13-14-04112017	Total/NA	Solid	3550C	
MB 490-422551/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-422551/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 423223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146590-1	SJRP-SB07-14-15-04112017	Total/NA	Solid	8015C	422551
600-146590-2	SJRP-SB07-14-15-04112017 dup	Total/NA	Solid	8015C	422551
600-146590-3	SJRP-SB07-20-21-04112017	Total/NA	Solid	8015C	422551

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

GC Semi VOA (Continued)

Analysis Batch: 423223 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146590-4	SJRP-MW14-15-16-04102017	Total/NA	Solid	8015C	422551
600-146590-5	SJRP-MW14-20-21-04102017	Total/NA	Solid	8015C	422551
600-146590-6	SJRP-MW14-25-26-04102017	Total/NA	Solid	8015C	422551
600-146590-7	SJRP-SB12-19-20-04102017	Total/NA	Solid	8015C	422551
600-146590-8	SJRP-SB12-25-26-04102017	Total/NA	Solid	8015C	422551
600-146590-9	SJRP-SB04-14-15-04112017	Total/NA	Solid	8015C	422551
600-146590-10	SJRP-SB04-19-20-04112017	Total/NA	Solid	8015C	422551
600-146590-12	SJRP-SB08-13-14-04112017	Total/NA	Solid	8015C	422551
600-146590-13	SJRP-SB08-29-30-04112017	Total/NA	Solid	8015C	422551
600-146590-14	SJRP-SB03-10-11-04112017	Total/NA	Solid	8015C	422551
600-146590-15	SJRP-SB03-13-14-04112017	Total/NA	Solid	8015C	422551
MB 490-422551/1-A	Method Blank	Total/NA	Solid	8015C	422551
LCS 490-422551/2-A	Lab Control Sample	Total/NA	Solid	8015C	422551

Analysis Batch: 423565

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146590-12	SJRP-SB08-13-14-04112017	Total/NA	Solid	8015C	422551

Metals

Prep Batch: 210775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146590-1	SJRP-SB07-14-15-04112017	Total/NA	Solid	7471A	
600-146590-2	SJRP-SB07-14-15-04112017 dup	Total/NA	Solid	7471A	
600-146590-3	SJRP-SB07-20-21-04112017	Total/NA	Solid	7471A	
600-146590-4	SJRP-MW14-15-16-04102017	Total/NA	Solid	7471A	
600-146590-5	SJRP-MW14-20-21-04102017	Total/NA	Solid	7471A	
600-146590-6	SJRP-MW14-25-26-04102017	Total/NA	Solid	7471A	
600-146590-7	SJRP-SB12-19-20-04102017	Total/NA	Solid	7471A	
600-146590-8	SJRP-SB12-25-26-04102017	Total/NA	Solid	7471A	
600-146590-9	SJRP-SB04-14-15-04112017	Total/NA	Solid	7471A	
600-146590-10	SJRP-SB04-19-20-04112017	Total/NA	Solid	7471A	
600-146590-12	SJRP-SB08-13-14-04112017	Total/NA	Solid	7471A	
600-146590-13	SJRP-SB08-29-30-04112017	Total/NA	Solid	7471A	
600-146590-14	SJRP-SB03-10-11-04112017	Total/NA	Solid	7471A	
600-146590-15	SJRP-SB03-13-14-04112017	Total/NA	Solid	7471A	
MB 600-210775/7-A	Method Blank	Total/NA	Solid	7471A	
LCSSRM 600-210775/8-A	Lab Control Sample	Total/NA	Solid	7471A	
600-146590-15 MS	SJRP-SB03-13-14-04112017	Total/NA	Solid	7471A	
600-146590-15 DU	SJRP-SB03-13-14-04112017	Total/NA	Solid	7471A	

Analysis Batch: 210908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146590-1	SJRP-SB07-14-15-04112017	Total/NA	Solid	7471A	210775
600-146590-2	SJRP-SB07-14-15-04112017 dup	Total/NA	Solid	7471A	210775
600-146590-3	SJRP-SB07-20-21-04112017	Total/NA	Solid	7471A	210775
600-146590-4	SJRP-MW14-15-16-04102017	Total/NA	Solid	7471A	210775
600-146590-5	SJRP-MW14-20-21-04102017	Total/NA	Solid	7471A	210775
600-146590-6	SJRP-MW14-25-26-04102017	Total/NA	Solid	7471A	210775
600-146590-7	SJRP-SB12-19-20-04102017	Total/NA	Solid	7471A	210775

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Metals (Continued)

Analysis Batch: 210908 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146590-8	SJRP-SB12-25-26-04102017	Total/NA	Solid	7471A	210775
600-146590-9	SJRP-SB04-14-15-04112017	Total/NA	Solid	7471A	210775
600-146590-10	SJRP-SB04-19-20-04112017	Total/NA	Solid	7471A	210775
600-146590-12	SJRP-SB08-13-14-04112017	Total/NA	Solid	7471A	210775
600-146590-13	SJRP-SB08-29-30-04112017	Total/NA	Solid	7471A	210775
600-146590-14	SJRP-SB03-10-11-04112017	Total/NA	Solid	7471A	210775
600-146590-15	SJRP-SB03-13-14-04112017	Total/NA	Solid	7471A	210775
MB 600-210775/7-A	Method Blank	Total/NA	Solid	7471A	210775
LCSSRM 600-210775/8-A	Lab Control Sample	Total/NA	Solid	7471A	210775
600-146590-15 MS	SJRP-SB03-13-14-04112017	Total/NA	Solid	7471A	210775
600-146590-15 DU	SJRP-SB03-13-14-04112017	Total/NA	Solid	7471A	210775

Prep Batch: 211265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146590-1	SJRP-SB07-14-15-04112017	Total/NA	Solid	3050B	
600-146590-2	SJRP-SB07-14-15-04112017 dup	Total/NA	Solid	3050B	
600-146590-3	SJRP-SB07-20-21-04112017	Total/NA	Solid	3050B	
600-146590-4	SJRP-MW14-15-16-04102017	Total/NA	Solid	3050B	
600-146590-5	SJRP-MW14-20-21-04102017	Total/NA	Solid	3050B	
600-146590-6	SJRP-MW14-25-26-04102017	Total/NA	Solid	3050B	
600-146590-7	SJRP-SB12-19-20-04102017	Total/NA	Solid	3050B	
600-146590-8	SJRP-SB12-25-26-04102017	Total/NA	Solid	3050B	
600-146590-9	SJRP-SB04-14-15-04112017	Total/NA	Solid	3050B	
600-146590-10	SJRP-SB04-19-20-04112017	Total/NA	Solid	3050B	
600-146590-12	SJRP-SB08-13-14-04112017	Total/NA	Solid	3050B	
600-146590-13	SJRP-SB08-29-30-04112017	Total/NA	Solid	3050B	
600-146590-14	SJRP-SB03-10-11-04112017	Total/NA	Solid	3050B	
600-146590-15	SJRP-SB03-13-14-04112017	Total/NA	Solid	3050B	
MB 600-211265/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-211265/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-146590-15 MS	SJRP-SB03-13-14-04112017	Total/NA	Solid	3050B	
600-146590-15 DU	SJRP-SB03-13-14-04112017	Total/NA	Solid	3050B	

Analysis Batch: 211319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146590-1	SJRP-SB07-14-15-04112017	Total/NA	Solid	6010B	211265
600-146590-1	SJRP-SB07-14-15-04112017	Total/NA	Solid	6010B	211265
600-146590-2	SJRP-SB07-14-15-04112017 dup	Total/NA	Solid	6010B	211265
600-146590-2	SJRP-SB07-14-15-04112017 dup	Total/NA	Solid	6010B	211265
600-146590-3	SJRP-SB07-20-21-04112017	Total/NA	Solid	6010B	211265
600-146590-4	SJRP-MW14-15-16-04102017	Total/NA	Solid	6010B	211265
600-146590-4	SJRP-MW14-15-16-04102017	Total/NA	Solid	6010B	211265
600-146590-5	SJRP-MW14-20-21-04102017	Total/NA	Solid	6010B	211265
600-146590-6	SJRP-MW14-25-26-04102017	Total/NA	Solid	6010B	211265
600-146590-7	SJRP-SB12-19-20-04102017	Total/NA	Solid	6010B	211265
600-146590-8	SJRP-SB12-25-26-04102017	Total/NA	Solid	6010B	211265
600-146590-9	SJRP-SB04-14-15-04112017	Total/NA	Solid	6010B	211265
600-146590-10	SJRP-SB04-19-20-04112017	Total/NA	Solid	6010B	211265
600-146590-12	SJRP-SB08-13-14-04112017	Total/NA	Solid	6010B	211265
600-146590-13	SJRP-SB08-29-30-04112017	Total/NA	Solid	6010B	211265
600-146590-14	SJRP-SB03-10-11-04112017	Total/NA	Solid	6010B	211265

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Metals (Continued)

Analysis Batch: 211319 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146590-15	SJRP-SB03-13-14-04112017	Total/NA	Solid	6010B	211265
MB 600-211265/1-A	Method Blank	Total/NA	Solid	6010B	211265
LCSSRM 600-211265/2-A	Lab Control Sample	Total/NA	Solid	6010B	211265
600-146590-15 MS	SJRP-SB03-13-14-04112017	Total/NA	Solid	6010B	211265
600-146590-15 DU	SJRP-SB03-13-14-04112017	Total/NA	Solid	6010B	211265

General Chemistry

Analysis Batch: 210814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146590-1	SJRP-SB07-14-15-04112017	Total/NA	Solid	2540B	
600-146590-2	SJRP-SB07-14-15-04112017 dup	Total/NA	Solid	2540B	
600-146590-3	SJRP-SB07-20-21-04112017	Total/NA	Solid	2540B	
600-146590-4	SJRP-MW14-15-16-04102017	Total/NA	Solid	2540B	
600-146590-5	SJRP-MW14-20-21-04102017	Total/NA	Solid	2540B	
600-146590-6	SJRP-MW14-25-26-04102017	Total/NA	Solid	2540B	
600-146590-7	SJRP-SB12-19-20-04102017	Total/NA	Solid	2540B	
600-146590-8	SJRP-SB12-25-26-04102017	Total/NA	Solid	2540B	
600-146590-9	SJRP-SB04-14-15-04112017	Total/NA	Solid	2540B	
600-146590-10	SJRP-SB04-19-20-04112017	Total/NA	Solid	2540B	
600-146590-12	SJRP-SB08-13-14-04112017	Total/NA	Solid	2540B	
600-146590-13	SJRP-SB08-29-30-04112017	Total/NA	Solid	2540B	
600-146590-14	SJRP-SB03-10-11-04112017	Total/NA	Solid	2540B	
600-146590-15	SJRP-SB03-13-14-04112017	Total/NA	Solid	2540B	
600-146590-10 DU	SJRP-SB04-19-20-04112017	Total/NA	Solid	2540B	
600-146590-14 DU	SJRP-SB03-10-11-04112017	Total/NA	Solid	2540B	

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Client Sample ID: SJRP-SB07-14-15-04112017
Lab Sample ID: 600-146590-1
Date Collected: 04/11/17 08:30
Matrix: Solid
Date Received: 04/12/17 10:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			210814	04/14/17 16:07	B1K	TAL HOU

Client Sample ID: SJRP-SB07-14-15-04112017
Lab Sample ID: 600-146590-1
Date Collected: 04/11/17 08:30
Matrix: Solid
Date Received: 04/12/17 10:03
Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.013 g	5 mL	210699	04/12/17 16:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210668	04/13/17 13:20	WS1	TAL HOU
Total/NA	Prep	5030B			5.71 g	5.0 mL	422754	04/17/17 13:49	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	424225	04/22/17 14:22	FKG	TAL NSH
Total/NA	Prep	3550C			25.72 g	1.00 mL	422551	04/16/17 13:32	MNM	TAL NSH
Total/NA	Analysis	8015C		1			423223	04/19/17 17:14	MDW	TAL NSH
Total/NA	Prep	3050B			1.14 g	50 mL	211265	04/21/17 10:18	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211319	04/21/17 14:44	DCL	TAL HOU
Total/NA	Prep	3050B			1.14 g	50 mL	211265	04/21/17 10:18	JAH	TAL HOU
Total/NA	Analysis	6010B		5			211319	04/21/17 17:48	DCL	TAL HOU
Total/NA	Prep	7471A			.60 g	50 mL	210775	04/14/17 09:52	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210908	04/17/17 11:29	DDE	TAL HOU

Client Sample ID: SJRP-SB07-14-15-04112017 dup
Lab Sample ID: 600-146590-2
Date Collected: 04/11/17 08:30
Matrix: Solid
Date Received: 04/12/17 10:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			210814	04/14/17 16:07	B1K	TAL HOU

Client Sample ID: SJRP-SB07-14-15-04112017 dup
Lab Sample ID: 600-146590-2
Date Collected: 04/11/17 08:30
Matrix: Solid
Date Received: 04/12/17 10:03
Percent Solids: 87.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.701 g	5 mL	210699	04/12/17 16:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210668	04/13/17 13:44	WS1	TAL HOU
Total/NA	Prep	5030B			5.41 g	5.0 mL	422754	04/17/17 13:49	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	424225	04/22/17 14:52	FKG	TAL NSH
Total/NA	Prep	3550C			25.48 g	1.00 mL	422551	04/16/17 13:32	MNM	TAL NSH
Total/NA	Analysis	8015C		1			423223	04/19/17 17:30	MDW	TAL NSH
Total/NA	Prep	3050B			1.16 g	50 mL	211265	04/21/17 10:18	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211319	04/21/17 14:46	DCL	TAL HOU
Total/NA	Prep	3050B			1.16 g	50 mL	211265	04/21/17 10:18	JAH	TAL HOU
Total/NA	Analysis	6010B		5			211319	04/21/17 17:50	DCL	TAL HOU
Total/NA	Prep	7471A			.65 g	50 mL	210775	04/14/17 09:52	DDE	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Client Sample ID: SJRP-SB07-14-15-04112017 dup — **Lab Sample ID: 600-146590-2**
Date Collected: 04/11/17 08:30 — **Matrix: Solid**
Date Received: 04/12/17 10:03 — **Percent Solids: 87.3**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1			210908	04/17/17 11:31	DDE	TAL HOU

Client Sample ID: SJRP-SB07-20-21-04112017 — **Lab Sample ID: 600-146590-3**
Date Collected: 04/11/17 08:45 — **Matrix: Solid**
Date Received: 04/12/17 10:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			210814	04/14/17 16:07	B1K	TAL HOU

Client Sample ID: SJRP-SB07-20-21-04112017 — **Lab Sample ID: 600-146590-3**
Date Collected: 04/11/17 08:45 — **Matrix: Solid**
Date Received: 04/12/17 10:03 — **Percent Solids: 81.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.35 g	5 mL	210699	04/12/17 16:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210668	04/13/17 14:09	WS1	TAL HOU
Total/NA	Prep	5030B			5.73 g	5.0 mL	422754	04/17/17 13:49	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	424225	04/22/17 15:22	FKG	TAL NSH
Total/NA	Prep	3550C			25.01 g	1.00 mL	422551	04/16/17 13:32	MNM	TAL NSH
Total/NA	Analysis	8015C		1			423223	04/19/17 17:47	MDW	TAL NSH
Total/NA	Prep	3050B			1.11 g	50 mL	211265	04/21/17 10:18	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211319	04/21/17 14:48	DCL	TAL HOU
Total/NA	Prep	7471A			.63 g	50 mL	210775	04/14/17 09:52	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210908	04/17/17 11:33	DDE	TAL HOU

Client Sample ID: SJRP-MW14-15-16-04102017 — **Lab Sample ID: 600-146590-4**
Date Collected: 04/10/17 13:45 — **Matrix: Solid**
Date Received: 04/12/17 10:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			210814	04/14/17 16:07	B1K	TAL HOU

Client Sample ID: SJRP-MW14-15-16-04102017 — **Lab Sample ID: 600-146590-4**
Date Collected: 04/10/17 13:45 — **Matrix: Solid**
Date Received: 04/12/17 10:03 — **Percent Solids: 86.9**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.287 g	5 mL	210699	04/12/17 16:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210668	04/13/17 14:33	WS1	TAL HOU
Total/NA	Prep	5030B			5.75 g	5.0 mL	422754	04/17/17 13:49	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	424225	04/22/17 15:52	FKG	TAL NSH
Total/NA	Prep	3550C			25.88 g	1.00 mL	422551	04/16/17 13:32	MNM	TAL NSH
Total/NA	Analysis	8015C		1			423223	04/19/17 18:03	MDW	TAL NSH

TestAmerica Houston

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.17 g	50 mL	211265	04/21/17 10:18	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211319	04/21/17 14:50	DCL	TAL HOU
Total/NA	Prep	3050B			1.17 g	50 mL	211265	04/21/17 10:18	JAH	TAL HOU
Total/NA	Analysis	6010B		5			211319	04/21/17 17:52	DCL	TAL HOU
Total/NA	Prep	7471A			.66 g	50 mL	210775	04/14/17 09:52	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210908	04/17/17 11:16	DDE	TAL HOU

Client Sample ID: SJRP-MW14-20-21-04102017 — **Lab Sample ID: 600-146590-5**
Date Collected: 04/10/17 14:05 — **Matrix: Solid**
Date Received: 04/12/17 10:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.526 g	5 mL	210895	04/12/17 16:30	KLV	TAL HOU
Total/NA	Analysis	8260B		1	100 uL	5 mL	210997	04/18/17 17:20	KLV	TAL HOU
Total/NA	Analysis	2540B		1			210814	04/14/17 16:07	B1K	TAL HOU

Client Sample ID: SJRP-MW14-20-21-04102017 — **Lab Sample ID: 600-146590-5**
Date Collected: 04/10/17 14:05 — **Matrix: Solid**
Date Received: 04/12/17 10:03 — **Percent Solids: 82.9**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.54 g	5.0 mL	422754	04/17/17 13:49	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	424225	04/22/17 16:22	FKG	TAL NSH
Total/NA	Prep	3550C			25.73 g	1.00 mL	422551	04/16/17 13:32	MNM	TAL NSH
Total/NA	Analysis	8015C		1			423223	04/19/17 18:19	MDW	TAL NSH
Total/NA	Prep	3050B			1.06 g	50 mL	211265	04/21/17 10:18	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211319	04/21/17 14:52	DCL	TAL HOU
Total/NA	Prep	7471A			.62 g	50 mL	210775	04/14/17 09:52	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210908	04/17/17 11:18	DDE	TAL HOU

Client Sample ID: SJRP-MW14-25-26-04102017 — **Lab Sample ID: 600-146590-6**
Date Collected: 04/10/17 14:15 — **Matrix: Solid**
Date Received: 04/12/17 10:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			210814	04/14/17 16:07	B1K	TAL HOU

Client Sample ID: SJRP-MW14-25-26-04102017 — **Lab Sample ID: 600-146590-6**
Date Collected: 04/10/17 14:15 — **Matrix: Solid**
Date Received: 04/12/17 10:03 — **Percent Solids: 89.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.051 g	5 mL	210699	04/12/17 16:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210668	04/13/17 15:21	WS1	TAL HOU
Total/NA	Prep	5030B			5.26 g	5.0 mL	422754	04/17/17 13:49	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	424225	04/22/17 16:52	FKG	TAL NSH
Total/NA	Prep	3550C			25.14 g	1.00 mL	422551	04/16/17 13:32	MNM	TAL NSH

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Client Sample ID: SJRP-MW14-25-26-04102017 — Lab Sample ID: 600-146590-6

Date Collected: 04/10/17 14:15 — **Matrix: Solid**
Date Received: 04/12/17 10:03 — **Percent Solids: 89.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015C		1			423223	04/19/17 18:36	MDW	TAL NSH
Total/NA	Prep	3050B			1.12 g	50 mL	211265	04/21/17 10:18	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211319	04/21/17 14:54	DCL	TAL HOU
Total/NA	Prep	7471A			.60 g	50 mL	210775	04/14/17 09:52	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210908	04/17/17 11:24	DDE	TAL HOU

Client Sample ID: SJRP-SB12-19-20-04102017 — Lab Sample ID: 600-146590-7

Date Collected: 04/10/17 15:07 — **Matrix: Solid**
Date Received: 04/12/17 10:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.021 g	5 mL	210895	04/12/17 16:30	KLV	TAL HOU
Total/NA	Analysis	8260B		1	100 uL	5 mL	210997	04/18/17 17:49	KLV	TAL HOU
Total/NA	Analysis	2540B		1			210814	04/14/17 16:07	B1K	TAL HOU

Client Sample ID: SJRP-SB12-19-20-04102017 — Lab Sample ID: 600-146590-7

Date Collected: 04/10/17 15:07 — **Matrix: Solid**
Date Received: 04/12/17 10:03 — **Percent Solids: 83.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.43 g	5.0 mL	422754	04/17/17 13:49	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	424225	04/22/17 17:22	FKG	TAL NSH
Total/NA	Prep	3550C			25.89 g	1.00 mL	422551	04/16/17 13:32	MNM	TAL NSH
Total/NA	Analysis	8015C		1			423223	04/19/17 18:52	MDW	TAL NSH
Total/NA	Prep	3050B			1.18 g	50 mL	211265	04/21/17 10:18	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211319	04/21/17 14:57	DCL	TAL HOU
Total/NA	Prep	7471A			.65 g	50 mL	210775	04/14/17 09:52	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210908	04/17/17 11:25	DDE	TAL HOU

Client Sample ID: SJRP-SB12-25-26-04102017 — Lab Sample ID: 600-146590-8

Date Collected: 04/10/17 16:15 — **Matrix: Solid**
Date Received: 04/12/17 10:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			210814	04/14/17 16:07	B1K	TAL HOU

Client Sample ID: SJRP-SB12-25-26-04102017 — Lab Sample ID: 600-146590-8

Date Collected: 04/10/17 16:15 — **Matrix: Solid**
Date Received: 04/12/17 10:03 — **Percent Solids: 89.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.463 g	5 mL	210699	04/12/17 16:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210668	04/13/17 16:17	WS1	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.08 g	5.0 mL	422754	04/17/17 13:49	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	424225	04/22/17 17:52	FKG	TAL NSH
Total/NA	Prep	3550C			25.69 g	1.00 mL	422551	04/16/17 13:32	MNM	TAL NSH
Total/NA	Analysis	8015C		1			423223	04/19/17 19:09	MDW	TAL NSH
Total/NA	Prep	3050B			1.06 g	50 mL	211265	04/21/17 10:18	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211319	04/21/17 14:59	DCL	TAL HOU
Total/NA	Prep	7471A			.66 g	50 mL	210775	04/14/17 09:52	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210908	04/17/17 11:27	DDE	TAL HOU

Client Sample ID: SJRP-SB04-14-15-04112017

Lab Sample ID: 600-146590-9

Date Collected: 04/11/17 09:45

Matrix: Solid

Date Received: 04/12/17 10:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			210814	04/14/17 16:07	B1K	TAL HOU

Client Sample ID: SJRP-SB04-14-15-04112017

Lab Sample ID: 600-146590-9

Date Collected: 04/11/17 09:45

Matrix: Solid

Date Received: 04/12/17 10:03

Percent Solids: 86.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.78 g	5 mL	210699	04/12/17 16:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210668	04/13/17 12:06	WS1	TAL HOU
Total/NA	Prep	5030B			5.71 g	5.0 mL	422754	04/17/17 13:49	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	424225	04/22/17 18:22	FKG	TAL NSH
Total/NA	Prep	3550C			25.23 g	1.00 mL	422551	04/16/17 13:32	MNM	TAL NSH
Total/NA	Analysis	8015C		1			423223	04/19/17 19:25	MDW	TAL NSH
Total/NA	Prep	3050B			1.09 g	50 mL	211265	04/21/17 10:18	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211319	04/21/17 15:01	DCL	TAL HOU
Total/NA	Prep	7471A			.65 g	50 mL	210775	04/14/17 09:52	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210908	04/17/17 11:35	DDE	TAL HOU

Client Sample ID: SJRP-SB04-19-20-04112017

Lab Sample ID: 600-146590-10

Date Collected: 04/11/17 09:58

Matrix: Solid

Date Received: 04/12/17 10:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			210814	04/14/17 16:07	B1K	TAL HOU

Client Sample ID: SJRP-SB04-19-20-04112017

Lab Sample ID: 600-146590-10

Date Collected: 04/11/17 09:58

Matrix: Solid

Date Received: 04/12/17 10:03

Percent Solids: 83.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.668 g	5 mL	210699	04/12/17 16:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210668	04/13/17 12:31	WS1	TAL HOU
Total/NA	Prep	5030B			5.98 g	5.0 mL	422754	04/17/17 13:49	CU	TAL NSH

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Client Sample ID: SJRP-SB04-19-20-04112017

Lab Sample ID: 600-146590-10
Date Collected: 04/11/17 09:58
Matrix: Solid
Date Received: 04/12/17 10:03
Percent Solids: 83.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	424225	04/22/17 18:52	FKG	TAL NSH
Total/NA	Prep	3550C			25.76 g	1.00 mL	422551	04/16/17 13:32	MNM	TAL NSH
Total/NA	Analysis	8015C		1			423223	04/19/17 19:42	MDW	TAL NSH
Total/NA	Prep	3050B			1.01 g	50 mL	211265	04/21/17 10:18	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211319	04/21/17 15:03	DCL	TAL HOU
Total/NA	Prep	7471A			.61 g	50 mL	210775	04/14/17 09:52	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210908	04/17/17 11:36	DDE	TAL HOU

Client Sample ID: SJRP-TB-04112017

Lab Sample ID: 600-146590-11
Date Collected: 04/11/17 08:35
Matrix: Water
Date Received: 04/12/17 10:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	210885	04/17/17 23:31	YX1	TAL HOU

Client Sample ID: SJRP-SB08-13-14-04112017

Lab Sample ID: 600-146590-12
Date Collected: 04/11/17 11:45
Matrix: Solid
Date Received: 04/12/17 10:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			2.571 g	5 mL	210895	04/12/17 16:30	KLV	TAL HOU
Total/NA	Analysis	8260B		1	100 uL	5 mL	210997	04/18/17 18:18	KLV	TAL HOU
Total/NA	Prep	5035	DL		2.571 g	5 mL	210895	04/12/17 16:30	KLV	TAL HOU
Total/NA	Analysis	8260B	DL	10	100 uL	5 mL	211078	04/19/17 14:44	KLV	TAL HOU
Total/NA	Prep	5035	DL2		2.571 g	5 mL	210895	04/12/17 16:30	KLV	TAL HOU
Total/NA	Analysis	8260B	DL2	100	100 uL	5 mL	211078	04/19/17 15:12	KLV	TAL HOU
Total/NA	Analysis	2540B		1			210814	04/14/17 16:07	B1K	TAL HOU

Client Sample ID: SJRP-SB08-13-14-04112017

Lab Sample ID: 600-146590-12
Date Collected: 04/11/17 11:45
Matrix: Solid
Date Received: 04/12/17 10:03
Percent Solids: 82.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.18 g	5.0 mL	422754	04/17/17 13:49	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	424225	04/22/17 22:21	FKG	TAL NSH
Total/NA	Prep	3550C			25.14 g	1.00 mL	422551	04/16/17 13:32	MNM	TAL NSH
Total/NA	Analysis	8015C		1			423223	04/19/17 19:58	MDW	TAL NSH
Total/NA	Prep	3550C			25.14 g	1.00 mL	422551	04/16/17 13:32	MNM	TAL NSH
Total/NA	Analysis	8015C		5			423565	04/20/17 12:05	A1B	TAL NSH
Total/NA	Prep	3050B			1.09 g	50 mL	211265	04/21/17 10:18	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211319	04/21/17 15:11	DCL	TAL HOU
Total/NA	Prep	7471A			.66 g	50 mL	210775	04/14/17 09:52	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210908	04/17/17 11:38	DDE	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Client Sample ID: SJRP-SB08-29-30-04112017 — **Lab Sample ID: 600-146590-13**
Date Collected: 04/11/17 12:20 — **Matrix: Solid**
Date Received: 04/12/17 10:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.822 g	5 mL	210895	04/12/17 16:30	KLV	TAL HOU
Total/NA	Analysis	8260B		4	100 uL	5 mL	210997	04/18/17 18:46	KLV	TAL HOU
Total/NA	Analysis	2540B		1			210814	04/14/17 16:07	B1K	TAL HOU

Client Sample ID: SJRP-SB08-29-30-04112017 — **Lab Sample ID: 600-146590-13**
Date Collected: 04/11/17 12:20 — **Matrix: Solid**
Date Received: 04/12/17 10:03 — **Percent Solids: 86.2**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.17 g	5.0 mL	422754	04/17/17 13:49	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	424225	04/22/17 19:22	FKG	TAL NSH
Total/NA	Prep	3550C			25.50 g	1.00 mL	422551	04/16/17 13:32	MNM	TAL NSH
Total/NA	Analysis	8015C		1			423223	04/19/17 20:15	MDW	TAL NSH
Total/NA	Prep	3050B			1.04 g	50 mL	211265	04/21/17 10:18	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211319	04/21/17 15:13	DCL	TAL HOU
Total/NA	Prep	7471A			.64 g	50 mL	210775	04/14/17 09:52	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210908	04/17/17 11:40	DDE	TAL HOU

Client Sample ID: SJRP-SB03-10-11-04112017 — **Lab Sample ID: 600-146590-14**
Date Collected: 04/11/17 13:25 — **Matrix: Solid**
Date Received: 04/12/17 10:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.734 g	5 mL	210895	04/12/17 16:30	KLV	TAL HOU
Total/NA	Analysis	8260B		1	100 uL	5 mL	210997	04/18/17 19:15	KLV	TAL HOU
Total/NA	Analysis	2540B		1			210814	04/14/17 16:07	B1K	TAL HOU

Client Sample ID: SJRP-SB03-10-11-04112017 — **Lab Sample ID: 600-146590-14**
Date Collected: 04/11/17 13:25 — **Matrix: Solid**
Date Received: 04/12/17 10:03 — **Percent Solids: 80.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.28 g	5.0 mL	422754	04/17/17 13:49	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	424225	04/22/17 22:51	FKG	TAL NSH
Total/NA	Prep	3550C			2535 g	1.00 mL	422551	04/16/17 13:32	MNM	TAL NSH
Total/NA	Analysis	8015C		1			423223	04/19/17 20:31	MDW	TAL NSH
Total/NA	Prep	3050B			1.01 g	50 mL	211265	04/21/17 10:18	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211319	04/21/17 15:16	DCL	TAL HOU
Total/NA	Prep	7471A			.64 g	50 mL	210775	04/14/17 09:52	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210908	04/17/17 11:46	DDE	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Client Sample ID: SJRP-SB03-13-14-04112017 **Lab Sample ID: 600-146590-15**
Date Collected: 04/11/17 13:35 **Matrix: Solid**
Date Received: 04/12/17 10:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.354 g	5 mL	210895	04/12/17 16:30	KLV	TAL HOU
Total/NA	Analysis	8260B		1	100 uL	5 mL	210997	04/18/17 19:43	KLV	TAL HOU
Total/NA	Prep	5035	DL		5.354 g	5 mL	210895	04/12/17 16:30	KLV	TAL HOU
Total/NA	Analysis	8260B	DL	10	100 uL	5 mL	211078	04/19/17 15:40	KLV	TAL HOU
Total/NA	Analysis	2540B		1			210814	04/14/17 16:07	B1K	TAL HOU

Client Sample ID: SJRP-SB03-13-14-04112017 **Lab Sample ID: 600-146590-15**
Date Collected: 04/11/17 13:35 **Matrix: Solid**
Date Received: 04/12/17 10:03 **Percent Solids: 85.3**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.80 g	5.0 mL	422754	04/17/17 13:49	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	424225	04/22/17 23:21	FKG	TAL NSH
Total/NA	Prep	3550C			25.96 g	1.00 mL	422551	04/16/17 13:32	MNM	TAL NSH
Total/NA	Analysis	8015C		1			423223	04/19/17 20:48	MDW	TAL NSH
Total/NA	Prep	3050B			1.05 g	50 mL	211265	04/21/17 10:18	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211319	04/21/17 15:18	DCL	TAL HOU
Total/NA	Prep	7471A			.62 g	50 mL	210775	04/14/17 09:52	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210908	04/17/17 11:48	DDE	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146590-1

Laboratory: TestAmerica Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	16-046-0	08-04-17
Louisiana	NELAP	6	01967	06-30-17
Oklahoma	State Program	6	2015-050	08-31-17
Texas	NELAP	6	T104704223-17-21	10-31-17
USDA	Federal		P330-14-00192	06-06-17

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	A2LA		NA: NELAP & A2LA	12-31-17
A2LA	ISO/IEC 17025		0453.07	12-31-17
Alaska (UST)	State Program	10	UST-087	09-01-17
Arizona	State Program	9	AZ0473	05-05-17
Arkansas DEQ	State Program	6	88-0737	04-25-18
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-17
Florida	NELAP	4	E87358	06-30-17
Georgia	State Program	4	N/A	12-31-17
Illinois	NELAP	5	200010	12-09-17
Iowa	State Program	7	131	04-01-18
Kansas	NELAP	7	E-10229	10-31-17
Kentucky (UST)	State Program	4	19	06-30-17
Kentucky (WW)	State Program	4	90038	12-31-17
Louisiana	NELAP	6	30613	06-30-17
Maine	State Program	1	TN00032	11-03-17
Maryland	State Program	3	316	03-31-18
Massachusetts	State Program	1	M-TN032	06-30-17
Minnesota	NELAP	5	047-999-345	12-31-17
Mississippi	State Program	4	N/A	06-30-17
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-17
New Hampshire	NELAP	1	2963	10-09-17
New Jersey	NELAP	2	TN965	06-30-17
New York	NELAP	2	11342	03-31-18
North Carolina (WW/SW)	State Program	4	387	12-31-17
North Dakota	State Program	8	R-146	06-30-17
Ohio VAP	State Program	5	CL0033	07-10-17
Oklahoma	State Program	6	9412	08-31-17
Oregon	NELAP	10	TN200001	04-27-17 *
Pennsylvania	NELAP	3	68-00585	06-30-17
Rhode Island	State Program	1	LAO00268	12-30-17
South Carolina	State Program	4	84009 (001)	02-18-17 *
South Carolina (Do Not Use - DW)	State Program	4	84009 (002)	12-16-17
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-17
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-17
Virginia	NELAP	3	460152	06-14-17
Washington	State Program	10	C789	07-19-17

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc. TestAmerica Job ID: 600-146590-1
Project/Site: San Juan Site Characterization

Laboratory: TestAmerica Nashville (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
West Virginia DEP	State Program	3	219	02-28-18
Wisconsin	State Program	5	998020430	08-31-17
Wyoming (UST)	A2LA	8	453.07	12-31-17

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica

Client Information	Sampler: Katherine Mouzakis	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-52002-15345.10
Client Contact: Jeffrey Minchak	Phone: 9043826265273	E-Mail: cathy.upton@testamericainc.com		Page: Page 10 of 10
Company: CH2M Hill, Inc.				Job #:
Address: 3721 Rutledge Rd. NE Suite B-1	Due Date Requested:			
City: Albuquerque	TAT Requested (days):			
State, Zip: NM, 87109				
Phone: 281-721-8546(Tel)	PO #: Purchase Order Requested			
Email: Jeffrey.Minchak@ch2m.com	WO #: WD225383			
Project Name: Kinder Morgan Bloomfield, NM San Juan	Project #: 60005961-Analysis group BTEX/GRO/DRO/Metals			
Site: San Juan Site Characterization	SSOW#:			

Analysis Requested — Dallas . Ft Worth

560501

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO - Diesel and Oil Range Organics	8015C_GRO - GRO Range (C6-C10)	6010B, 7471A - NM/WQCC List Metals	8260B - 5035 BTEX	Moisture	Waters	6010B, 7470A - NM/WQCC List Metals	8260B_LL - BTEX Only	8015C_GRO - GRO Range (C6-C10)	8015C_DRO - Diesel and Oil Range Organics	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N		D	A	A	N		
SJRP-SB07-14-15-04112017	4/11/2017	830	G	Solid	N	N	X	X	X	X	X							
SJRP-SB07-14-15-04112017DUP	4/11/2017	830	G	Solid	N	N	X	X	X	X	X							COC in Cooler 1
SJRP-SB07-20-21-04112017	4/11/2017	845	G	Solid	N	N	X	X	X	X	X							
SJRP-MW14-15-16-04102017	4/10/2017	1345	G	Solid	N	N	X	X	X	X	X							
SJRP-MW14-20-21-04102017	4/10/2017	1405	G	Solid	N	N	X	X	X	X	X							
SJRP-MW14-25-26-04102017	4/10/2017	1415	G	Solid	N	N	X	X	X	X	X							
SJRP-SB12-19-20-04102017	4/10/2017	1507	G	Solid	N	N	X	X	X	X	X							
SJRP-SB12-25-26-04102017	4/10/2017	1615	G	Solid	N	N	X	X	X	X	X							
SJRP-SB04-14-15-04112017	4/11/2017	945	G	Solid	N	N	X	X	X	X	X							
SJRP-SB04-19-20-04112017	4/11/2017	958	G	Solid	N	N	X	X	X	X	X							
SJRP-TB-04112017	4/11/2017	835	G	Water	N	N								X				

600-146590 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1
☐ Return To Client ☐ Disposal By Lab ☐ Archive For

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
			Sherry Justus	4/12/17 1003	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica

Client Information	Sampler: Katherine Mazzaki's	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-52002-15345.10
Client Contact: Jeffrey Minchak	Phone: 9043580-6573	E-Mail: cathy.upton@testamericainc.com		Page: Page 10 of 10
Company: CH2M Hill, Inc.				Job #:
Address: 3721 Rutledge Rd. NE Suite B-1	Due Date Requested:			
City: Albuquerque	TAT Requested (days):			
State, Zip: NM, 87109				
Phone: 281-721-8546(Tel)	PO #: Purchase Order Requested			
Email: Jeffrey.Minchak@ch2m.com	WO #: WD225383			
Project Name: Kinder Morgan Bloomfield, NM San Juan	Project #: 60005961-Analysis group BTEX/GRO/DRO/Metals			
Site: San Juan Site Characterization	SSOW#:			

Analysis Requested

Dallas . Ft Worth

560501

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO - Diesel and Oil Range Organics	8015C_GRO - GRO Range (C6-C10)	6010B, 7471A - NMWQCC List Metals	8260B - 5035 BTEX	Moisture	Waters	6010B, 7470A - NMWQCC List Metals	8260B_LL - BTEX Only	8015C_GRO - GRO Range (C6-C10)	8015C_DRO - Diesel and Oil Range Organics	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N		D	A	A	N		
SJRP-SB08-13-14-04112017	4/11/17	1145	G	Solid	N	N	X	X	X	X	X							
SJRP-SB08-29-30-04112017	4/11/17	1220	G	Solid	N	N	X	X	X	X	X							
SJRP-SB03-10-11-04112017	4/11/17	1325	G	Solid	N	N	X	X	X	X	X							
SJRP-SB03-13-14-04112017	4/11/17	1335	G	Solid	N	N	X	X	X	X	X							
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Water														

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☑ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	4/11/17/1430		Shirry Justus	4/12/17 1003	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Loc: 600
146590

TestAmerica Houston

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Receipt Chec

Date/Time Received: '17 APR 12 10:03

JOB NUMBER: _____ CLIENT: CH2M

UNPACKED BY: _____ CARRIER/DRIVER: Fed Ex

Custody Seal Present: ☑ YES ☐ NO Number of Coolers Received: 3

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Them CF	Corrected Temp (°C)
B/W	Y / N	Y / N	4.1	549	-0.3	3.8
B/W	Y / N	Y / N	3.4	1	1	3.1
B/W	Y / N	Y / N	3.3	1	1	3.0
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N			SJ	4/12/17
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☑ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☐ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☐ YES ☐ NO

pH paper Lot #_____

VOA headspace acceptable (5-6mm): ☐ YES ☐ NO ☐ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?		

COMMENTS:

FedEx TRK# 0221 6025 5771 6077 XH LKSA

HS-SA-WI-013 Rev. 3; 07/01/2014

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TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-26441.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: cathy.upton@testamericainc.com	State of Origin: New Mexico	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):		Job #: 600-146590-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 4/24/2017			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: San Juan Site Characterization	Project #: 60005961			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO/3550C DRO/ORO	8015C_GRO/5030B_SolidNAC GRO Range (C6-C10)	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
SJRP-SB07-14-15-04112017 (600-146590-1)	4/11/17	08:30 Mountain		Solid			X	X	2	
SJRP-SB07-14-15-04112017 dup (600-146590-2)	4/11/17	08:30 Mountain		Solid			X	X	2	
SJRP-SB07-20-21-04112017 (600-146590-3)	4/11/17	08:45 Mountain		Solid			X	X	2	
SJRP-MW14-15-16-04102017 (600-146590-4)	4/10/17	13:45 Mountain		Solid			X	X	2	
SJRP-MW14-20-21-04102017 (600-146590-5)	4/10/17	14:05 Mountain		Solid			X	X	2	
SJRP-MW14-25-26-04102017 (600-146590-6)	4/10/17	14:15 Mountain		Solid			X	X	2	
SJRP-SB12-19-20-04102017 (600-146590-7)	4/10/17	15:07 Mountain		Solid			X	X	2	
SJRP-SB12-25-26-04102017 (600-146590-8)	4/10/17	16:15 Mountain		Solid			X	X	2	
SJRP-SB04-14-15-04112017 (600-146590-9)	4/11/17	09:45 Mountain		Solid			X	X	2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		4/13/17 1700			4-14-17 0945	TAN
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 4.8

Received by OCD: 11/13/2025 11:14:36 AM

Released to Imaging: 11/14/2025 9:30:04 AM

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TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Loc: 600
146590

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Upton, Cathy L	Ca	COC No: 600-26441.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: cathy.upton@testamericainc.com	State of Origin: New Mexico	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):		Job #: 600-146590-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 4/24/2017			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: San Juan Site Characterization	Project #: 60005961			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO/3550C DRO/ORO	8015C_GRO/6030B_SolidNAC GRO Range (C6-C10)	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
SJRP-SB04-19-20-04112017 (600-146590-10)	4/11/17	09:58 Mountain		Solid			X	X	2	
SJRP-SB08-13-14-04112017 (600-146590-12)	4/11/17	11:45 Mountain		Solid			X	X	2	
SJRP-SB08-29-30-04112017 (600-146590-13)	4/11/17	12:20 Mountain		Solid			X	X	2	
SJRP-SB03-10-11-04112017 (600-146590-14)	4/11/17	13:25 Mountain		Solid			X	X	2	
SJRP-SB03-13-14-04112017 (600-146590-15)	4/11/17	13:35 Mountain		Solid			X	X	2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	4/13/17(R)	TAN	[signature]	4-14-17 0945	TAN
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 4.8

Received by OCD: 11/13/2025 11:14:36 AM

Released to Imaging: 11/14/2025 9:30:04 AM

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

Loc: 600
146590

COOLER RECEIPT FORM

Cooler Received/Opened On 4/14/2017 @ 0945

Time Samples Removed From Cooler_____ Time Samples Placed In Storage_____ (2 Hour Window)

1. Tracking # 3050 (last 4 digits, FedEx) Courier: _FedEx_

IR Gun ID_160656843_ pH Strip Lot_____ Chlorine Strip Lot_____

2. Temperature of rep. sample or temp blank when opened: 4.8 Degrees Celsius

3. If Item #2 temperatures is 0°C or less, was the representative sample or temp blank frozen? YES NO..NA

4. Were custody seals on outside of cooler? YES..NO..NA

If yes, how many and where: NA

5. Were the seals intact, signed, and dated correctly? YES...NO..NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) _____

7. Were custody seals on containers: YES NO and Intact YES...NO..NA

Were these signed and dated correctly? YES...NO..NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES..NO...NA

12. Did all container labels and tags agree with custody papers? YES..NO...NA

13a. Were VOA vials received? YES..NO..NA

b. Was there any observable headspace present in any VOA vial? YES...NO..NA

14. Was there a Trip Blank in this cooler? YES...NO..NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (initial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO..NA

16. was residual chlorine present? YES...NO..NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) DA

17. Were custody papers properly filled out (ink, signed, etc)? YES..NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES..NO...NA

20. Was sufficient amount of sample sent in each container? YES..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) DA

I certify that I attached a label with the unique LIMS number to each container (initial) DA

21. Were there Non-Conformance issues at login? YES..NO Was a NCM generated? YES..NO..#_____

BIS = Broken in shipment

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc. Job Number: 600-146590-1

Login Number: 146590 **List Source: TestAmerica Houston**
List Number: 1
Creator: Crafton, Tommie S

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.8 3.1 3.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-146590-1

Login Number: 146590
List Number: 2
Creator: Armstrong, Daniel

List Source: TestAmerica Nashville
List Creation: 04/15/17 07:50 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.8C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-146619-1
Client Project/Site: San Juan Site Characterization
Revision: 1

For:
CH2M Hill Constructors, Inc.
14701 St. Mary's Lane
Suite 300
Houston, Texas 77079-2923

Attn: Mr. John Ynfante

Steve A Stepanski

Authorized for release by:
12/7/2020 4:38:11 PM
Steve Stepanski, Project Mgmt. Assistant
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Cathy Upton, Project Manager I
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LINKS
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Have a Question? Ask The Expert
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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-146619-1
Project/Site: San Juan Site Characterization

Job ID: 600-146619-1

Laboratory: TestAmerica Houston

Narrative

CASE NARRATIVE

Client: CH2M Hill Constructors, Inc.

Project: San Juan Site Characterization

Report Number: 600-146619-1

COMMENTS
This report was revised to a Level 2 deliverable per client's request.

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
Note: All samples that require thermal preservation are considered acceptable if the arrival temperature is within 2°C of the required temperature or method specified range. For samples with a specified temperature of 4°C, samples with a temperature ranging from just above freezing temperature of water to 6°C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

The samples were received on 04/13/2017; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.3º C and 2.7º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)-Soil
Samples SJRP-MW15-9-10-04122017 (600-146619-1), SJRP-MW15-14-15-04122017 (600-146619-2), SJRP-MW15-26-27-04122017 (600-146619-3), SJRP-SB06-10-11-04112017 (600-146619-4), SJRP-SB06-13-14-04112017 (600-146619-5), SJRP-SB06-18-19-04112017 (600-146619-6), SJRP-SB06-25-26-04112017 (600-146619-7), SJRP-SB05-10-11-04122017 (600-146619-8), SJRP-SB05-15-16-01122017 (600-146619-9) and SJRP-SB05-29-30-04122017 (600-146619-10) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were prepared on 04/13/2017 and analyzed on 04/14/2017, 04/15/2017, 04/18/2017 and 04/19/2017.

Internal standard responses were below acceptance limits for the following sample: SJRP-SB05-29-30-04122017 (600-146619-10). This sample was originally analyzed overnight which resulted in analysis outside of the tune time; therefore, insufficient sample remains for re-analysis. Both sets of data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GC-MS)-Water
Samples SJRP-EB-05112017 (600-146619-11) and SJRP-TB-04122017 (600-146619-12) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/17/2017.

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-146619-1
Project/Site: San Juan Site Characterization

Job ID: 600-146619-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GASOLINE RANGE ORGANICS (GRO)-Soil

Samples SJRP-MW15-9-10-04122017 (600-146619-1), SJRP-MW15-14-15-04122017 (600-146619-2), SJRP-MW15-26-27-04122017 (600-146619-3), SJRP-SB06-10-11-04112017 (600-146619-4), SJRP-SB06-13-14-04112017 (600-146619-5), SJRP-SB06-18-19-04112017 (600-146619-6), SJRP-SB06-25-26-04112017 (600-146619-7), SJRP-SB05-10-11-04122017 (600-146619-8), SJRP-SB05-15-16-01122017 (600-146619-9) and SJRP-SB05-29-30-04122017 (600-146619-10) were analyzed for gasoline range organics (GRO) in accordance with EPA SW-846 Method 8015C - GRO. The samples were analyzed on 04/23/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GASOLINE RANGE ORGANICS (GRO)-Water

Sample SJRP-EB-05112017 (600-146619-11) was analyzed for gasoline range organics (GRO) in accordance with 8015C GRO. The samples were analyzed on 04/20/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DIESEL RANGE ORGANICS (DRO)-Soil

Samples SJRP-MW15-9-10-04122017 (600-146619-1), SJRP-MW15-14-15-04122017 (600-146619-2), SJRP-MW15-26-27-04122017 (600-146619-3), SJRP-SB06-10-11-04112017 (600-146619-4), SJRP-SB06-13-14-04112017 (600-146619-5), SJRP-SB06-18-19-04112017 (600-146619-6), SJRP-SB06-25-26-04112017 (600-146619-7), SJRP-SB05-10-11-04122017 (600-146619-8), SJRP-SB05-15-16-01122017 (600-146619-9) and SJRP-SB05-29-30-04122017 (600-146619-10) were analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 04/19/2017 and analyzed on 04/20/2017 and 04/21/2017.

Due to the high concentration of Diesel Range Organics [C10-C28], samples SJRP-MW15-9-10-04122017 (600-146619-1) MS/MSD could not be evaluated for accuracy. The associated laboratory control sample (LCS) met acceptance criteria.

Refer to the QC report for details.

Samples SJRP-MW15-9-10-04122017 (600-146619-1)[10X] and SJRP-SB05-10-11-04122017 (600-146619-8)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DIESEL RANGE ORGANICS (DRO)-Water

Sample SJRP-EB-05112017 (600-146619-11) was analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 04/18/2017 and analyzed on 04/19/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)-Soil

Samples SJRP-MW15-9-10-04122017 (600-146619-1), SJRP-MW15-14-15-04122017 (600-146619-2), SJRP-MW15-26-27-04122017 (600-146619-3), SJRP-SB06-10-11-04112017 (600-146619-4), SJRP-SB06-13-14-04112017 (600-146619-5), SJRP-SB06-18-19-04112017 (600-146619-6), SJRP-SB06-25-26-04112017 (600-146619-7), SJRP-SB05-10-11-04122017 (600-146619-8), SJRP-SB05-15-16-01122017 (600-146619-9) and SJRP-SB05-29-30-04122017 (600-146619-10) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 04/21/2017 and 04/27/2017 and analyzed on 04/24/2017, 04/25/2017, 04/26/2017 and 04/28/2017.

Sodium was detected in method blank MB 600-211317/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Lead was detected in method blank MB 600-211317/1-A at a level exceeding the reporting limit. Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-146619-1
Project/Site: San Juan Site Characterization

Job ID: 600-146619-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

Molybdenum was detected in method blank MB 600-211317/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Lead was detected in method blank MB 600-211726/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

Due to the high concentration of target analytes, sample SJRP-SB05-29-30-04122017MS (600-146619-10 MS) could not be evaluated for accuracy. The associated laboratory control sample (LCS) met acceptance criteria.

**The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

Several analytes exceeded the RPD limit for the duplicate of sample SJRP-SB05-29-30-04122017DU (600-146619-10).

Refer to the QC report for details.

The continuing calibration verification (CCV) associated with batch 600-211424 recovered above the upper control limit for barium, calcium and sodium. The MB and LCS bracketed by this CCV met the acceptance criteria; therefore, the data have been qualified and reported..

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)-Water
Sample SJRP-EB-05112017 (600-146619-11) was analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared and analyzed on 04/19/2017.

Sodium was detected in method blank MB 600-211063/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY-Soil
Samples SJRP-MW15-9-10-04122017 (600-146619-1), SJRP-MW15-14-15-04122017 (600-146619-2), SJRP-MW15-26-27-04122017 (600-146619-3), SJRP-SB06-10-11-04112017 (600-146619-4), SJRP-SB06-13-14-04112017 (600-146619-5), SJRP-SB06-18-19-04112017 (600-146619-6), SJRP-SB06-25-26-04112017 (600-146619-7), SJRP-SB05-10-11-04122017 (600-146619-8), SJRP-SB05-15-16-01122017 (600-146619-9) and SJRP-SB05-29-30-04122017 (600-146619-10) were analyzed for total mercury in accordance with EPA SW-846 Method 7471A. The samples were prepared on 04/14/2017 and analyzed on 04/17/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY-Water
Sample SJRP-EB-05112017 (600-146619-11) was analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 04/14/2017 and analyzed on 04/17/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-146619-1
Project/Site: San Juan Site Characterization

Job ID: 600-146619-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

PERCENT SOLIDS

Samples SJRP-MW15-9-10-04122017 (600-146619-1), SJRP-MW15-14-15-04122017 (600-146619-2), SJRP-MW15-26-27-04122017 (600-146619-3), SJRP-SB06-10-11-04112017 (600-146619-4), SJRP-SB06-13-14-04112017 (600-146619-5), SJRP-SB06-18-19-04112017 (600-146619-6), SJRP-SB06-25-26-04112017 (600-146619-7), SJRP-SB05-10-11-04122017 (600-146619-8), SJRP-SB05-15-16-01122017 (600-146619-9) and SJRP-SB05-29-30-04122017 (600-146619-10) were analyzed for percent solids in accordance with EPA SW846 Method 3550C. The samples were analyzed on 04/13/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL NSH
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL NSH
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU

Protocol References:

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-146619-1	SJRP-MW15-9-10-04122017	Solid	04/12/17 09:55	04/13/17 09:51
600-146619-2	SJRP-MW15-14-15-04122017	Solid	04/12/17 10:05	04/13/17 09:51
600-146619-3	SJRP-MW15-26-27-04122017	Solid	04/12/17 10:20	04/13/17 09:51
600-146619-4	SJRP-SB06-10-11-04112017	Solid	04/11/17 15:25	04/13/17 09:51
600-146619-5	SJRP-SB06-13-14-04112017	Solid	04/11/17 15:35	04/13/17 09:51
600-146619-6	SJRP-SB06-18-19-04112017	Solid	04/11/17 15:40	04/13/17 09:51
600-146619-7	SJRP-SB06-25-26-04112017	Solid	04/11/17 15:50	04/13/17 09:51
600-146619-8	SJRP-SB05-10-11-04122017	Solid	04/12/17 08:05	04/13/17 09:51
600-146619-9	SJRP-SB05-15-16-01122017	Solid	04/12/17 08:10	04/13/17 09:51
600-146619-10	SJRP-SB05-29-30-04122017	Solid	04/12/17 08:45	04/13/17 09:51
600-146619-11	SJRP-EB-05112017	Water	04/11/17 16:15	04/13/17 09:51
600-146619-12	SJRP-TB-04122017	Water	04/12/17 07:00	04/13/17 09:51

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Client Sample ID: SJRP-MW15-9-10-04122017
Date Collected: 04/12/17 09:55
Date Received: 04/13/17 09:51

Lab Sample ID: 600-146619-1
Matrix: Solid
Percent Solids: 78.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	7.59		3.00	0.378	mg/Kg		04/13/17 12:14	04/18/17 20:11	10
Ethylbenzene	10.4		3.00	0.612	mg/Kg		04/13/17 12:14	04/18/17 20:11	10
Toluene	0.829	U	3.00	0.829	mg/Kg		04/13/17 12:14	04/18/17 20:11	10
Xylenes, Total	82.0		3.00	0.678	mg/Kg		04/13/17 12:14	04/18/17 20:11	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*61 - 130*	*04/13/17 12:14*	*04/18/17 20:11*	*10*
Dibromofluoromethane	*98*		*68 - 140*	*04/13/17 12:14*	*04/18/17 20:11*	*10*
Toluene-d8 (Surr)	*87*		*50 - 130*	*04/13/17 12:14*	*04/18/17 20:11*	*10*
4-Bromofluorobenzene	*72*		*57 - 140*	*04/13/17 12:14*	*04/18/17 20:11*	*10*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	1910		7.55	3.78	mg/Kg	☼	04/19/17 09:25	04/23/17 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*62*		*50 - 150*	*04/19/17 09:25*	*04/23/17 17:44*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1000		62.7	31.4	mg/Kg	☼	04/19/17 10:44	04/21/17 03:47	10
ORO C24-C40	18.0		6.27	3.14	mg/Kg	☼	04/19/17 10:44	04/20/17 14:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*139*		*50 - 150*	*04/19/17 10:44*	*04/20/17 14:20*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	13400		28.9	0.347	mg/Kg	☼	04/21/17 14:35	04/26/17 15:30	1
Arsenic	10.7		1.16	0.252	mg/Kg	☼	04/21/17 14:35	04/24/17 15:53	1
Barium	34.7		1.16	0.0347	mg/Kg	☼	04/21/17 14:35	04/24/17 15:53	1
Boron	2.20	J	23.1	0.447	mg/Kg	☼	04/21/17 14:35	04/24/17 15:53	1
Cadmium	0.272	J	0.289	0.0296	mg/Kg	☼	04/21/17 14:35	04/24/17 15:53	1
Calcium	2240		116	0.999	mg/Kg	☼	04/21/17 14:35	04/24/17 15:53	1
Chromium	6.94		0.578	0.0585	mg/Kg	☼	04/21/17 14:35	04/24/17 15:53	1
Cobalt	10.9		0.578	0.0782	mg/Kg	☼	04/21/17 14:35	04/24/17 15:53	1
Iron	23600		23.1	2.93	mg/Kg	☼	04/21/17 14:35	04/24/17 15:53	1
Lead	18.1	B	0.578	0.121	mg/Kg	☼	04/21/17 14:35	04/24/17 15:53	1
Magnesium	3620		116	2.22	mg/Kg	☼	04/21/17 14:35	04/24/17 15:53	1
Manganese	84.7		1.74	0.0441	mg/Kg	☼	04/21/17 14:35	04/24/17 15:53	1
Molybdenum	2.02	B	0.578	0.157	mg/Kg	☼	04/21/17 14:35	04/26/17 15:30	1
Nickel	12.2		1.16	0.135	mg/Kg	☼	04/21/17 14:35	04/24/17 15:53	1
Potassium	1750		116	12.7	mg/Kg	☼	04/21/17 14:35	04/24/17 15:53	1
Selenium	0.300	U	2.31	0.300	mg/Kg	☼	04/21/17 14:35	04/24/17 15:53	1
Sodium	8900	B	116	1.02	mg/Kg	☼	04/21/17 14:35	04/24/17 15:53	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0653		0.0197	0.00414	mg/Kg	☼	04/14/17 10:53	04/17/17 12:17	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Client Sample ID: SJRP-MW15-9-10-04122017

Lab Sample ID: 600-146619-1
Date Collected: 04/12/17 09:55
Matrix: Solid
Date Received: 04/13/17 09:51
Percent Solids: 78.6

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21.4		1.0	1.0	%			04/13/17 16:35	1
Percent Solids	78.6		1.0	1.0	%			04/13/17 16:35	1

Client Sample ID: SJRP-MW15-14-15-04122017

Lab Sample ID: 600-146619-2
Date Collected: 04/12/17 10:05
Matrix: Solid
Date Received: 04/13/17 09:51
Percent Solids: 83.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.58	J	2.50	0.315	mg/Kg		04/13/17 12:14	04/18/17 20:40	10
Ethylbenzene	7.95		2.50	0.511	mg/Kg		04/13/17 12:14	04/18/17 20:40	10
Toluene	0.691	U	2.50	0.691	mg/Kg		04/13/17 12:14	04/18/17 20:40	10
Xylenes, Total	35.3		2.50	0.566	mg/Kg		04/13/17 12:14	04/18/17 20:40	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*61 - 130*	*04/13/17 12:14*	*04/18/17 20:40*	*10*
Dibromofluoromethane	*111*		*68 - 140*	*04/13/17 12:14*	*04/18/17 20:40*	*10*
Toluene-d8 (Surr)	*104*		*50 - 130*	*04/13/17 12:14*	*04/18/17 20:40*	*10*
4-Bromofluorobenzene	*86*		*57 - 140*	*04/13/17 12:14*	*04/18/17 20:40*	*10*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	472		6.47	3.23	mg/Kg	☼	04/19/17 09:25	04/23/17 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*64*		*50 - 150*	*04/19/17 09:25*	*04/23/17 18:14*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	177		5.90	2.95	mg/Kg	☼	04/19/17 10:44	04/20/17 15:09	1
ORO C24-C40	4.93	J	5.90	2.95	mg/Kg	☼	04/19/17 10:44	04/20/17 15:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*70*		*50 - 150*	*04/19/17 10:44*	*04/20/17 15:09*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11600		27.6	0.331	mg/Kg	☼	04/21/17 14:35	04/26/17 15:32	1
Arsenic	8.52		1.10	0.241	mg/Kg	☼	04/21/17 14:35	04/24/17 15:55	1
Barium	39.0		1.10	0.0331	mg/Kg	☼	04/21/17 14:35	04/24/17 15:55	1
Boron	1.81	J	22.1	0.426	mg/Kg	☼	04/21/17 14:35	04/24/17 15:55	1
Cadmium	0.144	J	0.276	0.0283	mg/Kg	☼	04/21/17 14:35	04/24/17 15:55	1
Calcium	3150		110	0.954	mg/Kg	☼	04/21/17 14:35	04/24/17 15:55	1
Chromium	6.33		0.552	0.0559	mg/Kg	☼	04/21/17 14:35	04/24/17 15:55	1
Cobalt	7.82		0.552	0.0746	mg/Kg	☼	04/21/17 14:35	04/24/17 15:55	1
Iron	24300		22.1	2.79	mg/Kg	☼	04/21/17 14:35	04/24/17 15:55	1
Lead	19.7	B	0.552	0.116	mg/Kg	☼	04/21/17 14:35	04/24/17 15:55	1
Magnesium	2690		110	2.12	mg/Kg	☼	04/21/17 14:35	04/24/17 15:55	1
Manganese	97.6		1.66	0.0421	mg/Kg	☼	04/21/17 14:35	04/24/17 15:55	1
Molybdenum	2.49	B	0.552	0.150	mg/Kg	☼	04/21/17 14:35	04/26/17 15:32	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Client Sample ID: SJRP-MW15-14-15-04122017

Lab Sample ID: 600-146619-2
Date Collected: 04/12/17 10:05
Matrix: Solid
Date Received: 04/13/17 09:51
Percent Solids: 83.1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	7.65		1.10	0.129	mg/Kg	☼	04/21/17 14:35	04/24/17 15:55	1
Potassium	1250		110	12.1	mg/Kg	☼	04/21/17 14:35	04/24/17 15:55	1
Selenium	0.286	U	2.21	0.286	mg/Kg	☼	04/21/17 14:35	04/24/17 15:55	1
Sodium	5440	B	110	0.978	mg/Kg	☼	04/21/17 14:35	04/24/17 15:55	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0524		0.0189	0.00398	mg/Kg	☼	04/14/17 10:53	04/17/17 12:19	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.9		1.0	1.0	%			04/13/17 16:35	1
Percent Solids	83.1		1.0	1.0	%			04/13/17 16:35	1

Client Sample ID: SJRP-MW15-26-27-04122017

Lab Sample ID: 600-146619-3
Date Collected: 04/12/17 10:20
Matrix: Solid
Date Received: 04/13/17 09:51
Percent Solids: 83.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	3.28		0.212	0.0432	mg/Kg		04/13/17 12:14	04/18/17 21:08	1
Toluene	0.146	J	0.212	0.0584	mg/Kg		04/13/17 12:14	04/18/17 21:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*61 - 130*	*04/13/17 12:14*	*04/18/17 21:08*	*1*
Dibromofluoromethane	*107*		*68 - 140*	*04/13/17 12:14*	*04/18/17 21:08*	*1*
Toluene-d8 (Surr)	*92*		*50 - 130*	*04/13/17 12:14*	*04/18/17 21:08*	*1*
4-Bromofluorobenzene	*85*		*57 - 140*	*04/13/17 12:14*	*04/18/17 21:08*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	8.57		1.06	0.133	mg/Kg		04/13/17 12:14	04/19/17 16:09	5
Xylenes, Total	11.2		1.06	0.239	mg/Kg		04/13/17 12:14	04/19/17 16:09	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*61 - 130*	*04/13/17 12:14*	*04/19/17 16:09*	*5*
Dibromofluoromethane	*100*		*68 - 140*	*04/13/17 12:14*	*04/19/17 16:09*	*5*
Toluene-d8 (Surr)	*88*		*50 - 130*	*04/13/17 12:14*	*04/19/17 16:09*	*5*
4-Bromofluorobenzene	*77*		*57 - 140*	*04/13/17 12:14*	*04/19/17 16:09*	*5*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	124		6.07	3.03	mg/Kg	☼	04/19/17 09:25	04/23/17 13:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*63*		*50 - 150*	*04/19/17 09:25*	*04/23/17 13:16*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	21.4		5.94	2.97	mg/Kg	☼	04/19/17 10:44	04/20/17 15:26	1
ORO C24-C40	6.39		5.94	2.97	mg/Kg	☼	04/19/17 10:44	04/20/17 15:26	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Client Sample ID: SJRP-MW15-26-27-04122017

Lab Sample ID: 600-146619-3
Date Collected: 04/12/17 10:20
Matrix: Solid
Date Received: 04/13/17 09:51
Percent Solids: 83.6

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	*67*		*50 - 150*	*04/19/17 10:44*	*04/20/17 15:26*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**13100**		29.0	0.349	mg/Kg	☼	04/21/17 14:35	04/26/17 15:34	1
Arsenic	**5.43**		1.16	0.253	mg/Kg	☼	04/21/17 14:35	04/24/17 15:57	1
Barium	**68.2**		1.16	0.0349	mg/Kg	☼	04/21/17 14:35	04/24/17 15:57	1
Boron	**2.38**	**J**	23.2	0.448	mg/Kg	☼	04/21/17 14:35	04/24/17 15:57	1
Cadmium	**0.157**	**J**	0.290	0.0297	mg/Kg	☼	04/21/17 14:35	04/24/17 15:57	1
Calcium	**1870**		116	1.00	mg/Kg	☼	04/21/17 14:35	04/24/17 15:57	1
Chromium	**4.97**		0.581	0.0588	mg/Kg	☼	04/21/17 14:35	04/24/17 15:57	1
Cobalt	**10.1**		0.581	0.0785	mg/Kg	☼	04/21/17 14:35	04/24/17 15:57	1
Iron	**21400**		23.2	2.94	mg/Kg	☼	04/21/17 14:35	04/24/17 15:57	1
Lead	**18.1**	**B**	0.581	0.122	mg/Kg	☼	04/21/17 14:35	04/24/17 15:57	1
Magnesium	**3010**		116	2.23	mg/Kg	☼	04/21/17 14:35	04/24/17 15:57	1
Manganese	**98.1**		1.74	0.0443	mg/Kg	☼	04/21/17 14:35	04/24/17 15:57	1
Molybdenum	**2.76**	**B**	0.581	0.158	mg/Kg	☼	04/21/17 14:35	04/26/17 15:34	1
Nickel	**8.72**		1.16	0.136	mg/Kg	☼	04/21/17 14:35	04/24/17 15:57	1
Potassium	**1420**		116	12.8	mg/Kg	☼	04/21/17 14:35	04/24/17 15:57	1
Selenium	0.301	U	2.32	0.301	mg/Kg	☼	04/21/17 14:35	04/24/17 15:57	1
Sodium	**7400**	**B**	116	1.03	mg/Kg	☼	04/21/17 14:35	04/24/17 15:57	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0306**		0.0200	0.00421	mg/Kg	☼	04/14/17 10:53	04/17/17 12:20	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**16.4**		1.0	1.0	%			04/13/17 16:35	1
Percent Solids	**83.6**		1.0	1.0	%			04/13/17 16:35	1

Client Sample ID: SJRP-SB06-10-11-04112017

Lab Sample ID: 600-146619-4
Date Collected: 04/11/17 15:25
Matrix: Solid
Date Received: 04/13/17 09:51
Percent Solids: 85.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000609	U	0.00483	0.000609	mg/Kg	☼	04/13/17 12:14	04/14/17 16:35	1
Ethylbenzene	0.000986	U	0.00483	0.000986	mg/Kg	☼	04/13/17 12:14	04/14/17 16:35	1
Toluene	0.00133	U	0.00483	0.00133	mg/Kg	☼	04/13/17 12:14	04/14/17 16:35	1
Xylenes, Total	**0.00314**	**J**	0.00483	0.00109	mg/Kg	☼	04/13/17 12:14	04/14/17 16:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*78*		*61 - 130*	*04/13/17 12:14*	*04/14/17 16:35*	*1*
Dibromofluoromethane	*88*		*68 - 140*	*04/13/17 12:14*	*04/14/17 16:35*	*1*
Toluene-d8 (Surr)	*106*		*50 - 130*	*04/13/17 12:14*	*04/14/17 16:35*	*1*
4-Bromofluorobenzene	*89*		*57 - 140*	*04/13/17 12:14*	*04/14/17 16:35*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	**217**		6.06	3.03	mg/Kg	☼	04/19/17 09:25	04/23/17 13:46	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	67		50 - 150	04/19/17 09:25	04/23/17 13:46	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	110		5.65	2.83	mg/Kg	☼	04/19/17 10:44	04/20/17 15:42	1
ORO C24-C40	4.25	J	5.65	2.83	mg/Kg	☼	04/19/17 10:44	04/20/17 15:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	65		50 - 150	04/19/17 10:44	04/20/17 15:42	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11900		24.7	0.296	mg/Kg	☼	04/21/17 14:35	04/26/17 15:36	1
Arsenic	14.6		0.987	0.215	mg/Kg	☼	04/21/17 14:35	04/24/17 15:59	1
Barium	86.5		0.987	0.0296	mg/Kg	☼	04/21/17 14:35	04/24/17 15:59	1
Boron	1.30	J	19.7	0.381	mg/Kg	☼	04/21/17 14:35	04/24/17 15:59	1
Cadmium	0.415		0.247	0.0253	mg/Kg	☼	04/21/17 14:35	04/24/17 15:59	1
Calcium	4100		98.7	0.853	mg/Kg	☼	04/21/17 14:35	04/24/17 15:59	1
Chromium	8.63		0.494	0.0500	mg/Kg	☼	04/21/17 14:35	04/24/17 15:59	1
Cobalt	8.37		0.494	0.0667	mg/Kg	☼	04/21/17 14:35	04/24/17 15:59	1
Iron	31100		19.7	2.50	mg/Kg	☼	04/21/17 14:35	04/24/17 15:59	1
Lead	17.0	B	0.494	0.104	mg/Kg	☼	04/21/17 14:35	04/24/17 15:59	1
Magnesium	2870		98.7	1.90	mg/Kg	☼	04/21/17 14:35	04/24/17 15:59	1
Manganese	132		1.48	0.0376	mg/Kg	☼	04/21/17 14:35	04/24/17 15:59	1
Molybdenum	3.20	B	0.494	0.134	mg/Kg	☼	04/21/17 14:35	04/26/17 15:36	1
Nickel	14.0		0.987	0.116	mg/Kg	☼	04/21/17 14:35	04/24/17 15:59	1
Potassium	1410		98.7	10.9	mg/Kg	☼	04/21/17 14:35	04/24/17 15:59	1
Selenium	0.256	U	1.97	0.256	mg/Kg	☼	04/21/17 14:35	04/24/17 15:59	1
Sodium	4020	B	98.7	0.875	mg/Kg	☼	04/21/17 14:35	04/24/17 15:59	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0313		0.0193	0.00407	mg/Kg	☼	04/14/17 10:53	04/17/17 12:01	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14.9		1.0	1.0	%			04/13/17 16:35	1
Percent Solids	85.1		1.0	1.0	%			04/13/17 16:35	1

Client Sample ID: SJRP-SB06-13-14-04112017 — **Lab Sample ID: 600-146619-5**
Date Collected: 04/11/17 15:35 — **Matrix: Solid**
Date Received: 04/13/17 09:51 — **Percent Solids: 79.6**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000752	U	0.00597	0.000752	mg/Kg	☼	04/13/17 12:14	04/14/17 17:00	1
Ethylbenzene	0.00122	U	0.00597	0.00122	mg/Kg	☼	04/13/17 12:14	04/14/17 17:00	1
Toluene	0.00201	J	0.00597	0.00165	mg/Kg	☼	04/13/17 12:14	04/14/17 17:00	1
Xylenes, Total	0.00482	J	0.00597	0.00135	mg/Kg	☼	04/13/17 12:14	04/14/17 17:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	75		61 - 130	04/13/17 12:14	04/14/17 17:00	1
Dibromofluoromethane	88		68 - 140	04/13/17 12:14	04/14/17 17:00	1
Toluene-d8 (Surr)	103		50 - 130	04/13/17 12:14	04/14/17 17:00	1
4-Bromofluorobenzene	86		57 - 140	04/13/17 12:14	04/14/17 17:00	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Client Sample ID: SJRP-SB06-13-14-04112017

Lab Sample ID: 600-146619-5
Date Collected: 04/11/17 15:35
Matrix: Solid
Date Received: 04/13/17 09:51
Percent Solids: 79.6

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.70	U	7.39	3.70	mg/Kg	☼	04/19/17 09:25	04/23/17 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*65*		*50 - 150*	*04/19/17 09:25*	*04/23/17 14:16*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**33.0**		6.26	3.13	mg/Kg	☼	04/19/17 10:44	04/20/17 15:59	1
ORO C24-C40	**5.02**	**J**	6.26	3.13	mg/Kg	☼	04/19/17 10:44	04/20/17 15:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*69*		*50 - 150*	*04/19/17 10:44*	*04/20/17 15:59*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**15300**		31.4	0.377	mg/Kg	☼	04/21/17 14:35	04/26/17 15:44	1
Arsenic	**3.91**		1.26	0.274	mg/Kg	☼	04/21/17 14:35	04/24/17 16:01	1
Barium	**174**		1.26	0.0377	mg/Kg	☼	04/21/17 14:35	04/24/17 16:01	1
Boron	**2.05**	**J**	25.1	0.485	mg/Kg	☼	04/21/17 14:35	04/24/17 16:01	1
Cadmium	**0.113**	**J**	0.314	0.0322	mg/Kg	☼	04/21/17 14:35	04/24/17 16:01	1
Calcium	**3940**		126	1.09	mg/Kg	☼	04/21/17 14:35	04/24/17 16:01	1
Chromium	**7.58**		0.628	0.0636	mg/Kg	☼	04/21/17 14:35	04/24/17 16:01	1
Cobalt	**9.50**		0.628	0.0849	mg/Kg	☼	04/21/17 14:35	04/24/17 16:01	1
Iron	**18800**		25.1	3.18	mg/Kg	☼	04/21/17 14:35	04/24/17 16:01	1
Lead	**15.8**	**B**	0.628	0.132	mg/Kg	☼	04/21/17 14:35	04/24/17 16:01	1
Magnesium	**3670**		126	2.41	mg/Kg	☼	04/21/17 14:35	04/24/17 16:01	1
Manganese	**122**		1.88	0.0479	mg/Kg	☼	04/21/17 14:35	04/24/17 16:01	1
Molybdenum	**0.955**	**B**	0.628	0.171	mg/Kg	☼	04/21/17 14:35	04/26/17 15:44	1
Nickel	**12.2**		1.26	0.147	mg/Kg	☼	04/21/17 14:35	04/24/17 16:01	1
Potassium	**1470**		126	13.8	mg/Kg	☼	04/21/17 14:35	04/24/17 16:01	1
Selenium	0.325	U	2.51	0.325	mg/Kg	☼	04/21/17 14:35	04/24/17 16:01	1
Sodium	**5320**	**B**	126	1.11	mg/Kg	☼	04/21/17 14:35	04/24/17 16:01	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0281**		0.0207	0.00435	mg/Kg	☼	04/14/17 10:53	04/17/17 12:11	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**20.4**		1.0	1.0	%			04/13/17 16:35	1
Percent Solids	**79.6**		1.0	1.0	%			04/13/17 16:35	1

Client Sample ID: SJRP-SB06-18-19-04112017

Lab Sample ID: 600-146619-6
Date Collected: 04/11/17 15:40
Matrix: Solid
Date Received: 04/13/17 09:51
Percent Solids: 86.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.472**		0.208	0.0262	mg/Kg		04/13/17 12:14	04/18/17 21:36	1
Ethylbenzene	**0.934**		0.208	0.0424	mg/Kg		04/13/17 12:14	04/18/17 21:36	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Client Sample ID: SJRP-SB06-18-19-04112017
Date Collected: 04/11/17 15:40
Date Received: 04/13/17 09:51

Lab Sample ID: 600-146619-6
Matrix: Solid
Percent Solids: 86.4

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.942		0.208	0.0573	mg/Kg		04/13/17 12:14	04/18/17 21:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*61 - 130*	*04/13/17 12:14*	*04/18/17 21:36*	*1*
Dibromofluoromethane	*104*		*68 - 140*	*04/13/17 12:14*	*04/18/17 21:36*	*1*
Toluene-d8 (Surr)	*93*		*50 - 130*	*04/13/17 12:14*	*04/18/17 21:36*	*1*
4-Bromofluorobenzene	*82*		*57 - 140*	*04/13/17 12:14*	*04/18/17 21:36*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	11.8		1.04	0.235	mg/Kg		04/13/17 12:14	04/19/17 16:38	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*61 - 130*	*04/13/17 12:14*	*04/19/17 16:38*	*5*
Dibromofluoromethane	*119*		*68 - 140*	*04/13/17 12:14*	*04/19/17 16:38*	*5*
Toluene-d8 (Surr)	*104*		*50 - 130*	*04/13/17 12:14*	*04/19/17 16:38*	*5*
4-Bromofluorobenzene	*88*		*57 - 140*	*04/13/17 12:14*	*04/19/17 16:38*	*5*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	79.7		5.73	2.87	mg/Kg	☼	04/19/17 09:25	04/23/17 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*59*		*50 - 150*	*04/19/17 09:25*	*04/23/17 14:45*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.84	U	5.69	2.84	mg/Kg	☼	04/19/17 10:44	04/20/17 16:16	1
ORO C24-C40	4.24	J	5.69	2.84	mg/Kg	☼	04/19/17 10:44	04/20/17 16:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*86*		*50 - 150*	*04/19/17 10:44*	*04/20/17 16:16*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	13100		26.1	0.313	mg/Kg	☼	04/21/17 14:35	04/26/17 15:46	1
Arsenic	39.4		1.04	0.227	mg/Kg	☼	04/21/17 14:35	04/24/17 16:03	1
Barium	95.5		1.04	0.0313	mg/Kg	☼	04/21/17 14:35	04/24/17 16:03	1
Boron	1.31	J	20.9	0.403	mg/Kg	☼	04/21/17 14:35	04/24/17 16:03	1
Cadmium	0.261		0.261	0.0267	mg/Kg	☼	04/21/17 14:35	04/24/17 16:03	1
Calcium	4790		104	0.901	mg/Kg	☼	04/21/17 14:35	04/24/17 16:03	1
Chromium	5.97		0.521	0.0528	mg/Kg	☼	04/21/17 14:35	04/24/17 16:03	1
Cobalt	10.8		0.521	0.0705	mg/Kg	☼	04/21/17 14:35	04/24/17 16:03	1
Iron	23800		20.9	2.64	mg/Kg	☼	04/21/17 14:35	04/24/17 16:03	1
Lead	11.1	B	0.521	0.109	mg/Kg	☼	04/21/17 14:35	04/24/17 16:03	1
Magnesium	3210		104	2.00	mg/Kg	☼	04/21/17 14:35	04/24/17 16:03	1
Manganese	136		1.56	0.0397	mg/Kg	☼	04/21/17 14:35	04/24/17 16:03	1
Molybdenum	0.980	B	0.521	0.142	mg/Kg	☼	04/21/17 14:35	04/26/17 15:46	1
Nickel	14.6		1.04	0.122	mg/Kg	☼	04/21/17 14:35	04/24/17 16:03	1
Potassium	1220		104	11.5	mg/Kg	☼	04/21/17 14:35	04/24/17 16:03	1
Selenium	0.270	U	2.09	0.270	mg/Kg	☼	04/21/17 14:35	04/24/17 16:03	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Client Sample ID: SJRP-SB06-18-19-04112017

Lab Sample ID: 600-146619-6
Date Collected: 04/11/17 15:40
Matrix: Solid
Date Received: 04/13/17 09:51
Percent Solids: 86.4

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	4750	B	104	0.924	mg/Kg	☼	04/21/17 14:35	04/24/17 16:03	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0161	J	0.0194	0.00408	mg/Kg	☼	04/14/17 10:53	04/17/17 12:13	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	13.6		1.0	1.0	%			04/13/17 16:35	1
Percent Solids	86.4		1.0	1.0	%			04/13/17 16:35	1

Client Sample ID: SJRP-SB06-25-26-04112017

Lab Sample ID: 600-146619-7
Date Collected: 04/11/17 15:50
Matrix: Solid
Date Received: 04/13/17 09:51
Percent Solids: 88.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000793	U	0.00629	0.000793	mg/Kg	☼	04/13/17 12:14	04/14/17 20:16	1
Ethylbenzene	0.00128	U	0.00629	0.00128	mg/Kg	☼	04/13/17 12:14	04/14/17 20:16	1
Toluene	0.00256	J	0.00629	0.00174	mg/Kg	☼	04/13/17 12:14	04/14/17 20:16	1
Xylenes, Total	0.00423	J	0.00629	0.00142	mg/Kg	☼	04/13/17 12:14	04/14/17 20:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*74*		*61 - 130*	*04/13/17 12:14*	*04/14/17 20:16*	*1*
Dibromofluoromethane	*79*		*68 - 140*	*04/13/17 12:14*	*04/14/17 20:16*	*1*
Toluene-d8 (Surr)	*100*		*50 - 130*	*04/13/17 12:14*	*04/14/17 20:16*	*1*
4-Bromofluorobenzene	*105*		*57 - 140*	*04/13/17 12:14*	*04/14/17 20:16*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.03	U	6.06	3.03	mg/Kg	☼	04/19/17 09:25	04/23/17 15:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*60*		*50 - 150*	*04/19/17 09:25*	*04/23/17 15:15*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.82	U	5.63	2.82	mg/Kg	☼	04/19/17 10:44	04/20/17 16:32	1
ORO C24-C40	4.73	J	5.63	2.82	mg/Kg	☼	04/19/17 10:44	04/20/17 16:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*91*		*50 - 150*	*04/19/17 10:44*	*04/20/17 16:32*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	13500		25.9	0.310	mg/Kg	☼	04/21/17 14:35	04/26/17 15:48	1
Arsenic	2.73		1.03	0.226	mg/Kg	☼	04/21/17 14:35	04/24/17 16:05	1
Barium	77.1		1.03	0.0310	mg/Kg	☼	04/21/17 14:35	04/24/17 16:05	1
Boron	2.03	J	20.7	0.399	mg/Kg	☼	04/21/17 14:35	04/24/17 16:05	1
Cadmium	0.155	J	0.259	0.0265	mg/Kg	☼	04/21/17 14:35	04/24/17 16:05	1
Calcium	3440		103	0.894	mg/Kg	☼	04/21/17 14:35	04/24/17 16:05	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Client Sample ID: SJRP-SB06-25-26-04112017

Lab Sample ID: 600-146619-7
Date Collected: 04/11/17 15:50
Matrix: Solid
Date Received: 04/13/17 09:51
Percent Solids: 88.7

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.22		0.517	0.0524	mg/Kg	☼	04/21/17 14:35	04/24/17 16:05	1
Cobalt	8.88		0.517	0.0700	mg/Kg	☼	04/21/17 14:35	04/24/17 16:05	1
Iron	19200		20.7	2.62	mg/Kg	☼	04/21/17 14:35	04/24/17 16:05	1
Lead	14.4	B	0.517	0.109	mg/Kg	☼	04/21/17 14:35	04/24/17 16:05	1
Magnesium	3310		103	1.99	mg/Kg	☼	04/21/17 14:35	04/24/17 16:05	1
Manganese	150		1.55	0.0394	mg/Kg	☼	04/21/17 14:35	04/24/17 16:05	1
Molybdenum	0.983	B	0.517	0.141	mg/Kg	☼	04/21/17 14:35	04/26/17 15:48	1
Nickel	10.4		1.03	0.121	mg/Kg	☼	04/21/17 14:35	04/24/17 16:05	1
Potassium	1240		103	11.4	mg/Kg	☼	04/21/17 14:35	04/24/17 16:05	1
Selenium	0.268	U	2.07	0.268	mg/Kg	☼	04/21/17 14:35	04/24/17 16:05	1
Sodium	7340	B	103	0.917	mg/Kg	☼	04/21/17 14:35	04/24/17 16:05	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0199		0.0189	0.00397	mg/Kg	☼	04/14/17 10:53	04/17/17 12:15	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	11.3		1.0	1.0	%			04/13/17 16:35	1
Percent Solids	88.7		1.0	1.0	%			04/13/17 16:35	1

Client Sample ID: SJRP-SB05-10-11-04122017

Lab Sample ID: 600-146619-8
Date Collected: 04/12/17 08:05
Matrix: Solid
Date Received: 04/13/17 09:51
Percent Solids: 79.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	6.12		4.27	0.539	mg/Kg		04/13/17 12:14	04/18/17 22:05	20
Ethylbenzene	8.23		4.27	0.872	mg/Kg		04/13/17 12:14	04/18/17 22:05	20
Toluene	1.18	U	4.27	1.18	mg/Kg		04/13/17 12:14	04/18/17 22:05	20
Xylenes, Total	97.9		4.27	0.966	mg/Kg		04/13/17 12:14	04/18/17 22:05	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*61 - 130*	*04/13/17 12:14*	*04/18/17 22:05*	*20*
Dibromofluoromethane	*104*		*68 - 140*	*04/13/17 12:14*	*04/18/17 22:05*	*20*
Toluene-d8 (Surr)	*97*		*50 - 130*	*04/13/17 12:14*	*04/18/17 22:05*	*20*
4-Bromofluorobenzene	*78*		*57 - 140*	*04/13/17 12:14*	*04/18/17 22:05*	*20*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	1110		7.52	3.76	mg/Kg	☼	04/19/17 09:25	04/23/17 16:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*64*		*50 - 150*	*04/19/17 09:25*	*04/23/17 16:45*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	337		31.2	15.6	mg/Kg	☼	04/19/17 10:44	04/21/17 11:08	5
ORO C24-C40	6.17	J	6.24	3.12	mg/Kg	☼	04/19/17 10:44	04/20/17 16:49	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Client Sample ID: SJRP-SB05-10-11-04122017

Lab Sample ID: 600-146619-8
Date Collected: 04/12/17 08:05
Matrix: Solid
Date Received: 04/13/17 09:51
Percent Solids: 79.7

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	112		50 - 150	04/19/17 10:44	04/20/17 16:49	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	12700		28.0	0.336	mg/Kg	☼	04/21/17 14:35	04/26/17 15:50	1
Arsenic	15.0		1.12	0.244	mg/Kg	☼	04/21/17 14:35	04/24/17 16:07	1
Barium	33.3		1.12	0.0336	mg/Kg	☼	04/21/17 14:35	04/24/17 16:07	1
Boron	1.63	J	22.4	0.433	mg/Kg	☼	04/21/17 14:35	04/24/17 16:07	1
Cadmium	0.353		0.280	0.0287	mg/Kg	☼	04/21/17 14:35	04/24/17 16:07	1
Calcium	3720		112	0.969	mg/Kg	☼	04/21/17 14:35	04/24/17 16:07	1
Chromium	6.85		0.560	0.0567	mg/Kg	☼	04/21/17 14:35	04/24/17 16:07	1
Cobalt	8.65		0.560	0.0758	mg/Kg	☼	04/21/17 14:35	04/24/17 16:07	1
Iron	28500		22.4	2.84	mg/Kg	☼	04/21/17 14:35	04/24/17 16:07	1
Lead	23.2	B	0.560	0.118	mg/Kg	☼	04/21/17 14:35	04/24/17 16:07	1
Magnesium	3300		112	2.15	mg/Kg	☼	04/21/17 14:35	04/24/17 16:07	1
Manganese	138		1.68	0.0427	mg/Kg	☼	04/21/17 14:35	04/24/17 16:07	1
Molybdenum	3.34	B	0.560	0.152	mg/Kg	☼	04/21/17 14:35	04/26/17 15:50	1
Nickel	15.3		1.12	0.131	mg/Kg	☼	04/21/17 14:35	04/24/17 16:07	1
Potassium	2000		112	12.3	mg/Kg	☼	04/21/17 14:35	04/24/17 16:07	1
Selenium	0.290	U	2.24	0.290	mg/Kg	☼	04/21/17 14:35	04/24/17 16:07	1
Sodium	9290	B	112	0.993	mg/Kg	☼	04/21/17 14:35	04/24/17 16:07	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0350		0.0203	0.00428	mg/Kg	☼	04/14/17 10:53	04/17/17 12:22	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20.3		1.0	1.0	%			04/13/17 16:35	1
Percent Solids	79.7		1.0	1.0	%			04/13/17 16:35	1

Client Sample ID: SJRP-SB05-15-16-01122017

Lab Sample ID: 600-146619-9
Date Collected: 04/12/17 08:10
Matrix: Solid
Date Received: 04/13/17 09:51
Percent Solids: 82.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	3.19		0.257	0.0324	mg/Kg		04/13/17 12:14	04/18/17 22:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	128		61 - 130	04/13/17 12:14	04/18/17 22:33	1
Dibromofluoromethane	112		68 - 140	04/13/17 12:14	04/18/17 22:33	1
Toluene-d8 (Surr)	106		50 - 130	04/13/17 12:14	04/18/17 22:33	1
4-Bromofluorobenzene	87		57 - 140	04/13/17 12:14	04/18/17 22:33	1

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	7.63		5.14	1.05	mg/Kg		04/13/17 12:14	04/19/17 17:06	20
Toluene	17.3		5.14	1.42	mg/Kg		04/13/17 12:14	04/19/17 17:06	20
Xylenes, Total	116		5.14	1.16	mg/Kg		04/13/17 12:14	04/19/17 17:06	20

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Client Sample ID: SJRP-SB05-15-16-01122017
Date Collected: 04/12/17 08:10
Date Received: 04/13/17 09:51

Lab Sample ID: 600-146619-9
Matrix: Solid
Percent Solids: 82.1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		61 - 130	04/13/17 12:14	04/19/17 17:06	20
Dibromofluoromethane	105		68 - 140	04/13/17 12:14	04/19/17 17:06	20
Toluene-d8 (Surr)	86		50 - 130	04/13/17 12:14	04/19/17 17:06	20
4-Bromofluorobenzene	76		57 - 140	04/13/17 12:14	04/19/17 17:06	20

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	653		6.56	3.28	mg/Kg	☼	04/19/17 09:25	04/23/17 17:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	61		50 - 150	04/19/17 09:25	04/23/17 17:15	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	147		5.86	2.93	mg/Kg	☼	04/19/17 10:44	04/20/17 17:05	1
ORO C24-C40	3.27	J	5.86	2.93	mg/Kg	☼	04/19/17 10:44	04/20/17 17:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	81		50 - 150	04/19/17 10:44	04/20/17 17:05	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11500		28.7	0.345	mg/Kg	☼	04/21/17 14:35	04/26/17 15:52	1
Arsenic	3.21		1.15	0.250	mg/Kg	☼	04/21/17 14:35	04/24/17 16:09	1
Barium	60.4		1.15	0.0345	mg/Kg	☼	04/21/17 14:35	04/24/17 16:09	1
Boron	0.551	J	23.0	0.443	mg/Kg	☼	04/21/17 14:35	04/24/17 16:09	1
Cadmium	0.161	J	0.287	0.0294	mg/Kg	☼	04/21/17 14:35	04/24/17 16:09	1
Calcium	3030		115	0.993	mg/Kg	☼	04/21/17 14:35	04/24/17 16:09	1
Chromium	5.53		0.574	0.0581	mg/Kg	☼	04/21/17 14:35	04/24/17 16:09	1
Cobalt	12.4		0.574	0.0777	mg/Kg	☼	04/21/17 14:35	04/24/17 16:09	1
Iron	31000		23.0	2.91	mg/Kg	☼	04/21/17 14:35	04/24/17 16:09	1
Lead	13.2	B	0.539	0.113	mg/Kg	☼	04/27/17 16:59	04/28/17 16:18	1
Magnesium	3120		115	2.21	mg/Kg	☼	04/21/17 14:35	04/24/17 16:09	1
Manganese	139		1.72	0.0438	mg/Kg	☼	04/21/17 14:35	04/24/17 16:09	1
Molybdenum	1.30	B	0.574	0.156	mg/Kg	☼	04/21/17 14:35	04/26/17 15:52	1
Nickel	13.3		1.15	0.134	mg/Kg	☼	04/21/17 14:35	04/24/17 16:09	1
Potassium	1180		115	12.6	mg/Kg	☼	04/21/17 14:35	04/24/17 16:09	1
Selenium	0.298	U	2.30	0.298	mg/Kg	☼	04/21/17 14:35	04/24/17 16:09	1
Sodium	5680	B	115	1.02	mg/Kg	☼	04/21/17 14:35	04/24/17 16:09	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0181	J	0.0188	0.00396	mg/Kg	☼	04/14/17 10:53	04/17/17 12:26	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17.9		1.0	1.0	%			04/13/17 16:35	1
Percent Solids	82.1		1.0	1.0	%			04/13/17 16:35	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Client Sample ID: SJRP-SB05-29-30-04122017
Date Collected: 04/12/17 08:45
Date Received: 04/13/17 09:51

Lab Sample ID: 600-146619-10
Matrix: Solid
Percent Solids: 84.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0381	*	0.00595	0.000749	mg/Kg	☼	04/13/17 12:14	04/15/17 18:01	1
Ethylbenzene	0.00351	J *	0.00595	0.00121	mg/Kg	☼	04/13/17 12:14	04/15/17 18:01	1
Toluene	0.0115	*	0.00595	0.00164	mg/Kg	☼	04/13/17 12:14	04/15/17 18:01	1
Xylenes, Total	0.0258	*	0.00595	0.00134	mg/Kg	☼	04/13/17 12:14	04/15/17 18:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*	*	*61 - 130*	*04/13/17 12:14*	*04/15/17 18:01*	*1*
Dibromofluoromethane	*76*	*	*68 - 140*	*04/13/17 12:14*	*04/15/17 18:01*	*1*
Toluene-d8 (Surr)	*91*	*	*50 - 130*	*04/13/17 12:14*	*04/15/17 18:01*	*1*
4-Bromofluorobenzene	*108*	*	*57 - 140*	*04/13/17 12:14*	*04/15/17 18:01*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.36	U	6.73	3.36	mg/Kg	☼	04/19/17 09:25	04/23/17 15:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*63*		*50 - 150*	*04/19/17 09:25*	*04/23/17 15:45*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.90	U	5.81	2.90	mg/Kg	☼	04/19/17 10:44	04/20/17 17:22	1
ORO C24-C40	3.03	J	5.81	2.90	mg/Kg	☼	04/19/17 10:44	04/20/17 17:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*86*		*50 - 150*	*04/19/17 10:44*	*04/20/17 17:22*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	14600	B	29.2	0.350	mg/Kg	☼	04/21/17 14:35	04/24/17 16:18	1
Arsenic	4.35		1.17	0.255	mg/Kg	☼	04/21/17 14:35	04/24/17 16:18	1
Barium	182		1.17	0.0350	mg/Kg	☼	04/21/17 14:35	04/24/17 16:18	1
Boron	1.72	J F1	23.4	0.451	mg/Kg	☼	04/21/17 14:35	04/24/17 16:18	1
Cadmium	0.0876	J	0.292	0.0299	mg/Kg	☼	04/21/17 14:35	04/24/17 16:18	1
Calcium	3000		117	1.01	mg/Kg	☼	04/21/17 14:35	04/24/17 16:18	1
Chromium	4.49		0.584	0.0591	mg/Kg	☼	04/21/17 14:35	04/24/17 16:18	1
Cobalt	11.5		0.584	0.0790	mg/Kg	☼	04/21/17 14:35	04/24/17 16:18	1
Iron	15400		23.4	2.95	mg/Kg	☼	04/21/17 14:35	04/24/17 16:18	1
Lead	13.7	B	0.584	0.123	mg/Kg	☼	04/21/17 14:35	04/24/17 16:18	1
Magnesium	2940		117	2.24	mg/Kg	☼	04/21/17 14:35	04/24/17 16:18	1
Manganese	140	F1	1.75	0.0445	mg/Kg	☼	04/21/17 14:35	04/24/17 16:18	1
Molybdenum	0.216	J F1 B	0.584	0.159	mg/Kg	☼	04/21/17 14:35	04/25/17 13:12	1
Nickel	14.4		1.17	0.137	mg/Kg	☼	04/21/17 14:35	04/24/17 16:18	1
Potassium	1460		117	12.8	mg/Kg	☼	04/21/17 14:35	04/24/17 16:18	1
Selenium	0.302	U	2.34	0.302	mg/Kg	☼	04/21/17 14:35	04/24/17 16:18	1
Sodium	11600	B	117	1.03	mg/Kg	☼	04/21/17 14:35	04/24/17 16:18	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0299		0.0197	0.00415	mg/Kg	☼	04/14/17 10:53	04/17/17 12:24	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Client Sample ID: SJRP-SB05-29-30-04122017

Lab Sample ID: 600-146619-10
Date Collected: 04/12/17 08:45
Matrix: Solid
Date Received: 04/13/17 09:51
Percent Solids: 84.8

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.2		1.0	1.0	%			04/13/17 16:35	1
Percent Solids	84.8		1.0	1.0	%			04/13/17 16:35	1

Client Sample ID: SJRP-EB-05112017

Lab Sample ID: 600-146619-11
Date Collected: 04/11/17 16:15
Matrix: Water
Date Received: 04/13/17 09:51

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/17/17 16:20	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/17/17 16:20	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/17/17 16:20	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/17/17 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*50 - 134*		*04/17/17 16:20*	*1*
Dibromofluoromethane	*86*		*62 - 130*		*04/17/17 16:20*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*04/17/17 16:20*	*1*
4-Bromofluorobenzene	*103*		*67 - 139*		*04/17/17 16:20*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			04/20/17 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*84*		*50 - 150*		*04/20/17 16:37*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0910	U	0.100	0.0910	mg/L		04/18/17 20:29	04/19/17 14:38	1
ORO C24-C40	0.0910	U	0.100	0.0910	mg/L		04/18/17 20:29	04/19/17 14:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*77*		*50 - 150*	*04/18/17 20:29*	*04/19/17 14:38*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		04/19/17 09:24	04/19/17 17:47	1
Arsenic	0.00380	J	0.0100	0.00285	mg/L		04/19/17 09:24	04/19/17 17:47	1
Barium	0.000800	J	0.0200	0.000530	mg/L		04/19/17 09:24	04/19/17 17:47	1
Boron	0.0116	U	0.200	0.0116	mg/L		04/19/17 09:24	04/19/17 17:47	1
Cadmium	0.000300	J	0.00500	0.000280	mg/L		04/19/17 09:24	04/19/17 17:47	1
Calcium	0.0904	J	1.00	0.0240	mg/L		04/19/17 09:24	04/19/17 17:47	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/19/17 09:24	04/19/17 17:47	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		04/19/17 09:24	04/19/17 17:47	1
Iron	0.204	J	0.400	0.0270	mg/L		04/19/17 09:24	04/19/17 17:47	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/19/17 09:24	04/19/17 17:47	1
Magnesium	0.0555	U	1.00	0.0555	mg/L		04/19/17 09:24	04/19/17 17:47	1
Manganese	0.00340	J	0.0100	0.000360	mg/L		04/19/17 09:24	04/19/17 17:47	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		04/19/17 09:24	04/19/17 17:47	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Client Sample ID: SJRP-EB-05112017

Lab Sample ID: 600-146619-11

Date Collected: 04/11/17 16:15
Matrix: Water
Date Received: 04/13/17 09:51

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.000800	U	0.0100	0.000800	mg/L		04/19/17 09:24	04/19/17 17:47	1
Potassium	**0.0807**	**J**	1.00	0.0374	mg/L		04/19/17 09:24	04/19/17 17:47	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/19/17 09:24	04/19/17 17:47	1
Sodium	**0.285**	**J B**	1.00	0.0214	mg/L		04/19/17 09:24	04/19/17 17:47	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000820	U	0.000200	0.0000820	mg/L		04/14/17 07:56	04/17/17 15:34	1

Client Sample ID: SJRP-TB-04122017

Lab Sample ID: 600-146619-12

Date Collected: 04/12/17 07:00
Matrix: Water
Date Received: 04/13/17 09:51

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/17/17 16:49	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/17/17 16:49	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/17/17 16:49	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/17/17 16:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*50 - 134*		*04/17/17 16:49*	*1*
Dibromofluoromethane	*86*		*62 - 130*		*04/17/17 16:49*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*04/17/17 16:49*	*1*
4-Bromofluorobenzene	*106*		*67 - 139*		*04/17/17 16:49*	*1*

Definitions/Glossary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	ISTD response or retention time outside acceptable limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(61-130)	(68-140)	(50-130)	(57-140)
600-146619-1	SJRP-MW15-9-10-04122017	113	98	87	72
600-146619-2	SJRP-MW15-14-15-04122017	119	111	104	86
600-146619-3	SJRP-MW15-26-27-04122017	112	107	92	85
600-146619-3 - DL	SJRP-MW15-26-27-04122017	108	100	88	77
600-146619-4	SJRP-SB06-10-11-04112017	78	88	106	89
600-146619-5	SJRP-SB06-13-14-04112017	75	88	103	86
600-146619-6	SJRP-SB06-18-19-04112017	111	104	93	82
600-146619-6 - DL	SJRP-SB06-18-19-04112017	115	119	104	88
600-146619-7	SJRP-SB06-25-26-04112017	74	79	100	105
600-146619-8	SJRP-SB05-10-11-04122017	111	104	97	78
600-146619-9	SJRP-SB05-15-16-01122017	128	112	106	87
600-146619-9 - DL	SJRP-SB05-15-16-01122017	111	105	86	76
600-146619-10	SJRP-SB05-29-30-04122017	95 *	76 *	91 *	108 *
LCS 600-210761/3	Lab Control Sample	86	94	110	115
LCS 600-210829/3	Lab Control Sample	87	94	104	116
LCS 600-210994/1-A	Lab Control Sample	115	115	108	84
LCSD 600-210761/4	Lab Control Sample Dup	81	92	114	120
LCSD 600-210829/4	Lab Control Sample Dup	82	89	109	118
LCSD 600-210994/2-A	Lab Control Sample Dup	111	111	106	68
MB 600-210761/6	Method Blank	83	86	98	109
MB 600-210829/6	Method Blank	85	86	98	104
MB 600-210994/3-A	Method Blank	100	106	98	73

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(50-134)	(62-130)	(70-130)	(67-139)
600-146619-11	SJRP-EB-05112017	94	86	94	103
600-146619-12	SJRP-TB-04122017	92	86	93	106
LCS 600-210901/4	Lab Control Sample	91	86	91	102
LCSD 600-210901/5	Lab Control Sample Dup	93	87	91	104
MB 600-210901/7	Method Blank	92	84	95	106

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		TFT2							
Lab Sample ID	Client Sample ID	(50-150)							
600-146619-1	SJRP-MW15-9-10-04122017	62							
600-146619-2	SJRP-MW15-14-15-04122017	64							
600-146619-3	SJRP-MW15-26-27-04122017	63							
600-146619-4	SJRP-SB06-10-11-04112017	67							
600-146619-5	SJRP-SB06-13-14-04112017	65							
600-146619-6	SJRP-SB06-18-19-04112017	59							
600-146619-7	SJRP-SB06-25-26-04112017	60							
600-146619-8	SJRP-SB05-10-11-04122017	64							
600-146619-9	SJRP-SB05-15-16-01122017	61							
600-146619-10	SJRP-SB05-29-30-04122017	63							
LCS 490-423251/2-A	Lab Control Sample	86							
LCSD 490-423251/3-A	Lab Control Sample Dup	82							
MB 490-423251/1-A	Method Blank	60							

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		TFT2							
Lab Sample ID	Client Sample ID	(50-150)							
600-146619-11	SJRP-EB-05112017	84							
LCS 490-423531/4	Lab Control Sample	85							
LCSD 490-423531/5	Lab Control Sample Dup	85							
MB 490-423531/8	Method Blank	85							

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		OTPH1							
Lab Sample ID	Client Sample ID	(50-150)							
600-146619-1	SJRP-MW15-9-10-04122017	139							
600-146619-1 MS	SJRP-MW15-9-10-04122017	71							
600-146619-1 MSD	SJRP-MW15-9-10-04122017	72							
600-146619-2	SJRP-MW15-14-15-04122017	70							
600-146619-3	SJRP-MW15-26-27-04122017	67							
600-146619-4	SJRP-SB06-10-11-04112017	65							
600-146619-5	SJRP-SB06-13-14-04112017	69							
600-146619-6	SJRP-SB06-18-19-04112017	86							
600-146619-7	SJRP-SB06-25-26-04112017	91							
600-146619-8	SJRP-SB05-10-11-04122017	112							
600-146619-9	SJRP-SB05-15-16-01122017	81							
600-146619-10	SJRP-SB05-29-30-04122017	86							
LCS 490-423331/2-A	Lab Control Sample	101							

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	OTPH1 (50-150)							
MB 490-423331/1-A	Method Blank	99							

Surrogate Legend

OTPH = o-Terphenyl (Surr)

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	OTPH1 (50-150)							
600-146619-11	SJRP-EB-05112017	77							
LCS 490-423188/2-A	Lab Control Sample	79							
LCSD 490-423188/3-A	Lab Control Sample Dup	82							
MB 490-423188/1-A	Method Blank	78							

Surrogate Legend

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-210761/6
Matrix: Solid
Analysis Batch: 210761

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			04/14/17 12:31	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			04/14/17 12:31	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			04/14/17 12:31	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			04/14/17 12:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*61 - 130*		*04/14/17 12:31*	*1*
Dibromofluoromethane	*86*		*68 - 140*		*04/14/17 12:31*	*1*
Toluene-d8 (Surr)	*98*		*50 - 130*		*04/14/17 12:31*	*1*
4-Bromofluorobenzene	*109*		*57 - 140*		*04/14/17 12:31*	*1*

Lab Sample ID: LCS 600-210761/3
Matrix: Solid
Analysis Batch: 210761

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.04849		mg/Kg		97	70 - 131		
Ethylbenzene			0.0500	0.04712		mg/Kg		94	66 - 130		
Toluene			0.0500	0.04797		mg/Kg		96	67 - 130		
Xylenes, Total			0.100	0.09254		mg/Kg		93	63 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*61 - 130*
Dibromofluoromethane	*94*		*68 - 140*
Toluene-d8 (Surr)	*110*		*50 - 130*
4-Bromofluorobenzene	*115*		*57 - 140*

Lab Sample ID: LCSD 600-210761/4
Matrix: Solid
Analysis Batch: 210761

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.05042		mg/Kg		101	70 - 131	4	30
Ethylbenzene			0.0500	0.04722		mg/Kg		94	66 - 130	0	30
Toluene			0.0500	0.05014		mg/Kg		100	67 - 130	4	30
Xylenes, Total			0.100	0.09288		mg/Kg		93	63 - 130	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*81*		*61 - 130*
Dibromofluoromethane	*92*		*68 - 140*
Toluene-d8 (Surr)	*114*		*50 - 130*
4-Bromofluorobenzene	*120*		*57 - 140*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-210829/6
Matrix: Solid
Analysis Batch: 210829

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			04/15/17 11:32	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			04/15/17 11:32	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			04/15/17 11:32	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			04/15/17 11:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*61 - 130*		*04/15/17 11:32*	*1*
Dibromofluoromethane	*86*		*68 - 140*		*04/15/17 11:32*	*1*
Toluene-d8 (Surr)	*98*		*50 - 130*		*04/15/17 11:32*	*1*
4-Bromofluorobenzene	*104*		*57 - 140*		*04/15/17 11:32*	*1*

Lab Sample ID: LCS 600-210829/3
Matrix: Solid
Analysis Batch: 210829

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.05343		mg/Kg		107	70 - 131		
Ethylbenzene			0.0500	0.04978		mg/Kg		100	66 - 130		
Toluene			0.0500	0.05102		mg/Kg		102	67 - 130		
Xylenes, Total			0.100	0.09872		mg/Kg		99	63 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*61 - 130*
Dibromofluoromethane	*94*		*68 - 140*
Toluene-d8 (Surr)	*104*		*50 - 130*
4-Bromofluorobenzene	*116*		*57 - 140*

Lab Sample ID: LCSD 600-210829/4
Matrix: Solid
Analysis Batch: 210829

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.05165		mg/Kg		103	70 - 131	3	30
Ethylbenzene			0.0500	0.05039		mg/Kg		101	66 - 130	1	30
Toluene			0.0500	0.05309		mg/Kg		106	67 - 130	4	30
Xylenes, Total			0.100	0.09793		mg/Kg		98	63 - 130	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*82*		*61 - 130*
Dibromofluoromethane	*89*		*68 - 140*
Toluene-d8 (Surr)	*109*		*50 - 130*
4-Bromofluorobenzene	*118*		*57 - 140*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-210901/7
Matrix: Water
Analysis Batch: 210901

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/17/17 14:52	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/17/17 14:52	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/17/17 14:52	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/17/17 14:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*50 - 134*		*04/17/17 14:52*	*1*
Dibromofluoromethane	*84*		*62 - 130*		*04/17/17 14:52*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*04/17/17 14:52*	*1*
4-Bromofluorobenzene	*106*		*67 - 139*		*04/17/17 14:52*	*1*

Lab Sample ID: LCS 600-210901/4
Matrix: Water
Analysis Batch: 210901

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0100	0.009461		mg/L		95	70 - 130		
Ethylbenzene			0.0100	0.009301		mg/L		93	70 - 130		
Toluene			0.0100	0.009722		mg/L		97	70 - 130		
Xylenes, Total			0.0200	0.01881		mg/L		94	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*50 - 134*
Dibromofluoromethane	*86*		*62 - 130*
Toluene-d8 (Surr)	*91*		*70 - 130*
4-Bromofluorobenzene	*102*		*67 - 139*

Lab Sample ID: LCSD 600-210901/5
Matrix: Water
Analysis Batch: 210901

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0100	0.009022		mg/L		90	70 - 130	5	20
Ethylbenzene			0.0100	0.008778		mg/L		88	70 - 130	6	20
Toluene			0.0100	0.009223		mg/L		92	70 - 130	5	20
Xylenes, Total			0.0200	0.01780		mg/L		89	70 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*50 - 134*
Dibromofluoromethane	*87*		*62 - 130*
Toluene-d8 (Surr)	*91*		*70 - 130*
4-Bromofluorobenzene	*104*		*67 - 139*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-210994/3-A
Matrix: Solid
Analysis Batch: 210997

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210994

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0788	U	0.625	0.0788	mg/Kg		04/18/17 11:00	04/18/17 14:51	1
Ethylbenzene	0.128	U	0.625	0.128	mg/Kg		04/18/17 11:00	04/18/17 14:51	1
Toluene	0.173	U	0.625	0.173	mg/Kg		04/18/17 11:00	04/18/17 14:51	1
Xylenes, Total	0.141	U	0.625	0.141	mg/Kg		04/18/17 11:00	04/18/17 14:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*61 - 130*	*04/18/17 11:00*	*04/18/17 14:51*	*1*
Dibromofluoromethane	*106*		*68 - 140*	*04/18/17 11:00*	*04/18/17 14:51*	*1*
Toluene-d8 (Surr)	*98*		*50 - 130*	*04/18/17 11:00*	*04/18/17 14:51*	*1*
4-Bromofluorobenzene	*73*		*57 - 140*	*04/18/17 11:00*	*04/18/17 14:51*	*1*

Lab Sample ID: LCS 600-210994/1-A
Matrix: Solid
Analysis Batch: 210997

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210994

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	6.25	7.028		mg/Kg		112	70 - 131
Ethylbenzene	6.25	6.769		mg/Kg		108	66 - 130
Toluene	6.25	6.526		mg/Kg		104	67 - 130
Xylenes, Total	12.5	13.10		mg/Kg		105	63 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*115*		*61 - 130*
Dibromofluoromethane	*115*		*68 - 140*
Toluene-d8 (Surr)	*108*		*50 - 130*
4-Bromofluorobenzene	*84*		*57 - 140*

Lab Sample ID: LCSD 600-210994/2-A
Matrix: Solid
Analysis Batch: 210997

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 210994

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	6.25	7.701		mg/Kg		123	70 - 131	9	30
Ethylbenzene	6.25	7.235		mg/Kg		116	66 - 130	7	30
Toluene	6.25	6.974		mg/Kg		112	67 - 130	7	30
Xylenes, Total	12.5	13.92		mg/Kg		111	63 - 130	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*111*		*61 - 130*
Dibromofluoromethane	*111*		*68 - 140*
Toluene-d8 (Surr)	*106*		*50 - 130*
4-Bromofluorobenzene	*68*		*57 - 140*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 490-423251/1-A
Matrix: Solid
Analysis Batch: 424225

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 423251

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		04/19/17 09:25	04/23/17 11:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*60*		*50 - 150*	*04/19/17 09:25*	*04/23/17 11:17*	*1*

Lab Sample ID: LCS 490-423251/2-A
Matrix: Solid
Analysis Batch: 424225

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 423251

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	500	525.8		mg/Kg		105	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*86*		*50 - 150*

Lab Sample ID: LCSD 490-423251/3-A
Matrix: Solid
Analysis Batch: 424225

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 423251

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	500	505.7		mg/Kg		101	70 - 130	4	21

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*82*		*50 - 150*

Lab Sample ID: MB 490-423531/8
Matrix: Water
Analysis Batch: 423531

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			04/20/17 11:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*85*		*50 - 150*		*04/20/17 11:05*	*1*

Lab Sample ID: LCS 490-423531/4
Matrix: Water
Analysis Batch: 423531

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	1.00	1.033		mg/L		103	66 - 140

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: LCS 490-423531/4
Matrix: Water
Analysis Batch: 423531

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	*85*		*50 - 150*

Lab Sample ID: LCSD 490-423531/5
Matrix: Water
Analysis Batch: 423531

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	1.00	1.003		mg/L		100	66 - 140	3	42

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	*85*		*50 - 150*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Lab Sample ID: MB 490-423188/1-A
Matrix: Water
Analysis Batch: 423225

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 423188

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0910	U	0.100	0.0910	mg/L		04/18/17 20:29	04/19/17 14:23	1
ORO C24-C40	0.0910	U	0.100	0.0910	mg/L		04/18/17 20:29	04/19/17 14:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	*78*		*50 - 150*	*04/18/17 20:29*	*04/19/17 14:23*	*1*

Lab Sample ID: LCS 490-423188/2-A
Matrix: Water
Analysis Batch: 423225

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 423188

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	0.800	0.7347		mg/L		92	46 - 132

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	*79*		*50 - 150*

Lab Sample ID: LCSD 490-423188/3-A
Matrix: Water
Analysis Batch: 423225

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 423188

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	0.800	0.7747		mg/L		97	46 - 132	5	31

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Lab Sample ID: LCSD 490-423188/3-A
Matrix: Water
Analysis Batch: 423225

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 423188

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o-Terphenyl (Surr)	82		50 - 150

Lab Sample ID: MB 490-423331/1-A
Matrix: Solid
Analysis Batch: 423565

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 423331

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.50	U	5.00	2.50	mg/Kg		04/19/17 10:44	04/20/17 13:47	1
ORO C24-C40	2.50	U	5.00	2.50	mg/Kg		04/19/17 10:44	04/20/17 13:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	99		50 - 150	04/19/17 10:44	04/20/17 13:47	1

Lab Sample ID: LCS 490-423331/2-A
Matrix: Solid
Analysis Batch: 423565

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 423331

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	40.0	32.05		mg/Kg		80	54 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	101		50 - 150

Lab Sample ID: 600-146619-1 MS
Matrix: Solid
Analysis Batch: 423565

Client Sample ID: SJRP-MW15-9-10-04122017
Prep Type: Total/NA
Prep Batch: 423331

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	715	E	50.6	614.6	E 4	mg/Kg	☼	-198	10 - 142

Surrogate	MS %Recovery	MS Qualifier	Limits
o-Terphenyl (Surr)	71		50 - 150

Lab Sample ID: 600-146619-1 MSD
Matrix: Solid
Analysis Batch: 423565

Client Sample ID: SJRP-MW15-9-10-04122017
Prep Type: Total/NA
Prep Batch: 423331

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	715	E	50.8	683.9	E 4	mg/Kg	☼	-61	10 - 142	11	47

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl (Surr)	72		50 - 150

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-211063/1-A
Matrix: Water
Analysis Batch: 211106

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 211063

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		04/19/17 09:24	04/19/17 16:49	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		04/19/17 09:24	04/19/17 16:49	1
Barium	0.000530	U	0.0200	0.000530	mg/L		04/19/17 09:24	04/19/17 16:49	1
Boron	0.0116	U	0.200	0.0116	mg/L		04/19/17 09:24	04/19/17 16:49	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		04/19/17 09:24	04/19/17 16:49	1
Calcium	0.0240	U	1.00	0.0240	mg/L		04/19/17 09:24	04/19/17 16:49	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/19/17 09:24	04/19/17 16:49	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		04/19/17 09:24	04/19/17 16:49	1
Iron	0.0270	U	0.400	0.0270	mg/L		04/19/17 09:24	04/19/17 16:49	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/19/17 09:24	04/19/17 16:49	1
Magnesium	0.0555	U	1.00	0.0555	mg/L		04/19/17 09:24	04/19/17 16:49	1
Manganese	0.000360	U	0.0100	0.000360	mg/L		04/19/17 09:24	04/19/17 16:49	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		04/19/17 09:24	04/19/17 16:49	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		04/19/17 09:24	04/19/17 16:49	1
Potassium	0.0374	U	1.00	0.0374	mg/L		04/19/17 09:24	04/19/17 16:49	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/19/17 09:24	04/19/17 16:49	1
Sodium	0.09700	J	1.00	0.0214	mg/L		04/19/17 09:24	04/19/17 16:49	1

Lab Sample ID: LCS 600-211063/2-A
Matrix: Water
Analysis Batch: 211106

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211063

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	10.35		mg/L		104	80 - 120
Arsenic	1.00	1.035		mg/L		104	80 - 120
Barium	1.00	1.014		mg/L		101	80 - 120
Boron	1.00	0.9904		mg/L		99	80 - 120
Cadmium	0.500	0.5096		mg/L		102	80 - 120
Calcium	10.0	10.15		mg/L		102	80 - 120
Chromium	1.00	1.018		mg/L		102	80 - 120
Cobalt	1.00	0.9951		mg/L		100	80 - 120
Iron	10.0	10.16		mg/L		102	80 - 120
Lead	1.00	0.9866		mg/L		99	80 - 120
Magnesium	10.0	9.636		mg/L		96	80 - 120
Manganese	1.00	1.021		mg/L		102	80 - 120
Molybdenum	1.00	1.021		mg/L		102	80 - 120
Nickel	1.00	0.9956		mg/L		100	80 - 120
Potassium	10.0	10.10		mg/L		101	80 - 120
Selenium	1.00	1.026		mg/L		103	80 - 120
Sodium	10.0	10.23		mg/L		102	80 - 120

Lab Sample ID: MB 600-211317/1-A
Matrix: Solid
Analysis Batch: 211424

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 211317

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.218	U	1.00	0.218	mg/Kg		04/21/17 14:35	04/24/17 15:26	1
Boron	0.386	U	20.0	0.386	mg/Kg		04/21/17 14:35	04/24/17 15:26	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: MB 600-211317/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211424 — **Prep Batch: 211317**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		04/21/17 14:35	04/24/17 15:26	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		04/21/17 14:35	04/24/17 15:26	1
Cobalt	0.0676	U	0.500	0.0676	mg/Kg		04/21/17 14:35	04/24/17 15:26	1
Iron	2.53	U	20.0	2.53	mg/Kg		04/21/17 14:35	04/24/17 15:26	1
Lead	1.005		0.500	0.105	mg/Kg		04/21/17 14:35	04/24/17 15:26	1
Magnesium	1.92	U	100	1.92	mg/Kg		04/21/17 14:35	04/24/17 15:26	1
Manganese	0.0381	U	1.50	0.0381	mg/Kg		04/21/17 14:35	04/24/17 15:26	1
Molybdenum	0.136	U	0.500	0.136	mg/Kg		04/21/17 14:35	04/24/17 15:26	1
Nickel	0.117	U	1.00	0.117	mg/Kg		04/21/17 14:35	04/24/17 15:26	1
Potassium	11.0	U	100	11.0	mg/Kg		04/21/17 14:35	04/24/17 15:26	1
Selenium	0.259	U	2.00	0.259	mg/Kg		04/21/17 14:35	04/24/17 15:26	1

Lab Sample ID: MB 600-211317/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211523 — **Prep Batch: 211317**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.4500	J	25.0	0.300	mg/Kg		04/21/17 14:35	04/25/17 13:03	1
Barium	0.05000	J	1.00	0.0300	mg/Kg		04/21/17 14:35	04/25/17 13:03	1
Boron	0.386	U	20.0	0.386	mg/Kg		04/21/17 14:35	04/25/17 13:03	1
Calcium	3.810	J	100	0.864	mg/Kg		04/21/17 14:35	04/25/17 13:03	1
Chromium	0.05500	J	0.500	0.0506	mg/Kg		04/21/17 14:35	04/25/17 13:03	1
Cobalt	0.0676	U	0.500	0.0676	mg/Kg		04/21/17 14:35	04/25/17 13:03	1
Iron	2.53	U	20.0	2.53	mg/Kg		04/21/17 14:35	04/25/17 13:03	1
Lead	1.060		0.500	0.105	mg/Kg		04/21/17 14:35	04/25/17 13:03	1
Magnesium	1.92	U	100	1.92	mg/Kg		04/21/17 14:35	04/25/17 13:03	1
Manganese	0.04000	J	1.50	0.0381	mg/Kg		04/21/17 14:35	04/25/17 13:03	1
Molybdenum	0.3300	J	0.500	0.136	mg/Kg		04/21/17 14:35	04/25/17 13:03	1
Nickel	0.117	U	1.00	0.117	mg/Kg		04/21/17 14:35	04/25/17 13:03	1
Potassium	11.0	U	100	11.0	mg/Kg		04/21/17 14:35	04/25/17 13:03	1
Sodium	4.725	J	100	0.886	mg/Kg		04/21/17 14:35	04/25/17 13:03	1

Lab Sample ID: MB 600-211317/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211619 — **Prep Batch: 211317**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.300	U	25.0	0.300	mg/Kg		04/21/17 14:35	04/26/17 15:00	1
Molybdenum	0.1700	J	0.500	0.136	mg/Kg		04/21/17 14:35	04/26/17 15:00	1

Lab Sample ID: LCSSRM 600-211317/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211424 — **Prep Batch: 211317**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	97.5	98.34		mg/Kg		100.9	69.2 - 145.6
Boron	116	117.9		mg/Kg		101.6	73.0 - 127.6

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-211317/2-A
Matrix: Solid
Analysis Batch: 211424

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211317

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	76.6	75.23		mg/Kg		98.2	73.2 - 126.8
Chromium	103	100.4		mg/Kg		97.5	79.7 - 121.4
Cobalt	103	105.4		mg/Kg		102.3	83.3 - 116.5
Iron	14500	13760		mg/Kg		94.9	45.0 - 155.9
Lead	96.7	100.4		mg/Kg		103.8	81.7 - 117.9
Magnesium	2680	2571		mg/Kg		95.9	75.4 - 124.6
Manganese	400	393.3		mg/Kg		98.3	81.0 - 119.0
Molybdenum	94.9	95.58		mg/Kg		100.7	78.5 - 121.2
Nickel	153	155.6		mg/Kg		101.7	73.2 - 126.8
Potassium	2230	2132		mg/Kg		95.6	69.5 - 130.5
Selenium	161	161.3		mg/Kg		100.2	77.6 - 123.0

Lab Sample ID: LCSSRM 600-211317/2-A
Matrix: Solid
Analysis Batch: 211523

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211317

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	7590	6451		mg/Kg		85.0	34.9 - 151.5
Barium	306	281.8		mg/Kg		92.1	82.7 - 117.0
Boron	116	108.3		mg/Kg		93.4	73.0 - 127.6
Calcium	5880	5668		mg/Kg		96.4	81.8 - 118.4
Chromium	103	100.8		mg/Kg		97.9	79.7 - 121.4
Cobalt	103	101.7		mg/Kg		98.7	83.3 - 116.5
Iron	14500	12800		mg/Kg		88.3	45.0 - 155.9
Lead	96.7	96.43		mg/Kg		99.7	81.7 - 117.9
Magnesium	2680	2348		mg/Kg		87.6	75.4 - 124.6
Manganese	400	390.4		mg/Kg		97.6	81.0 - 119.0
Molybdenum	94.9	89.47		mg/Kg		94.3	78.5 - 121.2
Nickel	153	151.0		mg/Kg		98.7	73.2 - 126.8
Potassium	2230	1997		mg/Kg		89.6	69.5 - 130.5

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-211317/2-A
Matrix: Solid
Analysis Batch: 211523

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211317

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	370	337.6		mg/Kg		91.2	70.5 - 129.7

Lab Sample ID: LCSSRM 600-211317/2-A
Matrix: Solid
Analysis Batch: 211619

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211317

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	7590	6582		mg/Kg		86.7	34.9 - 151.5
Molybdenum	94.9	94.58		mg/Kg		99.7	78.5 - 121.2

Lab Sample ID: 600-146619-10 MS
Matrix: Solid
Analysis Batch: 211424

Client Sample ID: SJRP-SB05-29-30-04122017
Prep Type: Total/NA
Prep Batch: 211317

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	14600	B	551	19650	4	mg/Kg	☼	908	75 - 125
Arsenic	4.35		55.1	55.78		mg/Kg	☼	93	75 - 125
Boron	1.72	J F1	55.1	26.26	F1	mg/Kg	☼	45	75 - 125
Cadmium	0.0876	J	27.6	27.16		mg/Kg	☼	98	75 - 125
Calcium	3000		551	4877	4	mg/Kg	☼	341	75 - 125
Chromium	4.49		55.1	58.93		mg/Kg	☼	99	75 - 125
Cobalt	11.5		55.1	72.05		mg/Kg	☼	110	75 - 125
Iron	15400		551	18460	4	mg/Kg	☼	556	75 - 125
Lead	13.7	B	55.1	71.60		mg/Kg	☼	105	75 - 125
Magnesium	2940		551	3976	4	mg/Kg	☼	189	75 - 125
Manganese	140	F1	55.1	179.5	F1	mg/Kg	☼	71	75 - 125
Nickel	14.4		55.1	75.46		mg/Kg	☼	111	75 - 125
Potassium	1460		551	2122		mg/Kg	☼	120	75 - 125
Selenium	0.302	U	55.1	48.31		mg/Kg	☼	88	75 - 125

Lab Sample ID: 600-146619-10 MS
Matrix: Solid
Analysis Batch: 211523

Client Sample ID: SJRP-SB05-29-30-04122017
Prep Type: Total/NA
Prep Batch: 211317

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	14600	B	551	20090	4	mg/Kg	☼	998	75 - 125
Boron	1.79	J F1	55.1	26.29	F1	mg/Kg	☼	44	75 - 125
Calcium	3030	B	551	4971	4	mg/Kg	☼	353	75 - 125
Chromium	4.20	B	55.1	53.98		mg/Kg	☼	90	75 - 125
Cobalt	11.4		55.1	70.06		mg/Kg	☼	106	75 - 125
Iron	15300		551	18750	4	mg/Kg	☼	622	75 - 125
Lead	13.6	B	55.1	70.17		mg/Kg	☼	103	75 - 125
Magnesium	2960		551	4113	4	mg/Kg	☼	208	75 - 125
Manganese	134	F1 B	55.1	167.7	F1	mg/Kg	☼	61	75 - 125
Molybdenum	0.216	J F1 B	55.1	35.89	F1	mg/Kg	☼	65	75 - 125
Nickel	14.4		55.1	74.36		mg/Kg	☼	109	75 - 125
Potassium	1470	F1	551	2206	F1	mg/Kg	☼	133	75 - 125

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Lab Sample ID: 600-146619-10 MS
Matrix: Solid
Analysis Batch: 211619

Client Sample ID: SJRP-SB05-29-30-04122017
Prep Type: Total/NA
Prep Batch: 211317

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	15000		551	20150	4	mg/Kg	☼	933	75 - 125
Arsenic	4.40		55.1	58.10		mg/Kg	☼	97	75 - 125
Boron	1.42	J F1	55.1	25.27	F1	mg/Kg	☼	43	75 - 125
Cadmium	0.0299	U	27.6	27.14		mg/Kg	☼	98	75 - 125
Calcium	2970	B	551	4798	4	mg/Kg	☼	331	75 - 125
Chromium	4.32		55.1	54.49		mg/Kg	☼	91	75 - 125
Cobalt	11.6	B	55.1	71.82		mg/Kg	☼	109	75 - 125
Iron	15500		551	18370	4	mg/Kg	☼	524	75 - 125
Lead	13.5	B	55.1	71.00		mg/Kg	☼	104	75 - 125
Magnesium	2820		551	3798	4	mg/Kg	☼	178	75 - 125
Manganese	138	F1	55.1	171.7	F1	mg/Kg	☼	61	75 - 125
Molybdenum	0.216	J B F1	55.1	39.94	F1	mg/Kg	☼	72	75 - 125
Nickel	14.6		55.1	76.12		mg/Kg	☼	112	75 - 125
Potassium	1470		551	2150		mg/Kg	☼	123	75 - 125
Selenium	0.302	U	55.1	49.92		mg/Kg	☼	91	75 - 125

Lab Sample ID: 600-146619-10 DU
Matrix: Solid
Analysis Batch: 211424

Client Sample ID: SJRP-SB05-29-30-04122017
Prep Type: Total/NA
Prep Batch: 211317

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	14600	B	16390		mg/Kg	☼	11	20
Arsenic	4.35		4.227		mg/Kg	☼	3	20
Barium	182		141.7	F3	mg/Kg	☼	25	20
Boron	1.72	J F1	1.262	J F5	mg/Kg	☼	31	20
Cadmium	0.0876	J	0.08738	J	mg/Kg	☼	0.2	20
Calcium	3000		6630	F3	mg/Kg	☼	75	20
Chromium	4.49		4.495		mg/Kg	☼	0.09	20
Cobalt	11.5		13.55		mg/Kg	☼	17	20
Iron	15400		16720		mg/Kg	☼	8	20
Lead	13.7	B	16.37		mg/Kg	☼	17	20
Magnesium	2940		3413		mg/Kg	☼	15	20
Manganese	140	F1	97.97	F3	mg/Kg	☼	35	20
Nickel	14.4		17.20		mg/Kg	☼	18	20
Potassium	1460		1616		mg/Kg	☼	10	20
Selenium	0.302	U	0.283	U	mg/Kg	☼	NC	20

Lab Sample ID: 600-146619-10 DU
Matrix: Solid
Analysis Batch: 211523

Client Sample ID: SJRP-SB05-29-30-04122017
Prep Type: Total/NA
Prep Batch: 211317

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	14600	B	14880		mg/Kg	☼	2	20
Barium	186	B	132.3	F3	mg/Kg	☼	34	20
Boron	1.79	J F1	1.431	J F5	mg/Kg	☼	22	20
Calcium	3030	B	5991	F3	mg/Kg	☼	66	20
Chromium	4.20	B	4.172		mg/Kg	☼	0.8	20
Cobalt	11.4		13.60		mg/Kg	☼	18	20
Iron	15300		15050		mg/Kg	☼	2	20
Lead	13.6	B	16.74	F3	mg/Kg	☼	21	20
Magnesium	2960		3112		mg/Kg	☼	5	20

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-146619-10 DU — **Client Sample ID: SJRP-SB05-29-30-04122017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211523 — **Prep Batch: 211317**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Manganese	134	F1 B	93.11	F3	mg/Kg	☼	36	20
Molybdenum	0.216	J F1 B	0.149	U	mg/Kg	☼	NC	20
Nickel	14.4		17.57		mg/Kg	☼	20	20
Potassium	1470	F1	1490		mg/Kg	☼	1	20

Lab Sample ID: 600-146619-10 DU — **Client Sample ID: SJRP-SB05-29-30-04122017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211619 — **Prep Batch: 211317**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	15000		14780		mg/Kg	☼	2	20
Arsenic	4.40		4.467		mg/Kg	☼	2	20
Barium	191	B	135.3	F3	mg/Kg	☼	34	20
Boron	1.42	J F1	1.212	J	mg/Kg	☼	16	20
Cadmium	0.0299	U	0.0280	U	mg/Kg	☼	NC	20
Calcium	2970	B	5756	F3	mg/Kg	☼	64	20
Chromium	4.32		4.222		mg/Kg	☼	2	20
Cobalt	11.6	B	13.58		mg/Kg	☼	16	20
Iron	15500		14690		mg/Kg	☼	5	20
Lead	13.5	B	16.05		mg/Kg	☼	17	20
Magnesium	2820		2871		mg/Kg	☼	2	20
Manganese	138	F1	95.35	F3	mg/Kg	☼	36	20
Molybdenum	0.216	J B F1	0.1529	J F5	mg/Kg	☼	34	20
Nickel	14.6		17.39		mg/Kg	☼	17	20
Potassium	1470		1449		mg/Kg	☼	2	20
Selenium	0.302	U	0.283	U	mg/Kg	☼	NC	20

Lab Sample ID: MB 600-211726/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211796 — **Prep Batch: 211726**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.300	U	25.0	0.300	mg/Kg		04/27/17 16:59	04/28/17 15:53	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		04/27/17 16:59	04/28/17 15:53	1
Barium	0.0300	U	1.00	0.0300	mg/Kg		04/27/17 16:59	04/28/17 15:53	1
Boron	0.386	U	20.0	0.386	mg/Kg		04/27/17 16:59	04/28/17 15:53	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		04/27/17 16:59	04/28/17 15:53	1
Calcium	0.864	U	100	0.864	mg/Kg		04/27/17 16:59	04/28/17 15:53	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		04/27/17 16:59	04/28/17 15:53	1
Cobalt	0.0676	U	0.500	0.0676	mg/Kg		04/27/17 16:59	04/28/17 15:53	1
Iron	2.53	U	20.0	2.53	mg/Kg		04/27/17 16:59	04/28/17 15:53	1
Lead	0.1055	J	0.500	0.105	mg/Kg		04/27/17 16:59	04/28/17 15:53	1
Magnesium	1.92	U	100	1.92	mg/Kg		04/27/17 16:59	04/28/17 15:53	1
Manganese	0.0381	U	1.50	0.0381	mg/Kg		04/27/17 16:59	04/28/17 15:53	1
Nickel	0.117	U	1.00	0.117	mg/Kg		04/27/17 16:59	04/28/17 15:53	1
Selenium	0.259	U	2.00	0.259	mg/Kg		04/27/17 16:59	04/28/17 15:53	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-211726/2-A
Matrix: Solid
Analysis Batch: 211796

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211726

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	7590	5879		mg/Kg		77.5	34.9 - 151.5
Arsenic	97.5	78.59		mg/Kg		80.6	69.2 - 145.6
Barium	306	275.8		mg/Kg		90.1	82.7 - 117.0
Boron	116	111.4		mg/Kg		96.0	73.0 - 127.6
Cadmium	76.6	71.82		mg/Kg		93.8	73.2 - 126.8
Calcium	5880	5304		mg/Kg		90.2	81.8 - 118.4
Chromium	103	92.86		mg/Kg		90.2	79.7 - 121.4
Cobalt	103	99.11		mg/Kg		96.2	83.3 - 116.5
Iron	14500	10820		mg/Kg		74.6	45.0 - 155.9
Lead	96.7	87.36		mg/Kg		90.3	81.7 - 117.9
Magnesium	2680	2368		mg/Kg		88.3	75.4 - 124.6
Manganese	400	349.6		mg/Kg		87.4	81.0 - 119.0
Nickel	153	141.6		mg/Kg		92.5	73.2 - 126.8
Selenium	161	140.7		mg/Kg		87.4	77.6 - 123.0

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-210757/7-A
Matrix: Water
Analysis Batch: 210930

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210757

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000820	U	0.000200	0.0000820	mg/L		04/14/17 07:56	04/17/17 15:30	1

Lab Sample ID: LCS 600-210757/8-A
Matrix: Water
Analysis Batch: 210930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210757

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00300	0.002960		mg/L		99	70 - 130

Lab Sample ID: 600-146619-11 MS
Matrix: Water
Analysis Batch: 210930

Client Sample ID: SJRP-EB-05112017
Prep Type: Total/NA
Prep Batch: 210757

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0000820	U	0.00300	0.003056		mg/L		102	75 - 125

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) (Continued)

Lab Sample ID: 600-146619-11 DU — **Client Sample ID: SJRP-EB-05112017**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 210930 — **Prep Batch: 210757**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Mercury	0.0000820	U		0.0000820	U	mg/L				NC	20

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-210782/7-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 210908 — **Prep Batch: 210782**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00330	U	0.0157	0.00330	mg/Kg		04/14/17 10:53	04/17/17 11:57	1

Lab Sample ID: LCSSRM 600-210782/8-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 210908 — **Prep Batch: 210782**

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			20.2	23.89		mg/Kg		118.3	70.8 - 129.2		

Lab Sample ID: 600-146619-4 MS — **Client Sample ID: SJRP-SB06-10-11-04112017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 210908 — **Prep Batch: 210782**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.0313		0.334	0.3285		mg/Kg	☼	89	75 - 125		

Lab Sample ID: 600-146619-4 DU — **Client Sample ID: SJRP-SB06-10-11-04112017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 210908 — **Prep Batch: 210782**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Mercury	0.0313			0.03411		mg/Kg	☼			8	20

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

GC/MS VOA

Analysis Batch: 210761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-4	SJRP-SB06-10-11-04112017	Total/NA	Solid	8260B	210811
600-146619-5	SJRP-SB06-13-14-04112017	Total/NA	Solid	8260B	210811
600-146619-7	SJRP-SB06-25-26-04112017	Total/NA	Solid	8260B	210811
MB 600-210761/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-210761/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-210761/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 210811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-4	SJRP-SB06-10-11-04112017	Total/NA	Solid	5035	
600-146619-5	SJRP-SB06-13-14-04112017	Total/NA	Solid	5035	
600-146619-7	SJRP-SB06-25-26-04112017	Total/NA	Solid	5035	
600-146619-10	SJRP-SB05-29-30-04122017	Total/NA	Solid	5035	

Analysis Batch: 210829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-10	SJRP-SB05-29-30-04122017	Total/NA	Solid	8260B	210811
MB 600-210829/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-210829/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-210829/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 210896

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-1	SJRP-MW15-9-10-04122017	Total/NA	Solid	5035	
600-146619-2	SJRP-MW15-14-15-04122017	Total/NA	Solid	5035	
600-146619-3 - DL	SJRP-MW15-26-27-04122017	Total/NA	Solid	5035	
600-146619-3	SJRP-MW15-26-27-04122017	Total/NA	Solid	5035	
600-146619-6 - DL	SJRP-SB06-18-19-04112017	Total/NA	Solid	5035	
600-146619-6	SJRP-SB06-18-19-04112017	Total/NA	Solid	5035	
600-146619-8	SJRP-SB05-10-11-04122017	Total/NA	Solid	5035	
600-146619-9 - DL	SJRP-SB05-15-16-01122017	Total/NA	Solid	5035	
600-146619-9	SJRP-SB05-15-16-01122017	Total/NA	Solid	5035	

Analysis Batch: 210901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-11	SJRP-EB-05112017	Total/NA	Water	8260B	
600-146619-12	SJRP-TB-04122017	Total/NA	Water	8260B	
MB 600-210901/7	Method Blank	Total/NA	Water	8260B	
LCS 600-210901/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-210901/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Prep Batch: 210994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-210994/3-A	Method Blank	Total/NA	Solid	5030B	
LCS 600-210994/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 600-210994/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 210997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-1	SJRP-MW15-9-10-04122017	Total/NA	Solid	8260B	210896
600-146619-2	SJRP-MW15-14-15-04122017	Total/NA	Solid	8260B	210896

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

GC/MS VOA (Continued)

Analysis Batch: 210997 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-3	SJRP-MW15-26-27-04122017	Total/NA	Solid	8260B	210896
600-146619-6	SJRP-SB06-18-19-04112017	Total/NA	Solid	8260B	210896
600-146619-8	SJRP-SB05-10-11-04122017	Total/NA	Solid	8260B	210896
600-146619-9	SJRP-SB05-15-16-01122017	Total/NA	Solid	8260B	210896
MB 600-210994/3-A	Method Blank	Total/NA	Solid	8260B	210994
LCS 600-210994/1-A	Lab Control Sample	Total/NA	Solid	8260B	210994
LCSD 600-210994/2-A	Lab Control Sample Dup	Total/NA	Solid	8260B	210994

Analysis Batch: 211078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-3 - DL	SJRP-MW15-26-27-04122017	Total/NA	Solid	8260B	210896
600-146619-6 - DL	SJRP-SB06-18-19-04112017	Total/NA	Solid	8260B	210896
600-146619-9 - DL	SJRP-SB05-15-16-01122017	Total/NA	Solid	8260B	210896

GC VOA

Prep Batch: 423251

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-1	SJRP-MW15-9-10-04122017	Total/NA	Solid	5030B	
600-146619-2	SJRP-MW15-14-15-04122017	Total/NA	Solid	5030B	
600-146619-3	SJRP-MW15-26-27-04122017	Total/NA	Solid	5030B	
600-146619-4	SJRP-SB06-10-11-04112017	Total/NA	Solid	5030B	
600-146619-5	SJRP-SB06-13-14-04112017	Total/NA	Solid	5030B	
600-146619-6	SJRP-SB06-18-19-04112017	Total/NA	Solid	5030B	
600-146619-7	SJRP-SB06-25-26-04112017	Total/NA	Solid	5030B	
600-146619-8	SJRP-SB05-10-11-04122017	Total/NA	Solid	5030B	
600-146619-9	SJRP-SB05-15-16-01122017	Total/NA	Solid	5030B	
600-146619-10	SJRP-SB05-29-30-04122017	Total/NA	Solid	5030B	
MB 490-423251/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 490-423251/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 490-423251/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 423531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-11	SJRP-EB-05112017	Total/NA	Water	8015C	
MB 490-423531/8	Method Blank	Total/NA	Water	8015C	
LCS 490-423531/4	Lab Control Sample	Total/NA	Water	8015C	
LCSD 490-423531/5	Lab Control Sample Dup	Total/NA	Water	8015C	

Analysis Batch: 424225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-1	SJRP-MW15-9-10-04122017	Total/NA	Solid	8015C	423251
600-146619-2	SJRP-MW15-14-15-04122017	Total/NA	Solid	8015C	423251
600-146619-3	SJRP-MW15-26-27-04122017	Total/NA	Solid	8015C	423251
600-146619-4	SJRP-SB06-10-11-04112017	Total/NA	Solid	8015C	423251
600-146619-5	SJRP-SB06-13-14-04112017	Total/NA	Solid	8015C	423251
600-146619-6	SJRP-SB06-18-19-04112017	Total/NA	Solid	8015C	423251
600-146619-7	SJRP-SB06-25-26-04112017	Total/NA	Solid	8015C	423251
600-146619-8	SJRP-SB05-10-11-04122017	Total/NA	Solid	8015C	423251
600-146619-9	SJRP-SB05-15-16-01122017	Total/NA	Solid	8015C	423251

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

GC VOA (Continued)

Analysis Batch: 424225 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-10	SJRP-SB05-29-30-04122017	Total/NA	Solid	8015C	423251
MB 490-423251/1-A	Method Blank	Total/NA	Solid	8015C	423251
LCS 490-423251/2-A	Lab Control Sample	Total/NA	Solid	8015C	423251
LCSD 490-423251/3-A	Lab Control Sample Dup	Total/NA	Solid	8015C	423251

GC Semi VOA

Prep Batch: 423188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-11	SJRP-EB-05112017	Total/NA	Water	3510C	
MB 490-423188/1-A	Method Blank	Total/NA	Water	3510C	
LCS 490-423188/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 490-423188/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 423225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-11	SJRP-EB-05112017	Total/NA	Water	8015C	423188
MB 490-423188/1-A	Method Blank	Total/NA	Water	8015C	423188
LCS 490-423188/2-A	Lab Control Sample	Total/NA	Water	8015C	423188
LCSD 490-423188/3-A	Lab Control Sample Dup	Total/NA	Water	8015C	423188

Prep Batch: 423331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-1	SJRP-MW15-9-10-04122017	Total/NA	Solid	3550C	
600-146619-2	SJRP-MW15-14-15-04122017	Total/NA	Solid	3550C	
600-146619-3	SJRP-MW15-26-27-04122017	Total/NA	Solid	3550C	
600-146619-4	SJRP-SB06-10-11-04112017	Total/NA	Solid	3550C	
600-146619-5	SJRP-SB06-13-14-04112017	Total/NA	Solid	3550C	
600-146619-6	SJRP-SB06-18-19-04112017	Total/NA	Solid	3550C	
600-146619-7	SJRP-SB06-25-26-04112017	Total/NA	Solid	3550C	
600-146619-8	SJRP-SB05-10-11-04122017	Total/NA	Solid	3550C	
600-146619-9	SJRP-SB05-15-16-01122017	Total/NA	Solid	3550C	
600-146619-10	SJRP-SB05-29-30-04122017	Total/NA	Solid	3550C	
MB 490-423331/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-423331/2-A	Lab Control Sample	Total/NA	Solid	3550C	
600-146619-1 MS	SJRP-MW15-9-10-04122017	Total/NA	Solid	3550C	
600-146619-1 MSD	SJRP-MW15-9-10-04122017	Total/NA	Solid	3550C	

Analysis Batch: 423565

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-1	SJRP-MW15-9-10-04122017	Total/NA	Solid	8015C	423331
600-146619-1	SJRP-MW15-9-10-04122017	Total/NA	Solid	8015C	423331
600-146619-2	SJRP-MW15-14-15-04122017	Total/NA	Solid	8015C	423331
600-146619-3	SJRP-MW15-26-27-04122017	Total/NA	Solid	8015C	423331
600-146619-4	SJRP-SB06-10-11-04112017	Total/NA	Solid	8015C	423331
600-146619-5	SJRP-SB06-13-14-04112017	Total/NA	Solid	8015C	423331
600-146619-6	SJRP-SB06-18-19-04112017	Total/NA	Solid	8015C	423331
600-146619-7	SJRP-SB06-25-26-04112017	Total/NA	Solid	8015C	423331
600-146619-8	SJRP-SB05-10-11-04122017	Total/NA	Solid	8015C	423331
600-146619-9	SJRP-SB05-15-16-01122017	Total/NA	Solid	8015C	423331

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

GC Semi VOA (Continued)

Analysis Batch: 423565 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-10	SJRP-SB05-29-30-04122017	Total/NA	Solid	8015C	423331
MB 490-423331/1-A	Method Blank	Total/NA	Solid	8015C	423331
LCS 490-423331/2-A	Lab Control Sample	Total/NA	Solid	8015C	423331
600-146619-1 MS	SJRP-MW15-9-10-04122017	Total/NA	Solid	8015C	423331
600-146619-1 MSD	SJRP-MW15-9-10-04122017	Total/NA	Solid	8015C	423331

Analysis Batch: 423937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-8	SJRP-SB05-10-11-04122017	Total/NA	Solid	8015C	423331

Metals

Prep Batch: 210757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-11	SJRP-EB-05112017	Total/NA	Water	7470A	
MB 600-210757/7-A	Method Blank	Total/NA	Water	7470A	
LCS 600-210757/8-A	Lab Control Sample	Total/NA	Water	7470A	
600-146619-11 MS	SJRP-EB-05112017	Total/NA	Water	7470A	
600-146619-11 DU	SJRP-EB-05112017	Total/NA	Water	7470A	

Prep Batch: 210782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-1	SJRP-MW15-9-10-04122017	Total/NA	Solid	7471A	
600-146619-2	SJRP-MW15-14-15-04122017	Total/NA	Solid	7471A	
600-146619-3	SJRP-MW15-26-27-04122017	Total/NA	Solid	7471A	
600-146619-4	SJRP-SB06-10-11-04112017	Total/NA	Solid	7471A	
600-146619-5	SJRP-SB06-13-14-04112017	Total/NA	Solid	7471A	
600-146619-6	SJRP-SB06-18-19-04112017	Total/NA	Solid	7471A	
600-146619-7	SJRP-SB06-25-26-04112017	Total/NA	Solid	7471A	
600-146619-8	SJRP-SB05-10-11-04122017	Total/NA	Solid	7471A	
600-146619-9	SJRP-SB05-15-16-01122017	Total/NA	Solid	7471A	
600-146619-10	SJRP-SB05-29-30-04122017	Total/NA	Solid	7471A	
MB 600-210782/7-A	Method Blank	Total/NA	Solid	7471A	
LCSSRM 600-210782/8-A	Lab Control Sample	Total/NA	Solid	7471A	
600-146619-4 MS	SJRP-SB06-10-11-04112017	Total/NA	Solid	7471A	
600-146619-4 DU	SJRP-SB06-10-11-04112017	Total/NA	Solid	7471A	

Analysis Batch: 210908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-1	SJRP-MW15-9-10-04122017	Total/NA	Solid	7471A	210782
600-146619-2	SJRP-MW15-14-15-04122017	Total/NA	Solid	7471A	210782
600-146619-3	SJRP-MW15-26-27-04122017	Total/NA	Solid	7471A	210782
600-146619-4	SJRP-SB06-10-11-04112017	Total/NA	Solid	7471A	210782
600-146619-5	SJRP-SB06-13-14-04112017	Total/NA	Solid	7471A	210782
600-146619-6	SJRP-SB06-18-19-04112017	Total/NA	Solid	7471A	210782
600-146619-7	SJRP-SB06-25-26-04112017	Total/NA	Solid	7471A	210782
600-146619-8	SJRP-SB05-10-11-04122017	Total/NA	Solid	7471A	210782
600-146619-9	SJRP-SB05-15-16-01122017	Total/NA	Solid	7471A	210782
600-146619-10	SJRP-SB05-29-30-04122017	Total/NA	Solid	7471A	210782
MB 600-210782/7-A	Method Blank	Total/NA	Solid	7471A	210782

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Metals (Continued)

Analysis Batch: 210908 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSSRM 600-210782/8-A	Lab Control Sample	Total/NA	Solid	7471A	210782
600-146619-4 MS	SJRP-SB06-10-11-04112017	Total/NA	Solid	7471A	210782
600-146619-4 DU	SJRP-SB06-10-11-04112017	Total/NA	Solid	7471A	210782

Analysis Batch: 210930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-11	SJRP-EB-05112017	Total/NA	Water	7470A	210757
MB 600-210757/7-A	Method Blank	Total/NA	Water	7470A	210757
LCS 600-210757/8-A	Lab Control Sample	Total/NA	Water	7470A	210757
600-146619-11 MS	SJRP-EB-05112017	Total/NA	Water	7470A	210757
600-146619-11 DU	SJRP-EB-05112017	Total/NA	Water	7470A	210757

Prep Batch: 211063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-11	SJRP-EB-05112017	Total/NA	Water	3010A	
MB 600-211063/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-211063/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 211106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-11	SJRP-EB-05112017	Total/NA	Water	6010B	211063
MB 600-211063/1-A	Method Blank	Total/NA	Water	6010B	211063
LCS 600-211063/2-A	Lab Control Sample	Total/NA	Water	6010B	211063

Prep Batch: 211317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-1	SJRP-MW15-9-10-04122017	Total/NA	Solid	3050B	
600-146619-2	SJRP-MW15-14-15-04122017	Total/NA	Solid	3050B	
600-146619-3	SJRP-MW15-26-27-04122017	Total/NA	Solid	3050B	
600-146619-4	SJRP-SB06-10-11-04112017	Total/NA	Solid	3050B	
600-146619-5	SJRP-SB06-13-14-04112017	Total/NA	Solid	3050B	
600-146619-6	SJRP-SB06-18-19-04112017	Total/NA	Solid	3050B	
600-146619-7	SJRP-SB06-25-26-04112017	Total/NA	Solid	3050B	
600-146619-8	SJRP-SB05-10-11-04122017	Total/NA	Solid	3050B	
600-146619-9	SJRP-SB05-15-16-01122017	Total/NA	Solid	3050B	
600-146619-10	SJRP-SB05-29-30-04122017	Total/NA	Solid	3050B	
MB 600-211317/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-211317/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-146619-10 MS	SJRP-SB05-29-30-04122017	Total/NA	Solid	3050B	
600-146619-10 DU	SJRP-SB05-29-30-04122017	Total/NA	Solid	3050B	

Analysis Batch: 211424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-1	SJRP-MW15-9-10-04122017	Total/NA	Solid	6010B	211317
600-146619-2	SJRP-MW15-14-15-04122017	Total/NA	Solid	6010B	211317
600-146619-3	SJRP-MW15-26-27-04122017	Total/NA	Solid	6010B	211317
600-146619-4	SJRP-SB06-10-11-04112017	Total/NA	Solid	6010B	211317
600-146619-5	SJRP-SB06-13-14-04112017	Total/NA	Solid	6010B	211317
600-146619-6	SJRP-SB06-18-19-04112017	Total/NA	Solid	6010B	211317
600-146619-7	SJRP-SB06-25-26-04112017	Total/NA	Solid	6010B	211317
600-146619-8	SJRP-SB05-10-11-04122017	Total/NA	Solid	6010B	211317

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Metals (Continued)

Analysis Batch: 211424 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-9	SJRP-SB05-15-16-01122017	Total/NA	Solid	6010B	211317
600-146619-10	SJRP-SB05-29-30-04122017	Total/NA	Solid	6010B	211317
MB 600-211317/1-A	Method Blank	Total/NA	Solid	6010B	211317
LCSSRM 600-211317/2-A	Lab Control Sample	Total/NA	Solid	6010B	211317
600-146619-10 MS	SJRP-SB05-29-30-04122017	Total/NA	Solid	6010B	211317
600-146619-10 DU	SJRP-SB05-29-30-04122017	Total/NA	Solid	6010B	211317

Analysis Batch: 211523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-10	SJRP-SB05-29-30-04122017	Total/NA	Solid	6010B	211317
MB 600-211317/1-A	Method Blank	Total/NA	Solid	6010B	211317
LCSSRM 600-211317/2-A	Lab Control Sample	Total/NA	Solid	6010B	211317
600-146619-10 MS	SJRP-SB05-29-30-04122017	Total/NA	Solid	6010B	211317
600-146619-10 DU	SJRP-SB05-29-30-04122017	Total/NA	Solid	6010B	211317

Analysis Batch: 211619

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-1	SJRP-MW15-9-10-04122017	Total/NA	Solid	6010B	211317
600-146619-2	SJRP-MW15-14-15-04122017	Total/NA	Solid	6010B	211317
600-146619-3	SJRP-MW15-26-27-04122017	Total/NA	Solid	6010B	211317
600-146619-4	SJRP-SB06-10-11-04112017	Total/NA	Solid	6010B	211317
600-146619-5	SJRP-SB06-13-14-04112017	Total/NA	Solid	6010B	211317
600-146619-6	SJRP-SB06-18-19-04112017	Total/NA	Solid	6010B	211317
600-146619-7	SJRP-SB06-25-26-04112017	Total/NA	Solid	6010B	211317
600-146619-8	SJRP-SB05-10-11-04122017	Total/NA	Solid	6010B	211317
600-146619-9	SJRP-SB05-15-16-01122017	Total/NA	Solid	6010B	211317
MB 600-211317/1-A	Method Blank	Total/NA	Solid	6010B	211317
LCSSRM 600-211317/2-A	Lab Control Sample	Total/NA	Solid	6010B	211317
600-146619-10 MS	SJRP-SB05-29-30-04122017	Total/NA	Solid	6010B	211317
600-146619-10 DU	SJRP-SB05-29-30-04122017	Total/NA	Solid	6010B	211317

Prep Batch: 211726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-9	SJRP-SB05-15-16-01122017	Total/NA	Solid	3050B	
MB 600-211726/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-211726/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 211796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-9	SJRP-SB05-15-16-01122017	Total/NA	Solid	6010B	211726
MB 600-211726/1-A	Method Blank	Total/NA	Solid	6010B	211726
LCSSRM 600-211726/2-A	Lab Control Sample	Total/NA	Solid	6010B	211726

General Chemistry

Analysis Batch: 210741

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-1	SJRP-MW15-9-10-04122017	Total/NA	Solid	2540B	
600-146619-2	SJRP-MW15-14-15-04122017	Total/NA	Solid	2540B	
600-146619-3	SJRP-MW15-26-27-04122017	Total/NA	Solid	2540B	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

General Chemistry (Continued)

Analysis Batch: 210741 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146619-4	SJRP-SB06-10-11-04112017	Total/NA	Solid	2540B	
600-146619-5	SJRP-SB06-13-14-04112017	Total/NA	Solid	2540B	
600-146619-6	SJRP-SB06-18-19-04112017	Total/NA	Solid	2540B	
600-146619-7	SJRP-SB06-25-26-04112017	Total/NA	Solid	2540B	
600-146619-8	SJRP-SB05-10-11-04122017	Total/NA	Solid	2540B	
600-146619-9	SJRP-SB05-15-16-01122017	Total/NA	Solid	2540B	
600-146619-10	SJRP-SB05-29-30-04122017	Total/NA	Solid	2540B	

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Client Sample ID: SJRP-MW15-9-10-04122017 — **Lab Sample ID: 600-146619-1**
Date Collected: 04/12/17 09:55 — **Matrix: Solid**
Date Received: 04/13/17 09:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.164 g	5 mL	210896	04/13/17 12:14	KLV	TAL HOU
Total/NA	Analysis	8260B		10	100 uL	5 mL	210997	04/18/17 20:11	KLV	TAL HOU
Total/NA	Analysis	2540B		1			210741	04/13/17 16:35	B1K	TAL HOU

Client Sample ID: SJRP-MW15-9-10-04122017 — **Lab Sample ID: 600-146619-1**
Date Collected: 04/12/17 09:55 — **Matrix: Solid**
Date Received: 04/13/17 09:51 — **Percent Solids: 78.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.14 g	5.0 mL	423251	04/19/17 09:25	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	424225	04/23/17 17:44	FKG	TAL NSH
Total/NA	Prep	3550C			25.36 g	1.00 mL	423331	04/19/17 10:44	MNM	TAL NSH
Total/NA	Analysis	8015C		1			423565	04/20/17 14:20	A1B	TAL NSH
Total/NA	Prep	3550C			25.36 g	1.00 mL	423331	04/19/17 10:44	MNM	TAL NSH
Total/NA	Analysis	8015C		10			423565	04/21/17 03:47	A1B	TAL NSH
Total/NA	Prep	3050B			1.10 g	50 mL	211317	04/21/17 14:35	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211424	04/24/17 15:53	DCL	TAL HOU
Total/NA	Prep	3050B			1.10 g	50 mL	211317	04/21/17 14:35	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211619	04/26/17 15:30	DCL	TAL HOU
Total/NA	Prep	7471A			.66 g	50 mL	210782	04/14/17 10:53	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210908	04/17/17 12:17	DDE	TAL HOU

Client Sample ID: SJRP-MW15-14-15-04122017 — **Lab Sample ID: 600-146619-2**
Date Collected: 04/12/17 10:05 — **Matrix: Solid**
Date Received: 04/13/17 09:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.993 g	5 mL	210896	04/13/17 12:14	KLV	TAL HOU
Total/NA	Analysis	8260B		10	100 uL	5 mL	210997	04/18/17 20:40	KLV	TAL HOU
Total/NA	Analysis	2540B		1			210741	04/13/17 16:35	B1K	TAL HOU

Client Sample ID: SJRP-MW15-14-15-04122017 — **Lab Sample ID: 600-146619-2**
Date Collected: 04/12/17 10:05 — **Matrix: Solid**
Date Received: 04/13/17 09:51 — **Percent Solids: 83.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.52 g	5.0 mL	423251	04/19/17 09:25	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	424225	04/23/17 18:14	FKG	TAL NSH
Total/NA	Prep	3550C			25.48 g	1.00 mL	423331	04/19/17 10:44	MNM	TAL NSH
Total/NA	Analysis	8015C		1			423565	04/20/17 15:09	A1B	TAL NSH
Total/NA	Prep	3050B			1.09 g	50 mL	211317	04/21/17 14:35	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211424	04/24/17 15:55	DCL	TAL HOU
Total/NA	Prep	3050B			1.09 g	50 mL	211317	04/21/17 14:35	JAH	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Client Sample ID: SJRP-MW15-14-15-04122017 — Lab Sample ID: 600-146619-2

Date Collected: 04/12/17 10:05 — **Matrix: Solid**
Date Received: 04/13/17 09:51 — **Percent Solids: 83.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		1			211619	04/26/17 15:32	DCL	TAL HOU
Total/NA	Prep	7471A			.65 g	50 mL	210782	04/14/17 10:53	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210908	04/17/17 12:19	DDE	TAL HOU

Client Sample ID: SJRP-MW15-26-27-04122017 — Lab Sample ID: 600-146619-3

Date Collected: 04/12/17 10:20 — **Matrix: Solid**
Date Received: 04/13/17 09:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.906 g	5 mL	210896	04/13/17 12:14	KLV	TAL HOU
Total/NA	Analysis	8260B		1	100 uL	5 mL	210997	04/18/17 21:08	KLV	TAL HOU
Total/NA	Prep	5035	DL		5.906 g	5 mL	210896	04/13/17 12:14	KLV	TAL HOU
Total/NA	Analysis	8260B	DL	5	100 uL	5 mL	211078	04/19/17 16:09	KLV	TAL HOU
Total/NA	Analysis	2540B		1			210741	04/13/17 16:35	B1K	TAL HOU

Client Sample ID: SJRP-MW15-26-27-04122017 — Lab Sample ID: 600-146619-3

Date Collected: 04/12/17 10:20 — **Matrix: Solid**
Date Received: 04/13/17 09:51 — **Percent Solids: 83.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.88 g	5.0 mL	423251	04/19/17 09:25	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	424225	04/23/17 13:16	FKG	TAL NSH
Total/NA	Prep	3550C			25.16 g	1.00 mL	423331	04/19/17 10:44	MNM	TAL NSH
Total/NA	Analysis	8015C		1			423565	04/20/17 15:26	A1B	TAL NSH
Total/NA	Prep	3050B			1.03 g	50 mL	211317	04/21/17 14:35	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211424	04/24/17 15:57	DCL	TAL HOU
Total/NA	Prep	3050B			1.03 g	50 mL	211317	04/21/17 14:35	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211619	04/26/17 15:34	DCL	TAL HOU
Total/NA	Prep	7471A			.61 g	50 mL	210782	04/14/17 10:53	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210908	04/17/17 12:20	DDE	TAL HOU

Client Sample ID: SJRP-SB06-10-11-04112017 — Lab Sample ID: 600-146619-4

Date Collected: 04/11/17 15:25 — **Matrix: Solid**
Date Received: 04/13/17 09:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			210741	04/13/17 16:35	B1K	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Client Sample ID: SJRP-SB06-10-11-04112017

Lab Sample ID: 600-146619-4

Date Collected: 04/11/17 15:25
Matrix: Solid
Date Received: 04/13/17 09:51
Percent Solids: 85.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.079 g	5 mL	210811	04/13/17 12:14	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210761	04/14/17 16:35	WS1	TAL HOU
Total/NA	Prep	5030B			5.66 g	5.0 mL	423251	04/19/17 09:25	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	424225	04/23/17 13:46	FKG	TAL NSH
Total/NA	Prep	3550C			25.98 g	1.00 mL	423331	04/19/17 10:44	MNM	TAL NSH
Total/NA	Analysis	8015C		1			423565	04/20/17 15:42	A1B	TAL NSH
Total/NA	Prep	3050B			1.19 g	50 mL	211317	04/21/17 14:35	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211424	04/24/17 15:59	DCL	TAL HOU
Total/NA	Prep	3050B			1.19 g	50 mL	211317	04/21/17 14:35	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211619	04/26/17 15:36	DCL	TAL HOU
Total/NA	Prep	7471A			.62 g	50 mL	210782	04/14/17 10:53	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210908	04/17/17 12:01	DDE	TAL HOU

Client Sample ID: SJRP-SB06-13-14-04112017

Lab Sample ID: 600-146619-5

Date Collected: 04/11/17 15:35
Matrix: Solid
Date Received: 04/13/17 09:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			210741	04/13/17 16:35	B1K	TAL HOU

Client Sample ID: SJRP-SB06-13-14-04112017

Lab Sample ID: 600-146619-5

Date Collected: 04/11/17 15:35
Matrix: Solid
Date Received: 04/13/17 09:51
Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.265 g	5 mL	210811	04/13/17 12:14	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210761	04/14/17 17:00	WS1	TAL HOU
Total/NA	Prep	5030B			5.14 g	5.0 mL	423251	04/19/17 09:25	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	424225	04/23/17 14:16	FKG	TAL NSH
Total/NA	Prep	3550C			25.10 g	1.00 mL	423331	04/19/17 10:44	MNM	TAL NSH
Total/NA	Analysis	8015C		1			423565	04/20/17 15:59	A1B	TAL NSH
Total/NA	Prep	3050B			1.00 g	50 mL	211317	04/21/17 14:35	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211424	04/24/17 16:01	DCL	TAL HOU
Total/NA	Prep	3050B			1.00 g	50 mL	211317	04/21/17 14:35	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211619	04/26/17 15:44	DCL	TAL HOU
Total/NA	Prep	7471A			.62 g	50 mL	210782	04/14/17 10:53	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210908	04/17/17 12:11	DDE	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Client Sample ID: SJRP-SB06-18-19-04112017 — **Lab Sample ID: 600-146619-6**
Date Collected: 04/11/17 15:40 — **Matrix: Solid**
Date Received: 04/13/17 09:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.016 g	5 mL	210896	04/13/17 12:14	KLV	TAL HOU
Total/NA	Analysis	8260B		1	100 uL	5 mL	210997	04/18/17 21:36	KLV	TAL HOU
Total/NA	Prep	5035	DL		6.016 g	5 mL	210896	04/13/17 12:14	KLV	TAL HOU
Total/NA	Analysis	8260B	DL	5	100 uL	5 mL	211078	04/19/17 16:38	KLV	TAL HOU
Total/NA	Analysis	2540B		1			210741	04/13/17 16:35	B1K	TAL HOU

Client Sample ID: SJRP-SB06-18-19-04112017 — **Lab Sample ID: 600-146619-6**
Date Collected: 04/11/17 15:40 — **Matrix: Solid**
Date Received: 04/13/17 09:51 — **Percent Solids: 86.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.85 g	5.0 mL	423251	04/19/17 09:25	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	424225	04/23/17 14:45	FKG	TAL NSH
Total/NA	Prep	3550C			25.44 g	1.00 mL	423331	04/19/17 10:44	MNM	TAL NSH
Total/NA	Analysis	8015C		1			423565	04/20/17 16:16	A1B	TAL NSH
Total/NA	Prep	3050B			1.11 g	50 mL	211317	04/21/17 14:35	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211424	04/24/17 16:03	DCL	TAL HOU
Total/NA	Prep	3050B			1.11 g	50 mL	211317	04/21/17 14:35	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211619	04/26/17 15:46	DCL	TAL HOU
Total/NA	Prep	7471A			.61 g	50 mL	210782	04/14/17 10:53	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210908	04/17/17 12:13	DDE	TAL HOU

Client Sample ID: SJRP-SB06-25-26-04112017 — **Lab Sample ID: 600-146619-7**
Date Collected: 04/11/17 15:50 — **Matrix: Solid**
Date Received: 04/13/17 09:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			210741	04/13/17 16:35	B1K	TAL HOU

Client Sample ID: SJRP-SB06-25-26-04112017 — **Lab Sample ID: 600-146619-7**
Date Collected: 04/11/17 15:50 — **Matrix: Solid**
Date Received: 04/13/17 09:51 — **Percent Solids: 88.7**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.482 g	5 mL	210811	04/13/17 12:14	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210761	04/14/17 20:16	WS1	TAL HOU
Total/NA	Prep	5030B			5.20 g	5.0 mL	423251	04/19/17 09:25	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	424225	04/23/17 15:15	FKG	TAL NSH
Total/NA	Prep	3550C			25.03 g	1.00 mL	423331	04/19/17 10:44	MNM	TAL NSH
Total/NA	Analysis	8015C		1			423565	04/20/17 16:32	A1B	TAL NSH
Total/NA	Prep	3050B			1.09 g	50 mL	211317	04/21/17 14:35	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211424	04/24/17 16:05	DCL	TAL HOU
Total/NA	Prep	3050B			1.09 g	50 mL	211317	04/21/17 14:35	JAH	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Client Sample ID: SJRP-SB06-25-26-04112017 — Lab Sample ID: 600-146619-7

Date Collected: 04/11/17 15:50 — **Matrix: Solid**
Date Received: 04/13/17 09:51 — **Percent Solids: 88.7**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		1			211619	04/26/17 15:48	DCL	TAL HOU
Total/NA	Prep	7471A			.61 g	50 mL	210782	04/14/17 10:53	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210908	04/17/17 12:15	DDE	TAL HOU

Client Sample ID: SJRP-SB05-10-11-04122017 — Lab Sample ID: 600-146619-8

Date Collected: 04/12/17 08:05 — **Matrix: Solid**
Date Received: 04/13/17 09:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.849 g	5 mL	210896	04/13/17 12:14	KLV	TAL HOU
Total/NA	Analysis	8260B		20	100 uL	5 mL	210997	04/18/17 22:05	KLV	TAL HOU
Total/NA	Analysis	2540B		1			210741	04/13/17 16:35	B1K	TAL HOU

Client Sample ID: SJRP-SB05-10-11-04122017 — Lab Sample ID: 600-146619-8

Date Collected: 04/12/17 08:05 — **Matrix: Solid**
Date Received: 04/13/17 09:51 — **Percent Solids: 79.7**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.03 g	5.0 mL	423251	04/19/17 09:25	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	424225	04/23/17 16:45	FKG	TAL NSH
Total/NA	Prep	3550C			25.16 g	1.00 mL	423331	04/19/17 10:44	MNM	TAL NSH
Total/NA	Analysis	8015C		1			423565	04/20/17 16:49	A1B	TAL NSH
Total/NA	Prep	3550C			25.16 g	1.00 mL	423331	04/19/17 10:44	MNM	TAL NSH
Total/NA	Analysis	8015C		5			423937	04/21/17 11:08	MDW	TAL NSH
Total/NA	Prep	3050B			1.12 g	50 mL	211317	04/21/17 14:35	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211424	04/24/17 16:07	DCL	TAL HOU
Total/NA	Prep	3050B			1.12 g	50 mL	211317	04/21/17 14:35	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211619	04/26/17 15:50	DCL	TAL HOU
Total/NA	Prep	7471A			.63 g	50 mL	210782	04/14/17 10:53	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210908	04/17/17 12:22	DDE	TAL HOU

Client Sample ID: SJRP-SB05-15-16-01122017 — Lab Sample ID: 600-146619-9

Date Collected: 04/12/17 08:10 — **Matrix: Solid**
Date Received: 04/13/17 09:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.867 g	5 mL	210896	04/13/17 12:14	KLV	TAL HOU
Total/NA	Analysis	8260B		1	100 uL	5 mL	210997	04/18/17 22:33	KLV	TAL HOU
Total/NA	Prep	5035	DL		4.867 g	5 mL	210896	04/13/17 12:14	KLV	TAL HOU
Total/NA	Analysis	8260B	DL	20	100 uL	5 mL	211078	04/19/17 17:06	KLV	TAL HOU
Total/NA	Analysis	2540B		1			210741	04/13/17 16:35	B1K	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Client Sample ID: SJRP-SB05-15-16-01122017

Lab Sample ID: 600-146619-9

Date Collected: 04/12/17 08:10
Matrix: Solid
Date Received: 04/13/17 09:51
Percent Solids: 82.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.56 g	5.0 mL	423251	04/19/17 09:25	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	424225	04/23/17 17:15	FKG	TAL NSH
Total/NA	Prep	3550C			25.98 g	1.00 mL	423331	04/19/17 10:44	MNM	TAL NSH
Total/NA	Analysis	8015C		1			423565	04/20/17 17:05	A1B	TAL NSH
Total/NA	Prep	3050B			1.13 g	50 mL	211726	04/27/17 16:59	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211796	04/28/17 16:18	DCL	TAL HOU
Total/NA	Prep	3050B			1.06 g	50 mL	211317	04/21/17 14:35	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211424	04/24/17 16:09	DCL	TAL HOU
Total/NA	Prep	3050B			1.06 g	50 mL	211317	04/21/17 14:35	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211619	04/26/17 15:52	DCL	TAL HOU
Total/NA	Prep	7471A			.66 g	50 mL	210782	04/14/17 10:53	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210908	04/17/17 12:26	DDE	TAL HOU

Client Sample ID: SJRP-SB05-29-30-04122017

Lab Sample ID: 600-146619-10

Date Collected: 04/12/17 08:45
Matrix: Solid
Date Received: 04/13/17 09:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			210741	04/13/17 16:35	B1K	TAL HOU

Client Sample ID: SJRP-SB05-29-30-04122017

Lab Sample ID: 600-146619-10

Date Collected: 04/12/17 08:45
Matrix: Solid
Date Received: 04/13/17 09:51
Percent Solids: 84.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.959 g	5 mL	210811	04/13/17 12:14	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210829	04/15/17 18:01	WS1	TAL HOU
Total/NA	Prep	5030B			5.06 g	5.0 mL	423251	04/19/17 09:25	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	424225	04/23/17 15:45	FKG	TAL NSH
Total/NA	Prep	3550C			25.40 g	1.00 mL	423331	04/19/17 10:44	MNM	TAL NSH
Total/NA	Analysis	8015C		1			423565	04/20/17 17:22	A1B	TAL NSH
Total/NA	Prep	3050B			1.01 g	50 mL	211317	04/21/17 14:35	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211424	04/24/17 16:18	DCL	TAL HOU
Total/NA	Prep	3050B			1.01 g	50 mL	211317	04/21/17 14:35	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211523	04/25/17 13:12	DCL	TAL HOU
Total/NA	Prep	7471A			.61 g	50 mL	210782	04/14/17 10:53	DDE	TAL HOU
Total/NA	Analysis	7471A		1			210908	04/17/17 12:24	DDE	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Client Sample ID: SJRP-EB-05112017

Lab Sample ID: 600-146619-11

Date Collected: 04/11/17 16:15

Matrix: Water

Date Received: 04/13/17 09:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	210901	04/17/17 16:20	KLV	TAL HOU
Total/NA	Analysis	8015C		1	5 mL	5 mL	423531	04/20/17 16:37	A1B	TAL NSH
Total/NA	Prep	3510C			250 mL	1.0 mL	423188	04/18/17 20:29	DHC	TAL NSH
Total/NA	Analysis	8015C		1			423225	04/19/17 14:38	A1B	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	211063	04/19/17 09:24	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211106	04/19/17 17:47	DCL	TAL HOU
Total/NA	Prep	7470A			40 mL	40 mL	210757	04/14/17 07:56	DDE	TAL HOU
Total/NA	Analysis	7470A		1			210930	04/17/17 15:34	DDE	TAL HOU

Client Sample ID: SJRP-TB-04122017

Lab Sample ID: 600-146619-12

Date Collected: 04/12/17 07:00

Matrix: Water

Date Received: 04/13/17 09:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	210901	04/17/17 16:49	KLV	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146619-1

Laboratory: TestAmerica Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	16-046-0	08-04-17
Louisiana	NELAP	6	01967	06-30-17
Oklahoma	State Program	6	2015-050	08-31-17
Texas	NELAP	6	T104704223-17-21	10-31-17
USDA	Federal		P330-14-00192	06-06-17

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	A2LA		NA: NELAP & A2LA	12-31-17
A2LA	ISO/IEC 17025		0453.07	12-31-17
Alaska (UST)	State Program	10	UST-087	09-01-17
Arizona	State Program	9	AZ0473	05-05-17
Arkansas DEQ	State Program	6	88-0737	04-25-18
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-17
Florida	NELAP	4	E87358	06-30-17
Georgia	State Program	4	N/A	12-31-17
Illinois	NELAP	5	200010	12-09-17
Iowa	State Program	7	131	04-01-18
Kansas	NELAP	7	E-10229	10-31-17
Kentucky (UST)	State Program	4	19	06-30-17
Kentucky (WW)	State Program	4	90038	12-31-17
Louisiana	NELAP	6	30613	06-30-17
Maine	State Program	1	TN00032	11-03-17
Maryland	State Program	3	316	03-31-18
Massachusetts	State Program	1	M-TN032	06-30-17
Minnesota	NELAP	5	047-999-345	12-31-17
Mississippi	State Program	4	N/A	06-30-17
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-17
New Hampshire	NELAP	1	2963	10-09-17
New Jersey	NELAP	2	TN965	06-30-17
New York	NELAP	2	11342	03-31-18
North Carolina (WW/SW)	State Program	4	387	12-31-17
North Dakota	State Program	8	R-146	06-30-17
Ohio VAP	State Program	5	CL0033	07-10-17
Oklahoma	State Program	6	9412	08-31-17
Oregon	NELAP	10	TN200001	04-27-17 *
Pennsylvania	NELAP	3	68-00585	06-30-17
Rhode Island	State Program	1	LAO00268	12-30-17
South Carolina	State Program	4	84009 (001)	02-18-17 *
South Carolina (Do Not Use - DW)	State Program	4	84009 (002)	12-16-17
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-17
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-17
Virginia	NELAP	3	460152	06-14-17
Washington	State Program	10	C789	07-19-17

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc. TestAmerica Job ID: 600-146619-1
Project/Site: San Juan Site Characterization

Laboratory: TestAmerica Nashville (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
West Virginia DEP	State Program	3	219	02-28-18
Wisconsin	State Program	5	998020430	08-31-17
Wyoming (UST)	A2LA	8	453.07	12-31-17

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

600-146619 Chain of Custody

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Katherine Mourtados	Lab PM: Upton, Cathy L	COC No: 600-52002-15345.10
Client Contact: Jeffrey Minchak	Phone: 9043866573	E-Mail: cathy.upton@testamericainc.com	Page: Page 10 of 10
Company: CH2M Hill, Inc.			Job #:
Address: 3721 Rutledge Rd NE Suite B-1	Due Date Requested:	Analysis Requested	Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
City: Albuquerque	TAT Requested (days):		
State, Zip: NM, 87109			
Phone: 281-721-8546(Tel)	PO #: Purchase Order Requested		
Email: Jeffrey.Minchak@ch2m.com	WO #: WD225383		
Project Name: Kinder Morgan Bloomfield, NM San Juan	Project #: 60005961-Analysis group BTEX/GRO/DRO/Metals		
Site: San Juan Site Characterization	SSOW#:		Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO - Diesel and Oil Range Organics	8015C_GRO - GRO Range (C6-C10)	6010B, 7471A - NM/WQCC List Metals	8260B - 5035 BTEX	Moisture	Waters	6010B, 7470A - NM/WQCC List Metals	8260B_LL - BTEX Only	8015C_GRO - GRO Range (C6-C10)	8015C_DRO - Diesel and Oil Range Organics	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N		D	A	A	N		
STRP-SB06-10-11-04112017	4/11/17	1525	G	Solid	N	N	X	X	X	X							7	82 bottles
STRP-SB06-13-14-04112017	4/11/17	1535	G	Solid	N	N	X	X	X	X							7	
STRP-SB06-18-19-04112017	4/11/17	1540	G	Solid	N	N	X	X	X								7	COC in
STRP-SB06-25-26-04112017	4/11/17	1550	G	Solid	N	N											7	cooler 1
STRP-SB05-10-11-04122017	4/12/17	805	G	Solid	N	N											7	
STRP-SB05-15-16-04122017	4/12/17	810	G	Solid	N	N											7	2 coolers
STRP-SB05-29-30-04122017	4/12/17	845	G	Solid	N	N											7	
			G	Solid														
			G	Solid														
STRP-FB-04112017	4/11/17	1615	G	~~Water~~ Solid	N	N											3	
STRP-TB-04122017	4/12/17	0700	G	Water	N	N											9	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☑ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	4/12/17 1200		Shirley Justus	4/13/17 0951	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Cooler Temperature(s) °C and Other Remarks:

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Katherine Mozaka	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-52002-15345.10
Client Contact: Jeffrey Minchak	Phone: 404-386-6573	E-Mail: cathy.upton@testamericainc.com		Page: Page 10 of 10
Company: CH2M Hill, Inc.				Job #:
Address: 3721 Rutledge Rd. NE Suite B-1	Due Date Requested:			
City: Albuquerque	TAT Requested (days):			
State, Zip: NM, 87109				
Phone: 281-721-8546(Tel)	PO #: Purchase Order Requested			
Email: Jeffrey.Minchak@ch2m.com	WO #: WD225383			
Project Name: Kinder Morgan Bloomfield, NM San Juan	Project #: 60005961-Analysis group BTEX/GRO/DRO/Metals			
Site: San Juan Site Characterization	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO - Diesel and Oil Range Organics	8015C_GRO - GRO Range (C6-C10)	6010B, 7471A - NMWQCC List Metals	8260B - 5035 BTEX	Moisture			Waters	6010B, 7470A - NMWQCC List Metals	8260B_LL - BTEX Only	8015C_GRO - GRO Range (C6-C10)	8015C_DRO - Diesel and Oil Range Organics		Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	N	N	N	N				D	A	A	N		X	
SJRP-MW15-9-10-04122017	4/12/17	955	G	Solid	N	N	/	/	/	/	/									7	
SJRP-MW15-14-15-04122017	4/12/17	1005	G	Solid	N	N	/	/	/	/	/									7	
SJRP-MW15-26-27-04122017	4/12/17	1020	G	Solid	N	N	/	/	/	/	/									7	
			G	Solid																	
			G	Solid																	
			G	Solid																	
			G	Solid																	
			G	Solid																	
			G	Solid																	
			G	Solid																	
			G	Solid																	
			G	Water																	

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☑ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	4/12/2017/1200		Sherry Justus	4/13/17 0954	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston

Loc: 600
146619

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Receipt Checklist

Date/Time Received: 17APR13 9:51

JOB NUMBER: _____

CLIENT: CH2M

UNPACKED BY: SJ

CARRIER/DRIVER: FedEx

Custody Seal Present: ☒ YES ☐ NO

Number of Coolers Received: 2

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Them CF	Corrected Temp (°C)
P/W	Y / N	Y / N	3.0	549	-0.3	2.7
B/W	Y / N	Y / N	2.9	549	-0.3	2.6
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N	SJ 4/13/17			
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☒ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☒ YES ☐ NO

pH paper Lot # HC697954

VOA headspace acceptable (5-6mm): ☒ YES ☐ NO ☐ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X	

COMMENTS:

FedEx
TRK# 0221 7246 6874 7853
XH LKSA

SJ 4/13/17

HS-SA-WI-013 Rev. 3; 07/01/2014

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TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-26483.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: cathy.upton@testamericainc.com	State of Origin: New Mexico	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):		Job #: 600-146619-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 4/25/2017			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: San Juan Site Characterization	Project #: 60005961			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_GRO/5030B_H Standard GRO Range (C6-C10)	8015C_DRO/3550C DRO/ORO	8015C_GRO/5030B GRO Range (C6-C10)	8015C_DRO/3510C_LVI DRO/ORO	Total Number of containers	Special Instructions/Note:
		Preservation Code:										
SJRP-MW15-9-10-04122017 (600-146619-1)	4/12/17	09:55 Mountain		Solid			X	X			2	
SJRP-MW15-14-15-04122017 (600-146619-2)	4/12/17	10:05 Mountain		Solid			X	X			2	
SJRP-MW15-26-27-04122017 (600-146619-3)	4/12/17	10:20 Mountain		Solid			X	X			2	
SJRP-SB06-10-11-04112017 (600-146619-4)	4/11/17	15:25 Mountain		Solid			X	X			2	
SJRP-SB06-13-14-04112017 (600-146619-5)	4/11/17	15:35 Mountain		Solid			X	X			2	
SJRP-SB06-18-19-04112017 (600-146619-6)	4/11/17	15:40 Mountain		Solid			X	X			2	
SJRP-SB06-25-26-04112017 (600-146619-7)	4/11/17	15:50 Mountain		Solid			X	X			2	
SJRP-SB05-10-11-04122017 (600-146619-8)	4/12/17	08:05 Mountain		Solid			X	X			2	
SJRP-SB05-15-16-01122017 (600-146619-9)	4/12/17	08:10 Mountain		Solid			X	X			2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:	
Relinquished by:	Date/Time: 4/17/17 1445	Company	Received by:	Date/Time: 4-18-17 0908	Company TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.2

Received by OCD: 11/13/2025 11:14:36 AM

12/7/2020 (Rev. 1)

Released to Imaging: 11/14/2025 9:30:04 AM

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TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Loc: 600
146619

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

12/7/2020 (Rev. 1)

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Upton, Cathy L	Ca	COC No: 600-26483.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: cathy.upton@testamericainc.com	State of Origin: New Mexico	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):		Job #: 600-146619-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 4/25/2017			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: San Juan Site Characterization	Project #: 60005961			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_GRO/5030B_H Standard GRO Range (C6-C10)	8015C_DRO/3550C DRO/ORO	8015C_GRO/5030B GRO Range (C6-C10)	8015C_DRO/3510C_LVI DRO/ORO	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
SJRP-SB05-29-30-04122017 (600-146619-10)	4/12/17	08:45 Mountain		Solid			X	X			2	
SJRP-EB-05112017 (600-146619-11)	4/11/17	16:15 Mountain		Water					X	X	5	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. I

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:			
Relinquished by:	Date/Time: 4/10/17 1415	Company	Received by:	Date/Time: 4-18-17 0908	Company TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.2

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Received by OCD: 11/13/2025 11:14:36 AM

Released to Imaging: 11/14/2025 9:30:04 AM

Loc: 600
146619

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Cooler Received/Opened On 4/18/2017 @ 0908

Time Samples Removed From Cooler 1230 Time Samples Placed In Storage_____ (2 Hour Window)

1. Tracking #_____7280_____(last 4 digits, FedEx) Courier: _FedEx_

IR Gun ID_160406069_ pH Strip Lot_____ Chlorine Strip Lot_____

2. Temperature of rep. sample or temp blank when opened: 3.2 Degrees Celsius

3. If Item #2 temperatures is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) _____

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (initial) _____

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) DA

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) DA

I certify that I attached a label with the unique LIMS number to each container (initial) DA

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 12/15/15

12/7/2020 (Rev. 1)

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc. Job Number: 600-146619-1

Login Number: 146619 **List Source: TestAmerica Houston**
List Number: 1
Creator: Justus, Sherry E

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.7, 2.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-146619-1

Login Number: 146619
List Number: 2
Creator: Armstrong, Daniel

List Source: TestAmerica Nashville
List Creation: 04/18/17 06:25 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.2C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-146619-1

Login Number: 146619
List Number: 3
Creator: Armstrong, Daniel

List Source: TestAmerica Nashville
List Creation: 04/18/17 06:28 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	18.5C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-146619-1

Login Number: 146619
List Number: 4
Creator: Armstrong, Daniel

List Source: TestAmerica Nashville
List Creation: 04/18/17 06:36 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.2C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-146714-1
Client Project/Site: San Juan Characterization
Revision: 1

For:
CH2M Hill Constructors, Inc.
14701 St. Mary's Lane
Suite 300
Houston, Texas 77079-2923

Attn: Mr. John Ynfante

Steve A Stepanski

Authorized for release by:
12/7/2020 4:39:57 PM
Steve Stepanski, Project Mgmt. Assistant
(713)690-4444
steve.stepanski@Eurofinset.com

Designee for

Cathy Upton, Project Manager I
(713)690-4444
cathy.upton@testamericainc.com

LINKS
Review your project results through TotalAccess
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

Job ID: 600-146714-1

Job ID: 600-146714-1

Laboratory: TestAmerica Houston

Narrative

CASE NARRATIVE

Client: CH2M Hill Constructors, Inc.

Project: San Juan Characterization

Report Number: 600-146714-1

COMMENTS

This report was revised to a Level 2 deliverable per client's request.

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

Note: All samples that require thermal preservation are considered acceptable if the arrival temperature is within 2°C of the required temperature or method specified range. For samples with a specified temperature of 4°C, samples with a temperature ranging from just above freezing temperature of water to 6°C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

The samples were received on 04/14/2017; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.9 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)-Soil

Samples SJRP-MW16-10-11-04122017 (600-146714-1), SJRP-MW16-14-15-04122017 (600-146714-2), SJRP-SB02-13-14-04122017 (600-146714-3) and SJRP-SB02-18-19-04122017 (600-146714-4) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were prepared on 04/14/2017 and analyzed on 04/15/2017 and 04/17/2017.

1,2-Dichloroethane-d4 (Surr) failed the surrogate recovery criteria high for SJRP-SB02-13-14-04122017 (600-146714-3) and SJRP-SB02-18-19-04122017 (600-146714-4). These samples did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

1,2-Dichloroethane-d4 (Surr) failed the surrogate recovery criteria high for SJRP-MW16-14-15-04122017 (600-146714-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GC-MS)-Water

Case Narrative

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

Job ID: 600-146714-1

Job ID: 600-146714-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

Samples SJRP-TB-04122017 (600-146714-5) and SJRP-EB-04122017 (600-146714-6) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/17/2017.

The following volatile sample was analyzed with significant headspace in the sample vial(s): SJRP-TB-04122017 (600-146714-5). Significant headspace is defined as a bubble greater than 6 mm in diameter.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GASOLINE RANGE ORGANICS (GRO)-Soil
Samples SJRP-MW16-10-11-04122017 (600-146714-1), SJRP-MW16-14-15-04122017 (600-146714-2), SJRP-SB02-13-14-04122017 (600-146714-3) and SJRP-SB02-18-19-04122017 (600-146714-4) were analyzed for gasoline range organics (GRO) in accordance with EPA SW-846 Method 8015C - GRO. The samples were analyzed on 04/20/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GASOLINE RANGE ORGANICS (GRO)-Water
Sample SJRP-EB-04122017 (600-146714-6) was analyzed for gasoline range organics (GRO) in accordance with 8015C GRO. The samples were analyzed on 04/20/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DIESEL RANGE ORGANICS (DRO)-Soil
Samples SJRP-MW16-10-11-04122017 (600-146714-1), SJRP-MW16-14-15-04122017 (600-146714-2), SJRP-SB02-13-14-04122017 (600-146714-3) and SJRP-SB02-18-19-04122017 (600-146714-4) were analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 04/19/2017 and analyzed on 04/20/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DIESEL RANGE ORGANICS (DRO)-Water
Sample SJRP-EB-04122017 (600-146714-6) was analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 04/19/2017 and analyzed on 04/20/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)-Soil
Samples SJRP-MW16-10-11-04122017 (600-146714-1), SJRP-MW16-14-15-04122017 (600-146714-2), SJRP-SB02-13-14-04122017 (600-146714-3) and SJRP-SB02-18-19-04122017 (600-146714-4) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 04/26/2017 and 04/28/2017 and analyzed on 04/27/2017 and 04/28/2017.

Aluminum, Barium, Chromium, Manganese and Nickel were detected in method blank MB 600-211612/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Sodium was detected in method blank MB 600-211759/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

Due to the high concentration of target analytes, sample SJRP-MW16-10-11-04122017MS (600-146714-1) in batch 600-211796 could not be evaluated for accuracy. The associated laboratory control sample (LCS) met acceptance criteria.

Refer to the QC report for details.

The post digestion spike recovery for Calcium (69%) associated with batch 211796 was outside of control limits.

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-146714-1
Project/Site: San Juan Characterization

Job ID: 600-146714-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

The serial dilution performed for the following sample associated with batch 211796 was outside control limits for Iron (19%) and Nickel (13%): (600-146714-A-1-C SD).

The continuing calibration blank (CCB 600-211796/175) contained Molybdenum above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

Samples SJRP-MW16-10-11-04122017 (600-146714-1)[5X] and SJRP-MW16-14-15-04122017 (600-146714-2)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)-Water

Sample SJRP-EB-04122017 (600-146714-6) was analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared and analyzed on 04/19/2017.

Sodium was detected in method blank MB 600-211063/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY-Soil

Samples SJRP-MW16-10-11-04122017 (600-146714-1), SJRP-MW16-14-15-04122017 (600-146714-2), SJRP-SB02-13-14-04122017 (600-146714-3) and SJRP-SB02-18-19-04122017 (600-146714-4) were analyzed for total mercury in accordance with EPA SW-846 Method 7471A. The samples were prepared on 04/18/2017 and 04/19/2017 and analyzed on 04/19/2017 and 04/20/2017.

Mercury exceeded the RPD limit for the duplicate of sample SJRP-SB02-18-19-04122017DU (600-146714-4).

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY-Water

Sample SJRP-EB-04122017 (600-146714-6) was analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 04/17/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PERCENT SOLIDS

Samples SJRP-MW16-10-11-04122017 (600-146714-1), SJRP-MW16-14-15-04122017 (600-146714-2), SJRP-SB02-13-14-04122017 (600-146714-3) and SJRP-SB02-18-19-04122017 (600-146714-4) were analyzed for percent solids in accordance with EPA SW846 Method 3550C. The samples were analyzed on 04/17/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL NSH
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL NSH
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU

Protocol References:

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-146714-1	SJRP-MW16-10-11-04122017	Solid	04/12/17 14:18	04/14/17 09:02
600-146714-2	SJRP-MW16-14-15-04122017	Solid	04/12/17 14:30	04/14/17 09:02
600-146714-3	SJRP-SB02-13-14-04122017	Solid	04/12/17 16:25	04/14/17 09:02
600-146714-4	SJRP-SB02-18-19-04122017	Solid	04/12/17 16:35	04/14/17 09:02
600-146714-5	SJRP-TB-04122017	Water	04/12/17 14:00	04/14/17 09:02
600-146714-6	SJRP-EB-04122017	Water	04/12/17 18:45	04/14/17 09:02

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Client Sample ID: SJRP-MW16-10-11-04122017
Date Collected: 04/12/17 14:18
Date Received: 04/14/17 09:02

Lab Sample ID: 600-146714-1
Matrix: Solid
Percent Solids: 75.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.34		0.219	0.0276	mg/Kg		04/14/17 10:00	04/17/17 18:34	1
Ethylbenzene	0.311		0.219	0.0447	mg/Kg		04/14/17 10:00	04/17/17 18:34	1
Toluene	2.51		0.219	0.0605	mg/Kg		04/14/17 10:00	04/17/17 18:34	1
Xylenes, Total	6.69		0.219	0.0495	mg/Kg		04/14/17 10:00	04/17/17 18:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*61 - 130*	*04/14/17 10:00*	*04/17/17 18:34*	*1*
Dibromofluoromethane	*103*		*68 - 140*	*04/14/17 10:00*	*04/17/17 18:34*	*1*
Toluene-d8 (Surr)	*94*		*50 - 130*	*04/14/17 10:00*	*04/17/17 18:34*	*1*
4-Bromofluorobenzene	*71*		*57 - 140*	*04/14/17 10:00*	*04/17/17 18:34*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.62	U	7.23	3.62	mg/Kg	☼	04/19/17 09:25	04/20/17 20:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*63*		*50 - 150*	*04/19/17 09:25*	*04/20/17 20:36*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	19.6		6.57	3.29	mg/Kg	☼	04/19/17 10:44	04/20/17 17:38	1
ORO C24-C40	6.64		6.57	3.29	mg/Kg	☼	04/19/17 10:44	04/20/17 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*79*		*50 - 150*	*04/19/17 10:44*	*04/20/17 17:38*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	14900	B	31.8	0.382	mg/Kg	☼	04/26/17 13:50	04/27/17 13:59	1
Arsenic	6.14		1.27	0.277	mg/Kg	☼	04/26/17 13:50	04/27/17 13:59	1
Barium	68.6	B	1.27	0.0382	mg/Kg	☼	04/26/17 13:50	04/27/17 13:59	1
Boron	1.69	J	25.4	0.491	mg/Kg	☼	04/26/17 13:50	04/27/17 13:59	1
Cadmium	0.197	J	0.318	0.0326	mg/Kg	☼	04/26/17 13:50	04/27/17 13:59	1
Calcium	5610		127	1.10	mg/Kg	☼	04/26/17 13:50	04/27/17 13:59	1
Chromium	7.03	B	0.636	0.0644	mg/Kg	☼	04/26/17 13:50	04/27/17 13:59	1
Cobalt	9.48		0.636	0.0860	mg/Kg	☼	04/26/17 13:50	04/27/17 13:59	1
Iron	19200		25.4	3.22	mg/Kg	☼	04/26/17 13:50	04/27/17 13:59	1
Lead	14.3		0.636	0.134	mg/Kg	☼	04/26/17 13:50	04/27/17 13:59	1
Magnesium	3390		127	2.44	mg/Kg	☼	04/26/17 13:50	04/27/17 13:59	1
Manganese	135	B	1.91	0.0485	mg/Kg	☼	04/26/17 13:50	04/27/17 13:59	1
Molybdenum	1.17	^	0.655	0.178	mg/Kg	☼	04/28/17 09:38	04/28/17 18:02	1
Nickel	14.7	B	1.27	0.149	mg/Kg	☼	04/26/17 13:50	04/27/17 13:59	1
Potassium	1660		127	14.0	mg/Kg	☼	04/26/17 13:50	04/27/17 13:59	1
Selenium	0.833	J	2.54	0.330	mg/Kg	☼	04/26/17 13:50	04/27/17 13:59	1
Sodium	15600	B	636	5.64	mg/Kg	☼	04/26/17 13:50	04/27/17 17:41	5

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0240		0.0211	0.00444	mg/Kg	☼	04/18/17 06:26	04/19/17 09:25	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Client Sample ID: SJRP-MW16-10-11-04122017

Lab Sample ID: 600-146714-1
Date Collected: 04/12/17 14:18
Matrix: Solid
Date Received: 04/14/17 09:02
Percent Solids: 75.6

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	24.4		1.0	1.0	%			04/17/17 16:13	1
Percent Solids	75.6		1.0	1.0	%			04/17/17 16:13	1

Client Sample ID: SJRP-MW16-14-15-04122017

Lab Sample ID: 600-146714-2
Date Collected: 04/12/17 14:30
Matrix: Solid
Date Received: 04/14/17 09:02
Percent Solids: 88.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00308	J	0.00445	0.000560	mg/Kg	☼	04/14/17 10:00	04/15/17 16:41	1
Ethylbenzene	0.00584		0.00445	0.000907	mg/Kg	☼	04/14/17 10:00	04/15/17 16:41	1
Toluene	0.00123	U	0.00445	0.00123	mg/Kg	☼	04/14/17 10:00	04/15/17 16:41	1
Xylenes, Total	0.0849		0.00445	0.00101	mg/Kg	☼	04/14/17 10:00	04/15/17 16:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*135*	*X*	*61 - 130*	*04/14/17 10:00*	*04/15/17 16:41*	*1*
Dibromofluoromethane	*115*		*68 - 140*	*04/14/17 10:00*	*04/15/17 16:41*	*1*
Toluene-d8 (Surr)	*86*		*50 - 130*	*04/14/17 10:00*	*04/15/17 16:41*	*1*
4-Bromofluorobenzene	*94*		*57 - 140*	*04/14/17 10:00*	*04/15/17 16:41*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.05	U	6.10	3.05	mg/Kg	☼	04/19/17 09:25	04/20/17 21:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*69*		*50 - 150*	*04/19/17 09:25*	*04/20/17 21:06*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.73	U	5.47	2.73	mg/Kg	☼	04/19/17 10:44	04/20/17 17:54	1
ORO C24-C40	3.15	J	5.47	2.73	mg/Kg	☼	04/19/17 10:44	04/20/17 17:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*94*		*50 - 150*	*04/19/17 10:44*	*04/20/17 17:54*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7270	B	25.7	0.308	mg/Kg	☼	04/26/17 13:50	04/27/17 14:01	1
Arsenic	2.06		1.03	0.224	mg/Kg	☼	04/26/17 13:50	04/27/17 14:01	1
Barium	260	B	5.13	0.154	mg/Kg	☼	04/26/17 13:50	04/27/17 17:43	5
Boron	0.913	J	20.5	0.396	mg/Kg	☼	04/26/17 13:50	04/27/17 14:01	1
Cadmium	0.103	J	0.257	0.0263	mg/Kg	☼	04/26/17 13:50	04/27/17 14:01	1
Calcium	12700		103	0.887	mg/Kg	☼	04/26/17 13:50	04/27/17 14:01	1
Chromium	5.32	B	0.513	0.0519	mg/Kg	☼	04/26/17 13:50	04/27/17 14:01	1
Cobalt	14.3		0.513	0.0694	mg/Kg	☼	04/26/17 13:50	04/27/17 14:01	1
Iron	9840		20.5	2.60	mg/Kg	☼	04/26/17 13:50	04/27/17 14:01	1
Lead	7.01		0.513	0.108	mg/Kg	☼	04/26/17 13:50	04/27/17 14:01	1
Magnesium	2410		103	1.97	mg/Kg	☼	04/26/17 13:50	04/27/17 14:01	1
Manganese	473	B	1.54	0.0391	mg/Kg	☼	04/26/17 13:50	04/27/17 14:01	1
Molybdenum	2.04	B	0.559	0.152	mg/Kg	☼	04/28/17 09:38	04/28/17 16:41	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Client Sample ID: SJRP-MW16-14-15-04122017

Lab Sample ID: 600-146714-2
Date Collected: 04/12/17 14:30
Matrix: Solid
Date Received: 04/14/17 09:02
Percent Solids: 88.6

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	15.9	B	1.03	0.120	mg/Kg	☼	04/26/17 13:50	04/27/17 14:01	1
Potassium	602		103	11.3	mg/Kg	☼	04/26/17 13:50	04/27/17 14:01	1
Selenium	0.266	U	2.05	0.266	mg/Kg	☼	04/26/17 13:50	04/27/17 14:01	1
Sodium	5280		103	0.909	mg/Kg	☼	04/26/17 13:50	04/27/17 14:01	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00391	U	0.0186	0.00391	mg/Kg	☼	04/18/17 06:26	04/19/17 09:27	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	11.4		1.0	1.0	%			04/17/17 16:13	1
Percent Solids	88.6		1.0	1.0	%			04/17/17 16:13	1

Client Sample ID: SJRP-SB02-13-14-04122017

Lab Sample ID: 600-146714-3
Date Collected: 04/12/17 16:25
Matrix: Solid
Date Received: 04/14/17 09:02
Percent Solids: 81.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000652	U	0.00517	0.000652	mg/Kg	☼	04/14/17 10:00	04/15/17 17:10	1
Ethylbenzene	0.00106	U	0.00517	0.00106	mg/Kg	☼	04/14/17 10:00	04/15/17 17:10	1
Toluene	0.00143	U	0.00517	0.00143	mg/Kg	☼	04/14/17 10:00	04/15/17 17:10	1
Xylenes, Total	0.00117	U	0.00517	0.00117	mg/Kg	☼	04/14/17 10:00	04/15/17 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*137*	*X*	*61 - 130*	*04/14/17 10:00*	*04/15/17 17:10*	*1*
Dibromofluoromethane	*107*		*68 - 140*	*04/14/17 10:00*	*04/15/17 17:10*	*1*
Toluene-d8 (Surr)	*93*		*50 - 130*	*04/14/17 10:00*	*04/15/17 17:10*	*1*
4-Bromofluorobenzene	*106*		*57 - 140*	*04/14/17 10:00*	*04/15/17 17:10*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.49	U	6.99	3.49	mg/Kg	☼	04/19/17 09:25	04/20/17 21:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*63*		*50 - 150*	*04/19/17 09:25*	*04/20/17 21:36*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	4.10	J	6.08	3.04	mg/Kg	☼	04/19/17 10:44	04/20/17 18:11	1
ORO C24-C40	13.9		6.08	3.04	mg/Kg	☼	04/19/17 10:44	04/20/17 18:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*64*		*50 - 150*	*04/19/17 10:44*	*04/20/17 18:11*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	15800	B	30.0	0.360	mg/Kg	☼	04/26/17 13:50	04/27/17 14:03	1
Arsenic	4.16		1.20	0.262	mg/Kg	☼	04/26/17 13:50	04/27/17 14:03	1
Barium	27.7	B	1.20	0.0360	mg/Kg	☼	04/26/17 13:50	04/27/17 14:03	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Client Sample ID: SJRP-SB02-13-14-04122017

Lab Sample ID: 600-146714-3
Date Collected: 04/12/17 16:25
Matrix: Solid
Date Received: 04/14/17 09:02
Percent Solids: 81.6

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1.43	J	24.0	0.464	mg/Kg	☼	04/26/17 13:50	04/27/17 14:03	1
Cadmium	0.114	J	0.300	0.0308	mg/Kg	☼	04/26/17 13:50	04/27/17 14:03	1
Calcium	2340		120	1.04	mg/Kg	☼	04/26/17 13:50	04/27/17 14:03	1
Chromium	7.39	B	0.601	0.0608	mg/Kg	☼	04/26/17 13:50	04/27/17 14:03	1
Cobalt	13.5		0.601	0.0812	mg/Kg	☼	04/26/17 13:50	04/27/17 14:03	1
Iron	19700		24.0	3.04	mg/Kg	☼	04/26/17 13:50	04/27/17 14:03	1
Lead	13.8		0.601	0.126	mg/Kg	☼	04/26/17 13:50	04/27/17 14:03	1
Magnesium	3920		120	2.31	mg/Kg	☼	04/26/17 13:50	04/27/17 14:03	1
Manganese	105	B	1.80	0.0458	mg/Kg	☼	04/26/17 13:50	04/27/17 14:03	1
Molybdenum	1.55	B	0.595	0.162	mg/Kg	☼	04/28/17 09:38	04/28/17 16:43	1
Nickel	16.1	B	1.20	0.141	mg/Kg	☼	04/26/17 13:50	04/27/17 14:03	1
Potassium	1540		120	13.2	mg/Kg	☼	04/26/17 13:50	04/27/17 14:03	1
Selenium	0.311	U	2.40	0.311	mg/Kg	☼	04/26/17 13:50	04/27/17 14:03	1
Sodium	4560		120	1.06	mg/Kg	☼	04/26/17 13:50	04/27/17 14:03	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0234		0.0208	0.00439	mg/Kg	☼	04/18/17 06:26	04/19/17 09:29	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18.4		1.0	1.0	%			04/17/17 16:13	1
Percent Solids	81.6		1.0	1.0	%			04/17/17 16:13	1

Client Sample ID: SJRP-SB02-18-19-04122017

Lab Sample ID: 600-146714-4
Date Collected: 04/12/17 16:35
Matrix: Solid
Date Received: 04/14/17 09:02
Percent Solids: 85.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000970	J	0.00485	0.000611	mg/Kg	☼	04/14/17 10:00	04/15/17 17:39	1
Ethylbenzene	0.000989	U	0.00485	0.000989	mg/Kg	☼	04/14/17 10:00	04/15/17 17:39	1
Toluene	0.00134	U	0.00485	0.00134	mg/Kg	☼	04/14/17 10:00	04/15/17 17:39	1
Xylenes, Total	0.00110	U	0.00485	0.00110	mg/Kg	☼	04/14/17 10:00	04/15/17 17:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*131*	*X*	*61 - 130*	*04/14/17 10:00*	*04/15/17 17:39*	*1*
Dibromofluoromethane	*110*		*68 - 140*	*04/14/17 10:00*	*04/15/17 17:39*	*1*
Toluene-d8 (Surr)	*104*		*50 - 130*	*04/14/17 10:00*	*04/15/17 17:39*	*1*
4-Bromofluorobenzene	*105*		*57 - 140*	*04/14/17 10:00*	*04/15/17 17:39*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.31	U	6.61	3.31	mg/Kg	☼	04/19/17 09:25	04/20/17 22:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*65*		*50 - 150*	*04/19/17 09:25*	*04/20/17 22:06*	*1*

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Client Sample ID: SJRP-SB02-18-19-04122017

Lab Sample ID: 600-146714-4
Date Collected: 04/12/17 16:35
Matrix: Solid
Date Received: 04/14/17 09:02
Percent Solids: 85.4

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.85	U	5.70	2.85	mg/Kg	☼	04/19/17 10:44	04/20/17 18:28	1
ORO C24-C40	**4.41**	**J**	5.70	2.85	mg/Kg	☼	04/19/17 10:44	04/20/17 18:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*57*		*50 - 150*	*04/19/17 10:44*	*04/20/17 18:28*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**14000**	**B**	27.9	0.334	mg/Kg	☼	04/26/17 13:50	04/27/17 14:05	1
Arsenic	**3.10**		1.11	0.243	mg/Kg	☼	04/26/17 13:50	04/27/17 14:05	1
Barium	**66.3**	**B**	1.11	0.0334	mg/Kg	☼	04/26/17 13:50	04/27/17 14:05	1
Boron	**0.791**	**J**	22.3	0.430	mg/Kg	☼	04/26/17 13:50	04/27/17 14:05	1
Cadmium	**0.139**	**J**	0.279	0.0285	mg/Kg	☼	04/26/17 13:50	04/27/17 14:05	1
Calcium	**2250**		111	0.963	mg/Kg	☼	04/26/17 13:50	04/27/17 14:05	1
Chromium	**6.39**	**B**	0.557	0.0564	mg/Kg	☼	04/26/17 13:50	04/27/17 14:05	1
Cobalt	**12.4**		0.557	0.0753	mg/Kg	☼	04/26/17 13:50	04/27/17 14:05	1
Iron	**19000**		22.3	2.82	mg/Kg	☼	04/26/17 13:50	04/27/17 14:05	1
Lead	**10.3**		0.557	0.117	mg/Kg	☼	04/26/17 13:50	04/27/17 14:05	1
Magnesium	**3620**		111	2.14	mg/Kg	☼	04/26/17 13:50	04/27/17 14:05	1
Manganese	**120**	**B**	1.67	0.0425	mg/Kg	☼	04/26/17 13:50	04/27/17 14:05	1
Molybdenum	**0.668**	**B**	0.579	0.158	mg/Kg	☼	04/28/17 09:38	04/28/17 16:46	1
Nickel	**12.9**	**B**	1.11	0.130	mg/Kg	☼	04/26/17 13:50	04/27/17 14:05	1
Potassium	**1160**		111	12.3	mg/Kg	☼	04/26/17 13:50	04/27/17 14:05	1
Selenium	0.289	U	2.23	0.289	mg/Kg	☼	04/26/17 13:50	04/27/17 14:05	1
Sodium	**3830**		111	0.988	mg/Kg	☼	04/26/17 13:50	04/27/17 14:05	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0185**	**J**	0.0187	0.00393	mg/Kg	☼	04/19/17 13:42	04/20/17 08:40	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**14.6**		1.0	1.0	%			04/17/17 16:13	1
Percent Solids	**85.4**		1.0	1.0	%			04/17/17 16:13	1

Client Sample ID: SJRP-TB-04122017

Lab Sample ID: 600-146714-5
Date Collected: 04/12/17 14:00
Matrix: Water
Date Received: 04/14/17 09:02

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/17/17 17:18	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/17/17 17:18	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/17/17 17:18	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/17/17 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*50 - 134*		*04/17/17 17:18*	*1*
Dibromofluoromethane	*87*		*62 - 130*		*04/17/17 17:18*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*04/17/17 17:18*	*1*
4-Bromofluorobenzene	*108*		*67 - 139*		*04/17/17 17:18*	*1*

TestAmerica Houston

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Client Sample ID: SJRP-EB-04122017
Date Collected: 04/12/17 18:45
Date Received: 04/14/17 09:02

Lab Sample ID: 600-146714-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/17/17 17:46	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/17/17 17:46	1
Toluene	**0.000240**	**J**	0.00100	0.000198	mg/L			04/17/17 17:46	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/17/17 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*50 - 134*		*04/17/17 17:46*	*1*
Dibromofluoromethane	*86*		*62 - 130*		*04/17/17 17:46*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*04/17/17 17:46*	*1*
4-Bromofluorobenzene	*106*		*67 - 139*		*04/17/17 17:46*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			04/20/17 16:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*83*		*50 - 150*		*04/20/17 16:05*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0948	U	0.104	0.0948	mg/L		04/19/17 17:17	04/20/17 13:02	1
ORO C24-C40	0.0948	U	0.104	0.0948	mg/L		04/19/17 17:17	04/20/17 13:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*74*		*50 - 150*	*04/19/17 17:17*	*04/20/17 13:02*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		04/19/17 09:24	04/19/17 17:56	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		04/19/17 09:24	04/19/17 17:56	1
Barium	0.000530	U	0.0200	0.000530	mg/L		04/19/17 09:24	04/19/17 17:56	1
Boron	0.0116	U	0.200	0.0116	mg/L		04/19/17 09:24	04/19/17 17:56	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		04/19/17 09:24	04/19/17 17:56	1
Calcium	**0.0374**	**J**	1.00	0.0240	mg/L		04/19/17 09:24	04/19/17 17:56	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/19/17 09:24	04/19/17 17:56	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		04/19/17 09:24	04/19/17 17:56	1
Iron	**0.0350**	**J**	0.400	0.0270	mg/L		04/19/17 09:24	04/19/17 17:56	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/19/17 09:24	04/19/17 17:56	1
Magnesium	0.0555	U	1.00	0.0555	mg/L		04/19/17 09:24	04/19/17 17:56	1
Manganese	**0.00110**	**J**	0.0100	0.000360	mg/L		04/19/17 09:24	04/19/17 17:56	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		04/19/17 09:24	04/19/17 17:56	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		04/19/17 09:24	04/19/17 17:56	1
Potassium	**0.0437**	**J**	1.00	0.0374	mg/L		04/19/17 09:24	04/19/17 17:56	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/19/17 09:24	04/19/17 17:56	1
Sodium	**0.172**	**J B**	1.00	0.0214	mg/L		04/19/17 09:24	04/19/17 17:56	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000820	U	0.000200	0.0000820	mg/L		04/17/17 11:57	04/17/17 14:21	1

Definitions/Glossary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery is outside acceptance limits.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(61-130)	(68-140)	(50-130)	(57-140)
600-146714-1	SJRP-MW16-10-11-04122017	111	103	94	71
600-146714-2	SJRP-MW16-14-15-04122017	135 X	115	86	94
600-146714-3	SJRP-SB02-13-14-04122017	137 X	107	93	106
600-146714-4	SJRP-SB02-18-19-04122017	131 X	110	104	105
LCS 600-210831/4	Lab Control Sample	104	103	100	101
LCS 600-210889/1-A	Lab Control Sample	113	105	105	90
LCSD 600-210831/5	Lab Control Sample Dup	102	105	94	95
LCSD 600-210889/2-A	Lab Control Sample Dup	122	111	107	86
MB 600-210831/7	Method Blank	88	97	102	92
MB 600-210889/3-A	Method Blank	112	110	114	104

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(50-134)	(62-130)	(70-130)	(67-139)
600-146714-5	SJRP-TB-04122017	90	87	94	108
600-146714-6	SJRP-EB-04122017	90	86	94	106
LCS 600-210901/4	Lab Control Sample	91	86	91	102
LCSD 600-210901/5	Lab Control Sample Dup	93	87	91	104
MB 600-210901/7	Method Blank	92	84	95	106

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(50-150)
600-146714-1	SJRP-MW16-10-11-04122017	63
600-146714-2	SJRP-MW16-14-15-04122017	69
600-146714-3	SJRP-SB02-13-14-04122017	63
600-146714-4	SJRP-SB02-18-19-04122017	65
LCS 490-423251/2-A	Lab Control Sample	84
LCS 490-423325/2-A	Lab Control Sample	87
LCSD 490-423251/3-A	Lab Control Sample Dup	81
MB 490-423251/1-A	Method Blank	74
MB 490-423325/1-A	Method Blank	63

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Surrogate Legend
TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(50-150)
600-146714-6	SJRP-EB-04122017	83
LCS 490-423531/4	Lab Control Sample	85
LCSD 490-423531/5	Lab Control Sample Dup	85
MB 490-423531/8	Method Blank	85

Surrogate Legend
TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		OTPH1
Lab Sample ID	Client Sample ID	(50-150)
600-146714-1	SJRP-MW16-10-11-04122017	79
600-146714-2	SJRP-MW16-14-15-04122017	94
600-146714-3	SJRP-SB02-13-14-04122017	64
600-146714-4	SJRP-SB02-18-19-04122017	57
LCS 490-423331/2-A	Lab Control Sample	101
MB 490-423331/1-A	Method Blank	99

Surrogate Legend
OTPH = o-Terphenyl (Surr)

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		OTPH1
Lab Sample ID	Client Sample ID	(50-150)
600-146714-6	SJRP-EB-04122017	74
LCS 490-423458/2-A	Lab Control Sample	78
LCSD 490-423458/3-A	Lab Control Sample Dup	64
MB 490-423458/1-A	Method Blank	69

Surrogate Legend
OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-210831/7
Matrix: Solid
Analysis Batch: 210831

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			04/15/17 12:49	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			04/15/17 12:49	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			04/15/17 12:49	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			04/15/17 12:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*61 - 130*		*04/15/17 12:49*	*1*
Dibromofluoromethane	*97*		*68 - 140*		*04/15/17 12:49*	*1*
Toluene-d8 (Surr)	*102*		*50 - 130*		*04/15/17 12:49*	*1*
4-Bromofluorobenzene	*92*		*57 - 140*		*04/15/17 12:49*	*1*

Lab Sample ID: LCS 600-210831/4
Matrix: Solid
Analysis Batch: 210831

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.05273		mg/Kg		105	70 - 131		
Ethylbenzene			0.0500	0.05328		mg/Kg		107	66 - 130		
Toluene			0.0500	0.05201		mg/Kg		104	67 - 130		
Xylenes, Total			0.100	0.1072		mg/Kg		107	63 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*61 - 130*
Dibromofluoromethane	*103*		*68 - 140*
Toluene-d8 (Surr)	*100*		*50 - 130*
4-Bromofluorobenzene	*101*		*57 - 140*

Lab Sample ID: LCSD 600-210831/5
Matrix: Solid
Analysis Batch: 210831

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.04869		mg/Kg		97	70 - 131	8	30
Ethylbenzene			0.0500	0.04982		mg/Kg		100	66 - 130	7	30
Toluene			0.0500	0.04871		mg/Kg		97	67 - 130	7	30
Xylenes, Total			0.100	0.09650		mg/Kg		97	63 - 130	11	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*61 - 130*
Dibromofluoromethane	*105*		*68 - 140*
Toluene-d8 (Surr)	*94*		*50 - 130*
4-Bromofluorobenzene	*95*		*57 - 140*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-210889/3-A
Matrix: Solid
Analysis Batch: 210900

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210889

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0788	U	0.625	0.0788	mg/Kg		04/17/17 11:00	04/17/17 15:20	1
Ethylbenzene	0.128	U	0.625	0.128	mg/Kg		04/17/17 11:00	04/17/17 15:20	1
Toluene	0.173	U	0.625	0.173	mg/Kg		04/17/17 11:00	04/17/17 15:20	1
Xylenes, Total	0.141	U	0.625	0.141	mg/Kg		04/17/17 11:00	04/17/17 15:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*61 - 130*	*04/17/17 11:00*	*04/17/17 15:20*	*1*
Dibromofluoromethane	*110*		*68 - 140*	*04/17/17 11:00*	*04/17/17 15:20*	*1*
Toluene-d8 (Surr)	*114*		*50 - 130*	*04/17/17 11:00*	*04/17/17 15:20*	*1*
4-Bromofluorobenzene	*104*		*57 - 140*	*04/17/17 11:00*	*04/17/17 15:20*	*1*

Lab Sample ID: LCS 600-210889/1-A
Matrix: Solid
Analysis Batch: 210900

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210889

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	6.25	6.541		mg/Kg		105	70 - 131
Ethylbenzene	6.25	5.984		mg/Kg		96	66 - 130
Toluene	6.25	5.664		mg/Kg		91	67 - 130
Xylenes, Total	12.5	11.36		mg/Kg		91	63 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*113*		*61 - 130*
Dibromofluoromethane	*105*		*68 - 140*
Toluene-d8 (Surr)	*105*		*50 - 130*
4-Bromofluorobenzene	*90*		*57 - 140*

Lab Sample ID: LCSD 600-210889/2-A
Matrix: Solid
Analysis Batch: 210900

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 210889

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	6.25	6.435		mg/Kg		103	70 - 131	2	30
Ethylbenzene	6.25	5.731		mg/Kg		92	66 - 130	4	30
Toluene	6.25	5.736		mg/Kg		92	67 - 130	1	30
Xylenes, Total	12.5	11.42		mg/Kg		91	63 - 130	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*122*		*61 - 130*
Dibromofluoromethane	*111*		*68 - 140*
Toluene-d8 (Surr)	*107*		*50 - 130*
4-Bromofluorobenzene	*86*		*57 - 140*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-210901/7
Matrix: Water
Analysis Batch: 210901

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/17/17 14:52	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/17/17 14:52	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/17/17 14:52	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/17/17 14:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*50 - 134*		*04/17/17 14:52*	*1*
Dibromofluoromethane	*84*		*62 - 130*		*04/17/17 14:52*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*04/17/17 14:52*	*1*
4-Bromofluorobenzene	*106*		*67 - 139*		*04/17/17 14:52*	*1*

Lab Sample ID: LCS 600-210901/4
Matrix: Water
Analysis Batch: 210901

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0100	0.009461		mg/L		95	70 - 130		
Ethylbenzene			0.0100	0.009301		mg/L		93	70 - 130		
Toluene			0.0100	0.009722		mg/L		97	70 - 130		
Xylenes, Total			0.0200	0.01881		mg/L		94	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*50 - 134*
Dibromofluoromethane	*86*		*62 - 130*
Toluene-d8 (Surr)	*91*		*70 - 130*
4-Bromofluorobenzene	*102*		*67 - 139*

Lab Sample ID: LCSD 600-210901/5
Matrix: Water
Analysis Batch: 210901

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0100	0.009022		mg/L		90	70 - 130	5	20
Ethylbenzene			0.0100	0.008778		mg/L		88	70 - 130	6	20
Toluene			0.0100	0.009223		mg/L		92	70 - 130	5	20
Xylenes, Total			0.0200	0.01780		mg/L		89	70 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*50 - 134*
Dibromofluoromethane	*87*		*62 - 130*
Toluene-d8 (Surr)	*91*		*70 - 130*
4-Bromofluorobenzene	*104*		*67 - 139*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 490-423251/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 423639 — **Prep Batch: 423251**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		04/19/17 09:25	04/20/17 14:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*74*		*50 - 150*	*04/19/17 09:25*	*04/20/17 14:05*	*1*

Lab Sample ID: LCS 490-423251/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 423639 — **Prep Batch: 423251**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	500	523.1		mg/Kg		105	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*84*		*50 - 150*

Lab Sample ID: LCSD 490-423251/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 423639 — **Prep Batch: 423251**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	500	528.9		mg/Kg		106	70 - 130	1	21

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*81*		*50 - 150*

Lab Sample ID: MB 490-423325/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 423639 — **Prep Batch: 423325**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		04/19/17 10:35	04/20/17 13:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*63*		*50 - 150*	*04/19/17 10:35*	*04/20/17 13:35*	*1*

Lab Sample ID: LCS 490-423325/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 423639 — **Prep Batch: 423325**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	500	523.9		mg/Kg		105	70 - 130

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: LCS 490-423325/2-A
Matrix: Solid
Analysis Batch: 423639

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 423325

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	87		50 - 150

Lab Sample ID: MB 490-423531/8
Matrix: Water
Analysis Batch: 423531

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			04/20/17 11:05	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	85		50 - 150		04/20/17 11:05	1

Lab Sample ID: LCS 490-423531/4
Matrix: Water
Analysis Batch: 423531

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	1.00	1.033		mg/L		103	66 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	85		50 - 150

Lab Sample ID: LCSD 490-423531/5
Matrix: Water
Analysis Batch: 423531

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	1.00	1.003		mg/L		100	66 - 140	3	42

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	85		50 - 150

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Lab Sample ID: MB 490-423331/1-A
Matrix: Solid
Analysis Batch: 423565

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 423331

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.50	U	5.00	2.50	mg/Kg		04/19/17 10:44	04/20/17 13:47	1
ORO C24-C40	2.50	U	5.00	2.50	mg/Kg		04/19/17 10:44	04/20/17 13:47	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Lab Sample ID: MB 490-423331/1-A
Matrix: Solid
Analysis Batch: 423565

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 423331

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	99		50 - 150	04/19/17 10:44	04/20/17 13:47	1

Lab Sample ID: LCS 490-423331/2-A
Matrix: Solid
Analysis Batch: 423565

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 423331

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			40.0	32.05		mg/Kg		80	54 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	101		50 - 150

Lab Sample ID: MB 490-423458/1-A
Matrix: Water
Analysis Batch: 423596

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 423458

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0910	U	0.100	0.0910	mg/L		04/19/17 17:17	04/20/17 12:17	1
ORO C24-C40	0.0910	U	0.100	0.0910	mg/L		04/19/17 17:17	04/20/17 12:17	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	69		50 - 150	04/19/17 17:17	04/20/17 12:17	1

Lab Sample ID: LCS 490-423458/2-A
Matrix: Water
Analysis Batch: 423596

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 423458

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			0.800	0.6787		mg/L		85	46 - 132		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	78		50 - 150

Lab Sample ID: LCSD 490-423458/3-A
Matrix: Water
Analysis Batch: 423596

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 423458

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			0.800	0.5400		mg/L		67	46 - 132	23	31

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o-Terphenyl (Surr)	64		50 - 150

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-211063/1-A
Matrix: Water
Analysis Batch: 211106

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 211063

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		04/19/17 09:24	04/19/17 16:49	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		04/19/17 09:24	04/19/17 16:49	1
Barium	0.000530	U	0.0200	0.000530	mg/L		04/19/17 09:24	04/19/17 16:49	1
Boron	0.0116	U	0.200	0.0116	mg/L		04/19/17 09:24	04/19/17 16:49	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		04/19/17 09:24	04/19/17 16:49	1
Calcium	0.0240	U	1.00	0.0240	mg/L		04/19/17 09:24	04/19/17 16:49	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/19/17 09:24	04/19/17 16:49	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		04/19/17 09:24	04/19/17 16:49	1
Iron	0.0270	U	0.400	0.0270	mg/L		04/19/17 09:24	04/19/17 16:49	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/19/17 09:24	04/19/17 16:49	1
Magnesium	0.0555	U	1.00	0.0555	mg/L		04/19/17 09:24	04/19/17 16:49	1
Manganese	0.000360	U	0.0100	0.000360	mg/L		04/19/17 09:24	04/19/17 16:49	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		04/19/17 09:24	04/19/17 16:49	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		04/19/17 09:24	04/19/17 16:49	1
Potassium	0.0374	U	1.00	0.0374	mg/L		04/19/17 09:24	04/19/17 16:49	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/19/17 09:24	04/19/17 16:49	1
Sodium	0.09700	J	1.00	0.0214	mg/L		04/19/17 09:24	04/19/17 16:49	1

Lab Sample ID: LCS 600-211063/2-A
Matrix: Water
Analysis Batch: 211106

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211063

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	10.35		mg/L		104	80 - 120
Arsenic	1.00	1.035		mg/L		104	80 - 120
Barium	1.00	1.014		mg/L		101	80 - 120
Boron	1.00	0.9904		mg/L		99	80 - 120
Cadmium	0.500	0.5096		mg/L		102	80 - 120
Calcium	10.0	10.15		mg/L		102	80 - 120
Chromium	1.00	1.018		mg/L		102	80 - 120
Cobalt	1.00	0.9951		mg/L		100	80 - 120
Iron	10.0	10.16		mg/L		102	80 - 120
Lead	1.00	0.9866		mg/L		99	80 - 120
Magnesium	10.0	9.636		mg/L		96	80 - 120
Manganese	1.00	1.021		mg/L		102	80 - 120
Molybdenum	1.00	1.021		mg/L		102	80 - 120
Nickel	1.00	0.9956		mg/L		100	80 - 120
Potassium	10.0	10.10		mg/L		101	80 - 120
Selenium	1.00	1.026		mg/L		103	80 - 120
Sodium	10.0	10.23		mg/L		102	80 - 120

Lab Sample ID: MB 600-211612/1-A
Matrix: Solid
Analysis Batch: 211709

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 211612

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	1.935	J	25.0	0.300	mg/Kg		04/26/17 13:50	04/27/17 13:55	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		04/26/17 13:50	04/27/17 13:55	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: MB 600-211612/1-A
Matrix: Solid
Analysis Batch: 211709

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 211612

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.05500	J	1.00	0.0300	mg/Kg		04/26/17 13:50	04/27/17 13:55	1
Boron	0.386	U	20.0	0.386	mg/Kg		04/26/17 13:50	04/27/17 13:55	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		04/26/17 13:50	04/27/17 13:55	1
Calcium	0.864	U	100	0.864	mg/Kg		04/26/17 13:50	04/27/17 13:55	1
Chromium	0.1050	J	0.500	0.0506	mg/Kg		04/26/17 13:50	04/27/17 13:55	1
Cobalt	0.0676	U	0.500	0.0676	mg/Kg		04/26/17 13:50	04/27/17 13:55	1
Iron	2.53	U	20.0	2.53	mg/Kg		04/26/17 13:50	04/27/17 13:55	1
Lead	0.105	U	0.500	0.105	mg/Kg		04/26/17 13:50	04/27/17 13:55	1
Magnesium	1.92	U	100	1.92	mg/Kg		04/26/17 13:50	04/27/17 13:55	1
Manganese	0.04000	J	1.50	0.0381	mg/Kg		04/26/17 13:50	04/27/17 13:55	1
Nickel	0.7000	J	1.00	0.117	mg/Kg		04/26/17 13:50	04/27/17 13:55	1
Potassium	11.0	U	100	11.0	mg/Kg		04/26/17 13:50	04/27/17 13:55	1
Selenium	0.259	U	2.00	0.259	mg/Kg		04/26/17 13:50	04/27/17 13:55	1
Sodium	0.886	U	100	0.886	mg/Kg		04/26/17 13:50	04/27/17 13:55	1

Lab Sample ID: LCSSRM 600-211612/2-A
Matrix: Solid
Analysis Batch: 211709

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211612

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	7590	7094		mg/Kg		93.5	34.9 - 151.5
Arsenic	97.5	99.29		mg/Kg		101.8	69.2 - 145.6
Barium	306	285.5		mg/Kg		93.3	82.7 - 117.0
Boron	116	110.2		mg/Kg		95.0	73.0 - 127.6
Cadmium	76.6	75.97		mg/Kg		99.2	73.2 - 126.8
Calcium	5880	6097		mg/Kg		103.7	81.8 - 118.4
Chromium	103	98.42		mg/Kg		95.6	79.7 - 121.4
Cobalt	103	107.4		mg/Kg		104.3	83.3 - 116.5
Iron	14500	13180		mg/Kg		90.9	45.0 - 155.9
Lead	96.7	97.36		mg/Kg		100.7	81.7 - 117.9
Magnesium	2680	2546		mg/Kg		95.0	75.4 - 124.6
Manganese	400	387.1		mg/Kg		96.8	81.0 - 119.0
Molybdenum	94.9	95.33		mg/Kg		100.5	78.5 - 121.2
Nickel	153	157.5		mg/Kg		102.9	73.2 - 126.8
Potassium	2230	2117		mg/Kg		94.9	69.5 - 130.5
Selenium	161	164.7		mg/Kg		102.3	77.6 - 123.0

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-211612/2-A
Matrix: Solid
Analysis Batch: 211709

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211612

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	370	348.4		mg/Kg		94.2	70.5 - 129.7

Lab Sample ID: MB 600-211759/1-A
Matrix: Solid
Analysis Batch: 211796

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 211759

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.300	U	25.0	0.300	mg/Kg		04/28/17 09:38	04/28/17 16:26	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		04/28/17 09:38	04/28/17 16:26	1
Barium	0.0300	U	1.00	0.0300	mg/Kg		04/28/17 09:38	04/28/17 16:26	1
Boron	0.386	U	20.0	0.386	mg/Kg		04/28/17 09:38	04/28/17 16:26	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		04/28/17 09:38	04/28/17 16:26	1
Calcium	0.864	U	100	0.864	mg/Kg		04/28/17 09:38	04/28/17 16:26	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		04/28/17 09:38	04/28/17 16:26	1
Cobalt	0.0676	U	0.500	0.0676	mg/Kg		04/28/17 09:38	04/28/17 16:26	1
Iron	2.53	U	20.0	2.53	mg/Kg		04/28/17 09:38	04/28/17 16:26	1
Lead	0.105	U	0.500	0.105	mg/Kg		04/28/17 09:38	04/28/17 16:26	1
Magnesium	1.92	U	100	1.92	mg/Kg		04/28/17 09:38	04/28/17 16:26	1
Manganese	0.0381	U	1.50	0.0381	mg/Kg		04/28/17 09:38	04/28/17 16:26	1
Nickel	0.117	U	1.00	0.117	mg/Kg		04/28/17 09:38	04/28/17 16:26	1
Selenium	0.259	U	2.00	0.259	mg/Kg		04/28/17 09:38	04/28/17 16:26	1
Sodium	21.36	J	100	0.886	mg/Kg		04/28/17 09:38	04/28/17 16:26	1

Lab Sample ID: MB 600-211759/1-A
Matrix: Solid
Analysis Batch: 211796

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 211759

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	0.136	U	0.500	0.136	mg/Kg		04/28/17 09:38	04/28/17 17:58	1

Lab Sample ID: LCSSRM 600-211759/2-A
Matrix: Solid
Analysis Batch: 211796

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211759

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	7590	6940		mg/Kg		91.4	34.9 - 151.5
Arsenic	97.5	81.21		mg/Kg		83.3	69.2 - 145.6
Barium	306	282.2		mg/Kg		92.2	82.7 - 117.0
Boron	116	114.8		mg/Kg		99.0	73.0 - 127.6
Cadmium	76.6	73.75		mg/Kg		96.3	73.2 - 126.8
Calcium	5880	5507		mg/Kg		93.7	81.8 - 118.4
Chromium	103	94.87		mg/Kg		92.1	79.7 - 121.4

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-211759/2-A
Matrix: Solid
Analysis Batch: 211796

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211759

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	103	99.93		mg/Kg		97.0	83.3 - 116.5
Iron	14500	12930		mg/Kg		89.2	45.0 - 155.9
Lead	96.7	91.84		mg/Kg		95.0	81.7 - 117.9
Magnesium	2680	2527		mg/Kg		94.3	75.4 - 124.6
Manganese	400	376.1		mg/Kg		94.0	81.0 - 119.0
Nickel	153	141.0		mg/Kg		92.2	73.2 - 126.8
Selenium	161	145.7		mg/Kg		90.5	77.6 - 123.0
Sodium	370	325.7		mg/Kg		88.0	70.5 - 129.7

Lab Sample ID: LCSSRM 600-211759/2-A
Matrix: Solid
Analysis Batch: 211796

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211759

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Molybdenum	94.9	90.32		mg/Kg		95.2	78.5 - 121.2

Lab Sample ID: 600-146714-1 MS
Matrix: Solid
Analysis Batch: 211796

Client Sample ID: SJRP-MW16-10-11-04122017
Prep Type: Total/NA
Prep Batch: 211759

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	13600		642	16900	4	mg/Kg	☼	509	75 - 125
Arsenic	3.01		64.2	67.32		mg/Kg	☼	100	75 - 125
Barium	70.8		64.2	130.7		mg/Kg	☼	93	75 - 125
Boron	7.49	J F1	64.2	41.79	F1	mg/Kg	☼	53	75 - 125
Cadmium	0.768		32.1	31.11		mg/Kg	☼	94	75 - 125
Calcium	6420		642	6819	4	mg/Kg	☼	62	75 - 125
Chromium	6.94		64.2	67.97		mg/Kg	☼	95	75 - 125
Cobalt	9.40		64.2	70.60		mg/Kg	☼	95	75 - 125
Iron	15600		642	16820	4	mg/Kg	☼	186	75 - 125
Lead	13.1		64.2	74.20		mg/Kg	☼	95	75 - 125
Magnesium	3580		642	4448	4	mg/Kg	☼	135	75 - 125
Manganese	143		64.2	191.9		mg/Kg	☼	76	75 - 125
Nickel	11.8		64.2	71.37		mg/Kg	☼	93	75 - 125
Selenium	0.339	U	64.2	55.97		mg/Kg	☼	87	75 - 125

Lab Sample ID: 600-146714-1 MS
Matrix: Solid
Analysis Batch: 211796

Client Sample ID: SJRP-MW16-10-11-04122017
Prep Type: Total/NA
Prep Batch: 211759

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Molybdenum	1.17	^	64.2	50.81		mg/Kg	☼	77	75 - 125

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-146714-1 DU — **Client Sample ID: SJRP-MW16-10-11-04122017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211796 — **Prep Batch: 211759**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	13600		13600		mg/Kg	☼	0.2	20
Arsenic	3.01		3.061		mg/Kg	☼	2	20
Barium	70.8		64.63		mg/Kg	☼	9	20
Boron	7.49	J F1	7.489	J	mg/Kg	☼	0	20
Cadmium	0.768		0.7161		mg/Kg	☼	7	20
Calcium	6420		5969		mg/Kg	☼	7	20
Chromium	6.94		6.934		mg/Kg	☼	0.05	20
Cobalt	9.40		9.040		mg/Kg	☼	4	20
Iron	15600		15690		mg/Kg	☼	0.5	20
Lead	13.1		12.98		mg/Kg	☼	0.8	20
Magnesium	3580		3550		mg/Kg	☼	0.8	20
Manganese	143		136.7		mg/Kg	☼	5	20
Nickel	11.8		11.56		mg/Kg	☼	2	20
Selenium	0.339	U	0.336	U	mg/Kg	☼	NC	20

Lab Sample ID: 600-146714-1 DU — **Client Sample ID: SJRP-MW16-10-11-04122017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211796 — **Prep Batch: 211759**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Molybdenum	1.17	^	1.057		mg/Kg	☼	10	20

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Lab Sample ID: LB 600-210869/1-B — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 210930 — **Prep Batch: 210899**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000820	U	0.000200	0.0000820	mg/L		04/17/17 11:57	04/17/17 14:28	1

Lab Sample ID: MB 600-210899/7-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 210930 — **Prep Batch: 210899**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000820	U	0.000200	0.0000820	mg/L		04/17/17 11:57	04/17/17 14:14	1

Lab Sample ID: LCS 600-210899/8-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 210930 — **Prep Batch: 210899**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00300	0.003113		mg/L		104	70 - 130

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-210954/7-A
Matrix: Solid
Analysis Batch: 211066

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 210954

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00325	U	0.0155	0.00325	mg/Kg		04/18/17 06:26	04/19/17 08:39	1

Lab Sample ID: LCSSRM 600-210954/8-A ^100
Matrix: Solid
Analysis Batch: 211066

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 210954

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	20.2	23.86		mg/Kg		118.1	70.8 - 129.2

Lab Sample ID: 600-146714-3 MS
Matrix: Solid
Analysis Batch: 211066

Client Sample ID: SJRP-SB02-13-14-04122017
Prep Type: Total/NA
Prep Batch: 210954

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0234		0.279	0.2697		mg/Kg	☼	88	75 - 125

Lab Sample ID: 600-146714-3 DU
Matrix: Solid
Analysis Batch: 211066

Client Sample ID: SJRP-SB02-13-14-04122017
Prep Type: Total/NA
Prep Batch: 210954

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.0234		0.02269		mg/Kg	☼	3	20

Lab Sample ID: MB 600-211102/7-A
Matrix: Solid
Analysis Batch: 211164

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 211102

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00325	U	0.0155	0.00325	mg/Kg		04/19/17 13:42	04/20/17 08:16	1

Lab Sample ID: LCSSRM 600-211102/8-A ^100
Matrix: Solid
Analysis Batch: 211164

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211102

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	20.2	24.84		mg/Kg		123.0	70.8 - 129.2

Lab Sample ID: 600-146714-4 MS
Matrix: Solid
Analysis Batch: 211164

Client Sample ID: SJRP-SB02-18-19-04122017
Prep Type: Total/NA
Prep Batch: 211102

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0185	J	0.274	0.2932		mg/Kg	☼	100	75 - 125

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) (Continued)

Lab Sample ID: 600-146714-4 DU
Matrix: Solid
Analysis Batch: 211164

Client Sample ID: SJRP-SB02-18-19-04122017
Prep Type: Total/NA
Prep Batch: 211102

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Mercury	0.0185	J		0.01432	J F5	mg/Kg	☼			25	20

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

GC/MS VOA

Analysis Batch: 210831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146714-2	SJRP-MW16-14-15-04122017	Total/NA	Solid	8260B	210838
600-146714-3	SJRP-SB02-13-14-04122017	Total/NA	Solid	8260B	210838
600-146714-4	SJRP-SB02-18-19-04122017	Total/NA	Solid	8260B	210838
MB 600-210831/7	Method Blank	Total/NA	Solid	8260B	
LCS 600-210831/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-210831/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 210838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146714-2	SJRP-MW16-14-15-04122017	Total/NA	Solid	5035	
600-146714-3	SJRP-SB02-13-14-04122017	Total/NA	Solid	5035	
600-146714-4	SJRP-SB02-18-19-04122017	Total/NA	Solid	5035	

Prep Batch: 210889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-210889/3-A	Method Blank	Total/NA	Solid	5030B	
LCS 600-210889/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 600-210889/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 210900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146714-1	SJRP-MW16-10-11-04122017	Total/NA	Solid	8260B	210904
MB 600-210889/3-A	Method Blank	Total/NA	Solid	8260B	210889
LCS 600-210889/1-A	Lab Control Sample	Total/NA	Solid	8260B	210889
LCSD 600-210889/2-A	Lab Control Sample Dup	Total/NA	Solid	8260B	210889

Analysis Batch: 210901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146714-5	SJRP-TB-04122017	Total/NA	Water	8260B	
600-146714-6	SJRP-EB-04122017	Total/NA	Water	8260B	
MB 600-210901/7	Method Blank	Total/NA	Water	8260B	
LCS 600-210901/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-210901/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Prep Batch: 210904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146714-1	SJRP-MW16-10-11-04122017	Total/NA	Solid	5035	

GC VOA

Prep Batch: 423251

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146714-1	SJRP-MW16-10-11-04122017	Total/NA	Solid	5030B	
600-146714-2	SJRP-MW16-14-15-04122017	Total/NA	Solid	5030B	
600-146714-3	SJRP-SB02-13-14-04122017	Total/NA	Solid	5030B	
600-146714-4	SJRP-SB02-18-19-04122017	Total/NA	Solid	5030B	
MB 490-423251/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 490-423251/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 490-423251/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

GC VOA (Continued)

Prep Batch: 423325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-423325/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 490-423325/2-A	Lab Control Sample	Total/NA	Solid	5030B	

Analysis Batch: 423531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146714-6	SJRP-EB-04122017	Total/NA	Water	8015C	
MB 490-423531/8	Method Blank	Total/NA	Water	8015C	
LCS 490-423531/4	Lab Control Sample	Total/NA	Water	8015C	
LCSD 490-423531/5	Lab Control Sample Dup	Total/NA	Water	8015C	

Analysis Batch: 423639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146714-1	SJRP-MW16-10-11-04122017	Total/NA	Solid	8015C	423251
600-146714-2	SJRP-MW16-14-15-04122017	Total/NA	Solid	8015C	423251
600-146714-3	SJRP-SB02-13-14-04122017	Total/NA	Solid	8015C	423251
600-146714-4	SJRP-SB02-18-19-04122017	Total/NA	Solid	8015C	423251
MB 490-423251/1-A	Method Blank	Total/NA	Solid	8015C	423251
MB 490-423325/1-A	Method Blank	Total/NA	Solid	8015C	423325
LCS 490-423251/2-A	Lab Control Sample	Total/NA	Solid	8015C	423251
LCS 490-423325/2-A	Lab Control Sample	Total/NA	Solid	8015C	423325
LCSD 490-423251/3-A	Lab Control Sample Dup	Total/NA	Solid	8015C	423251

GC Semi VOA

Prep Batch: 423331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146714-1	SJRP-MW16-10-11-04122017	Total/NA	Solid	3550C	
600-146714-2	SJRP-MW16-14-15-04122017	Total/NA	Solid	3550C	
600-146714-3	SJRP-SB02-13-14-04122017	Total/NA	Solid	3550C	
600-146714-4	SJRP-SB02-18-19-04122017	Total/NA	Solid	3550C	
MB 490-423331/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-423331/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Prep Batch: 423458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146714-6	SJRP-EB-04122017	Total/NA	Water	3510C	
MB 490-423458/1-A	Method Blank	Total/NA	Water	3510C	
LCS 490-423458/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 490-423458/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 423565

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146714-1	SJRP-MW16-10-11-04122017	Total/NA	Solid	8015C	423331
600-146714-2	SJRP-MW16-14-15-04122017	Total/NA	Solid	8015C	423331
600-146714-3	SJRP-SB02-13-14-04122017	Total/NA	Solid	8015C	423331
600-146714-4	SJRP-SB02-18-19-04122017	Total/NA	Solid	8015C	423331
MB 490-423331/1-A	Method Blank	Total/NA	Solid	8015C	423331
LCS 490-423331/2-A	Lab Control Sample	Total/NA	Solid	8015C	423331

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

GC Semi VOA (Continued)

Analysis Batch: 423596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146714-6	SJRP-EB-04122017	Total/NA	Water	8015C	423458
MB 490-423458/1-A	Method Blank	Total/NA	Water	8015C	423458
LCS 490-423458/2-A	Lab Control Sample	Total/NA	Water	8015C	423458
LCSD 490-423458/3-A	Lab Control Sample Dup	Total/NA	Water	8015C	423458

Metals

Leach Batch: 210869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 600-210869/1-B	Method Blank	Total/NA	Water	1311	

Prep Batch: 210899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146714-6	SJRP-EB-04122017	Total/NA	Water	7470A	
LB 600-210869/1-B	Method Blank	Total/NA	Water	7470A	210869
MB 600-210899/7-A	Method Blank	Total/NA	Water	7470A	
LCS 600-210899/8-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 210930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146714-6	SJRP-EB-04122017	Total/NA	Water	7470A	210899
LB 600-210869/1-B	Method Blank	Total/NA	Water	7470A	210899
MB 600-210899/7-A	Method Blank	Total/NA	Water	7470A	210899
LCS 600-210899/8-A	Lab Control Sample	Total/NA	Water	7470A	210899

Prep Batch: 210954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146714-1	SJRP-MW16-10-11-04122017	Total/NA	Solid	7471A	
600-146714-2	SJRP-MW16-14-15-04122017	Total/NA	Solid	7471A	
600-146714-3	SJRP-SB02-13-14-04122017	Total/NA	Solid	7471A	
MB 600-210954/7-A	Method Blank	Total/NA	Solid	7471A	
LCSSRM 600-210954/8-A ^100	Lab Control Sample	Total/NA	Solid	7471A	
600-146714-3 MS	SJRP-SB02-13-14-04122017	Total/NA	Solid	7471A	
600-146714-3 DU	SJRP-SB02-13-14-04122017	Total/NA	Solid	7471A	

Prep Batch: 211063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146714-6	SJRP-EB-04122017	Total/NA	Water	3010A	
MB 600-211063/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-211063/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 211066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146714-1	SJRP-MW16-10-11-04122017	Total/NA	Solid	7471A	210954
600-146714-2	SJRP-MW16-14-15-04122017	Total/NA	Solid	7471A	210954
600-146714-3	SJRP-SB02-13-14-04122017	Total/NA	Solid	7471A	210954
MB 600-210954/7-A	Method Blank	Total/NA	Solid	7471A	210954
LCSSRM 600-210954/8-A ^100	Lab Control Sample	Total/NA	Solid	7471A	210954
600-146714-3 MS	SJRP-SB02-13-14-04122017	Total/NA	Solid	7471A	210954
600-146714-3 DU	SJRP-SB02-13-14-04122017	Total/NA	Solid	7471A	210954

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Metals (Continued)

Prep Batch: 211102

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146714-4	SJRP-SB02-18-19-04122017	Total/NA	Solid	7471A	
MB 600-211102/7-A	Method Blank	Total/NA	Solid	7471A	
LCSSRM 600-211102/8-A ^100	Lab Control Sample	Total/NA	Solid	7471A	
600-146714-4 MS	SJRP-SB02-18-19-04122017	Total/NA	Solid	7471A	
600-146714-4 DU	SJRP-SB02-18-19-04122017	Total/NA	Solid	7471A	

Analysis Batch: 211106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146714-6	SJRP-EB-04122017	Total/NA	Water	6010B	211063
MB 600-211063/1-A	Method Blank	Total/NA	Water	6010B	211063
LCS 600-211063/2-A	Lab Control Sample	Total/NA	Water	6010B	211063

Analysis Batch: 211164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146714-4	SJRP-SB02-18-19-04122017	Total/NA	Solid	7471A	211102
MB 600-211102/7-A	Method Blank	Total/NA	Solid	7471A	211102
LCSSRM 600-211102/8-A ^100	Lab Control Sample	Total/NA	Solid	7471A	211102
600-146714-4 MS	SJRP-SB02-18-19-04122017	Total/NA	Solid	7471A	211102
600-146714-4 DU	SJRP-SB02-18-19-04122017	Total/NA	Solid	7471A	211102

Prep Batch: 211612

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146714-1	SJRP-MW16-10-11-04122017	Total/NA	Solid	3050B	
600-146714-2	SJRP-MW16-14-15-04122017	Total/NA	Solid	3050B	
600-146714-3	SJRP-SB02-13-14-04122017	Total/NA	Solid	3050B	
600-146714-4	SJRP-SB02-18-19-04122017	Total/NA	Solid	3050B	
MB 600-211612/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-211612/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 211709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146714-1	SJRP-MW16-10-11-04122017	Total/NA	Solid	6010B	211612
600-146714-1	SJRP-MW16-10-11-04122017	Total/NA	Solid	6010B	211612
600-146714-2	SJRP-MW16-14-15-04122017	Total/NA	Solid	6010B	211612
600-146714-2	SJRP-MW16-14-15-04122017	Total/NA	Solid	6010B	211612
600-146714-3	SJRP-SB02-13-14-04122017	Total/NA	Solid	6010B	211612
600-146714-4	SJRP-SB02-18-19-04122017	Total/NA	Solid	6010B	211612
MB 600-211612/1-A	Method Blank	Total/NA	Solid	6010B	211612
LCSSRM 600-211612/2-A	Lab Control Sample	Total/NA	Solid	6010B	211612

Prep Batch: 211759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146714-1	SJRP-MW16-10-11-04122017	Total/NA	Solid	3050B	
600-146714-2	SJRP-MW16-14-15-04122017	Total/NA	Solid	3050B	
600-146714-3	SJRP-SB02-13-14-04122017	Total/NA	Solid	3050B	
600-146714-4	SJRP-SB02-18-19-04122017	Total/NA	Solid	3050B	
MB 600-211759/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-211759/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-146714-1 MS	SJRP-MW16-10-11-04122017	Total/NA	Solid	3050B	
600-146714-1 DU	SJRP-MW16-10-11-04122017	Total/NA	Solid	3050B	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Metals (Continued)

Analysis Batch: 211796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146714-1	SJRP-MW16-10-11-04122017	Total/NA	Solid	6010B	211759
600-146714-2	SJRP-MW16-14-15-04122017	Total/NA	Solid	6010B	211759
600-146714-3	SJRP-SB02-13-14-04122017	Total/NA	Solid	6010B	211759
600-146714-4	SJRP-SB02-18-19-04122017	Total/NA	Solid	6010B	211759
MB 600-211759/1-A	Method Blank	Total/NA	Solid	6010B	211759
MB 600-211759/1-A	Method Blank	Total/NA	Solid	6010B	211759
LCSSRM 600-211759/2-A	Lab Control Sample	Total/NA	Solid	6010B	211759
LCSSRM 600-211759/2-A	Lab Control Sample	Total/NA	Solid	6010B	211759
600-146714-1 MS	SJRP-MW16-10-11-04122017	Total/NA	Solid	6010B	211759
600-146714-1 MS	SJRP-MW16-10-11-04122017	Total/NA	Solid	6010B	211759
600-146714-1 DU	SJRP-MW16-10-11-04122017	Total/NA	Solid	6010B	211759
600-146714-1 DU	SJRP-MW16-10-11-04122017	Total/NA	Solid	6010B	211759

General Chemistry

Analysis Batch: 210927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146714-1	SJRP-MW16-10-11-04122017	Total/NA	Solid	2540B	
600-146714-2	SJRP-MW16-14-15-04122017	Total/NA	Solid	2540B	
600-146714-3	SJRP-SB02-13-14-04122017	Total/NA	Solid	2540B	
600-146714-4	SJRP-SB02-18-19-04122017	Total/NA	Solid	2540B	

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Client Sample ID: SJRP-MW16-10-11-04122017 — Lab Sample ID: 600-146714-1

Date Collected: 04/12/17 14:18 — **Matrix: Solid**
Date Received: 04/14/17 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.705 g	5 mL	210904	04/14/17 10:00	KLV	TAL HOU
Total/NA	Analysis	8260B		1	100 uL	5 mL	210900	04/17/17 18:34	KLV	TAL HOU
Total/NA	Analysis	2540B		1			210927	04/17/17 16:13	B1K	TAL HOU

Client Sample ID: SJRP-MW16-10-11-04122017 — Lab Sample ID: 600-146714-1

Date Collected: 04/12/17 14:18 — **Matrix: Solid**
Date Received: 04/14/17 09:02 — **Percent Solids: 75.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.89 g	5.0 mL	423251	04/19/17 09:25	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	423639	04/20/17 20:36	AK1	TAL NSH
Total/NA	Prep	3550C			25.17 g	1.00 mL	423331	04/19/17 10:44	MNM	TAL NSH
Total/NA	Analysis	8015C		1			423565	04/20/17 17:38	A1B	TAL NSH
Total/NA	Prep	3050B			1.01 g	50 mL	211759	04/28/17 09:38	DCL	TAL HOU
Total/NA	Analysis	6010B		1			211796	04/28/17 18:02	DCL	TAL HOU
Total/NA	Prep	3050B			1.04 g	50 mL	211612	04/26/17 13:50	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211709	04/27/17 13:59	DCL	TAL HOU
Total/NA	Prep	3050B			1.04 g	50 mL	211612	04/26/17 13:50	JAH	TAL HOU
Total/NA	Analysis	6010B		5			211709	04/27/17 17:41	DCL	TAL HOU
Total/NA	Prep	7471A			.64 g	50 mL	210954	04/18/17 06:26	DDE	TAL HOU
Total/NA	Analysis	7471A		1			211066	04/19/17 09:25	DDE	TAL HOU

Client Sample ID: SJRP-MW16-14-15-04122017 — Lab Sample ID: 600-146714-2

Date Collected: 04/12/17 14:30 — **Matrix: Solid**
Date Received: 04/14/17 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			210927	04/17/17 16:13	B1K	TAL HOU

Client Sample ID: SJRP-MW16-14-15-04122017 — Lab Sample ID: 600-146714-2

Date Collected: 04/12/17 14:30 — **Matrix: Solid**
Date Received: 04/14/17 09:02 — **Percent Solids: 88.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.344 g	5 mL	210838	04/14/17 10:00	KLV	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210831	04/15/17 16:41	KLV	TAL HOU
Total/NA	Prep	5030B			5.17 g	5.0 mL	423251	04/19/17 09:25	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	423639	04/20/17 21:06	AK1	TAL NSH
Total/NA	Prep	3550C			25.80 g	1.00 mL	423331	04/19/17 10:44	MNM	TAL NSH
Total/NA	Analysis	8015C		1			423565	04/20/17 17:54	A1B	TAL NSH
Total/NA	Prep	3050B			1.01 g	50 mL	211759	04/28/17 09:38	DCL	TAL HOU
Total/NA	Analysis	6010B		1			211796	04/28/17 16:41	DCL	TAL HOU
Total/NA	Prep	3050B			1.10 g	50 mL	211612	04/26/17 13:50	JAH	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Client Sample ID: SJRP-MW16-14-15-04122017 — Lab Sample ID: 600-146714-2

Date Collected: 04/12/17 14:30 — **Matrix: Solid**
Date Received: 04/14/17 09:02 — **Percent Solids: 88.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		1			211709	04/27/17 14:01	DCL	TAL HOU
Total/NA	Prep	3050B			1.10 g	50 mL	211612	04/26/17 13:50	JAH	TAL HOU
Total/NA	Analysis	6010B		5			211709	04/27/17 17:43	DCL	TAL HOU
Total/NA	Prep	7471A			.62 g	50 mL	210954	04/18/17 06:26	DDE	TAL HOU
Total/NA	Analysis	7471A		1			211066	04/19/17 09:27	DDE	TAL HOU

Client Sample ID: SJRP-SB02-13-14-04122017 — Lab Sample ID: 600-146714-3

Date Collected: 04/12/17 16:25 — **Matrix: Solid**
Date Received: 04/14/17 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			210927	04/17/17 16:13	B1K	TAL HOU

Client Sample ID: SJRP-SB02-13-14-04122017 — Lab Sample ID: 600-146714-3

Date Collected: 04/12/17 16:25 — **Matrix: Solid**
Date Received: 04/14/17 09:02 — **Percent Solids: 81.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.923 g	5 mL	210838	04/14/17 10:00	KLV	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210831	04/15/17 17:10	KLV	TAL HOU
Total/NA	Prep	5030B			5.23 g	5.0 mL	423251	04/19/17 09:25	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	423639	04/20/17 21:36	AK1	TAL NSH
Total/NA	Prep	3550C			25.21 g	1.00 mL	423331	04/19/17 10:44	MNM	TAL NSH
Total/NA	Analysis	8015C		1			423565	04/20/17 18:11	A1B	TAL NSH
Total/NA	Prep	3050B			1.03 g	50 mL	211759	04/28/17 09:38	DCL	TAL HOU
Total/NA	Analysis	6010B		1			211796	04/28/17 16:43	DCL	TAL HOU
Total/NA	Prep	3050B			1.02 g	50 mL	211612	04/26/17 13:50	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211709	04/27/17 14:03	DCL	TAL HOU
Total/NA	Prep	7471A			.60 g	50 mL	210954	04/18/17 06:26	DDE	TAL HOU
Total/NA	Analysis	7471A		1			211066	04/19/17 09:29	DDE	TAL HOU

Client Sample ID: SJRP-SB02-18-19-04122017 — Lab Sample ID: 600-146714-4

Date Collected: 04/12/17 16:35 — **Matrix: Solid**
Date Received: 04/14/17 09:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			210927	04/17/17 16:13	B1K	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Client Sample ID: SJRP-SB02-18-19-04122017

Lab Sample ID: 600-146714-4

Date Collected: 04/12/17 16:35
Date Received: 04/14/17 09:02

Matrix: Solid
Percent Solids: 85.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.034 g	5 mL	210838	04/14/17 10:00	KLV	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	210831	04/15/17 17:39	KLV	TAL HOU
Total/NA	Prep	5030B			5.08 g	5.0 mL	423251	04/19/17 09:25	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	423639	04/20/17 22:06	AK1	TAL NSH
Total/NA	Prep	3550C			25.66 g	1.00 mL	423331	04/19/17 10:44	MNM	TAL NSH
Total/NA	Analysis	8015C		1			423565	04/20/17 18:28	A1B	TAL NSH
Total/NA	Prep	3050B			1.01 g	50 mL	211759	04/28/17 09:38	DCL	TAL HOU
Total/NA	Analysis	6010B		1			211796	04/28/17 16:46	DCL	TAL HOU
Total/NA	Prep	3050B			1.05 g	50 mL	211612	04/26/17 13:50	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211709	04/27/17 14:05	DCL	TAL HOU
Total/NA	Prep	7471A			.64 g	50 mL	211102	04/19/17 13:42	DDE	TAL HOU
Total/NA	Analysis	7471A		1			211164	04/20/17 08:40	DDE	TAL HOU

Client Sample ID: SJRP-TB-04122017

Lab Sample ID: 600-146714-5

Date Collected: 04/12/17 14:00
Date Received: 04/14/17 09:02

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	210901	04/17/17 17:18	KLV	TAL HOU

Client Sample ID: SJRP-EB-04122017

Lab Sample ID: 600-146714-6

Date Collected: 04/12/17 18:45
Date Received: 04/14/17 09:02

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	210901	04/17/17 17:46	KLV	TAL HOU
Total/NA	Analysis	8015C		1	5 mL	5 mL	423531	04/20/17 16:05	A1B	TAL NSH
Total/NA	Prep	3510C			240 mL	1 mL	423458	04/19/17 17:17	SAT	TAL NSH
Total/NA	Analysis	8015C		1			423596	04/20/17 13:02	AK1	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	211063	04/19/17 09:24	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211106	04/19/17 17:56	DCL	TAL HOU
Total/NA	Prep	7470A			40 mL	40 mL	210899	04/17/17 11:57	DDE	TAL HOU
Total/NA	Analysis	7470A		1			210930	04/17/17 14:21	DDE	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Laboratory: TestAmerica Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	16-046-0	08-04-17
Louisiana	NELAP	6	01967	06-30-17
Oklahoma	State Program	6	2015-050	08-31-17
Texas	NELAP	6	T104704223-17-21	10-31-17
USDA	Federal		P330-14-00192	06-06-17

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	A2LA		NA: NELAP & A2LA	12-31-17
A2LA	ISO/IEC 17025		0453.07	12-31-17
Alaska (UST)	State Program	10	UST-087	09-01-17
Arizona	State Program	9	AZ0473	05-05-17
Arkansas DEQ	State Program	6	88-0737	04-25-18
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-17
Florida	NELAP	4	E87358	06-30-17
Georgia	State Program	4	N/A	12-31-17
Illinois	NELAP	5	200010	12-09-17
Iowa	State Program	7	131	04-01-18
Kansas	NELAP	7	E-10229	10-31-17
Kentucky (UST)	State Program	4	19	06-30-17
Kentucky (WW)	State Program	4	90038	12-31-17
Louisiana	NELAP	6	30613	06-30-17
Maine	State Program	1	TN00032	11-03-17
Maryland	State Program	3	316	03-31-18
Massachusetts	State Program	1	M-TN032	06-30-17
Minnesota	NELAP	5	047-999-345	12-31-17
Mississippi	State Program	4	N/A	06-30-17
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-17
New Hampshire	NELAP	1	2963	10-09-17
New Jersey	NELAP	2	TN965	06-30-17
New York	NELAP	2	11342	03-31-18
North Carolina (WW/SW)	State Program	4	387	12-31-17
North Dakota	State Program	8	R-146	06-30-17
Ohio VAP	State Program	5	CL0033	07-10-17
Oklahoma	State Program	6	9412	08-31-17
Oregon	NELAP	10	TN200001	04-27-17 *
Pennsylvania	NELAP	3	68-00585	06-30-17
Rhode Island	State Program	1	LAO00268	12-30-17
South Carolina	State Program	4	84009 (001)	02-18-17 *
South Carolina (Do Not Use - DW)	State Program	4	84009 (002)	12-16-17
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-17
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-17
Virginia	NELAP	3	460152	06-14-17
Washington	State Program	10	C789	07-19-17

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Characterization

TestAmerica Job ID: 600-146714-1

Laboratory: TestAmerica Nashville (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
West Virginia DEP	State Program	3	219	02-28-18
Wisconsin	State Program	5	998020430	08-31-17
Wyoming (UST)	A2LA	8	453.07	12-31-17

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Katherine Mouzakis	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-52002-15345.10
Client Contact: Jeffrey Minchak	Phone: 9043816573	E-Mail: cathy.upton@testamericainc.com		Page: Page 10 of 10
Company: CH2M Hill, Inc.				Job #:

Address: 3721 Rutledge Rd. NE Suite B-1	Due Date Requested:
City: Albuquerque	TAT Requested (days):
State, Zip: NM, 87109	
Phone: 281-721-8546(Tel)	PO #: Purchase Order Requested
Email: Jeffrey.Minchak@ch2m.com	WO #: WD225383
Project Name: Kinder Morgan Bloomfield, NM San Juan	Project #: 60005961-Analysis group BTEX/GRO/DRO/Metals
Site: San Juan Site Characterization	SSOW#:

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO - Diesel and Oil Range Organics	8015C_GRO - GRO Range (C6-C10)	6010B, 7471A - NMWQCC List Metals	8260B - 5035 BTEX	Moisture	Waters	6010B, 7470A - NMWQCC List Metals	8260B_LL - BTEX Only	8015C_GRO - GRO Range (C6-C10)	8015C_DRO - Diesel and Oil Range Organics	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N		D	A	A	N		
SJRP-MW16-10-11-04122017	4/12/17	1418	G	Solid	N	N												
SJRP-MW16-14-15-04122017	4/12/17	1430	G	Solid	N	N												1 cooler
SJRP-SB02-13-14-04122017	4/12/17	1625	G	Solid	N	N												
SJRP-SB02-18-19-04122017	4/12/17	1635	G	Solid	N	N												
~~SJ~~			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
SJRP-TB-04122017	4/12/17	1400	G	Solid														
SJRP-EB-04122017	4/12/17	1845	G	Water									X	X	X	X		

600-146714 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☑ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 mo
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ I

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 4/13/2017/1630	Company	Received by:	Date/Time: 4/14/17	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston

Loc: 600

Sample Receipt C 146714

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Date/Time Received:

JOB NUMBER: _____ CLIENT: CH2

UNPACKED BY: _____ CARRIER/DRIVER: FE

Custody Seal Present: ☒ YES ☐ NO Number of Coolers Received: 1

'17 APR 14 9:02

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Them CF	Corrected Temp (°C)
BOX	Y / N	Y / N	1.1	075	0.0	0.5
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☒ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☐ YES ☐ NO

pH paper Lot #_____

VOA headspace acceptable (5-6mm): ☒ YES ☐ NO ☐ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?		

COMMENTS: FROZEN UNIT 10:00 AM

FedEx
TRK# 0221 6025 5771 6088
XH LKSA

FRI – 14 APR 10:30A
PRIORITY OVERNIGHT
77040
TX-US IAH

HS-SA-WI-013 Rev. 3; 07/01/2014

Page 635 of 1581

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-26483.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: cathy.upton@testamericainc.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):		Job #: 600-146714-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 4/26/2017			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: San Juan Characterization	Project #: 60005961			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8016C_DRO/3550C DRO/ORO	8016C_GRO/5030B_H Standard GRO Range (C6-C10)	8016C_DRO/3510C_LVI DRO/ORO	8015C_GRO/5030B GRO Range (C6-C10)	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
SJRP-MW16-10-11-04122017 (600-146714-1)	4/12/17	14:18 Central		Solid			X	X			2	
SJRP-MW16-14-15-04122017 (600-146714-2)	4/12/17	14:30 Central		Solid			X	X			2	
SJRP-SB02-13-14-04122017 (600-146714-3)	4/12/17	16:25 Central		Solid			X	X			2	
SJRP-SB02-18-19-04122017 (600-146714-4)	4/12/17	16:35 Central		Solid			X	X			2	
SJRP-EB-04122017 (600-146714-6)	4/12/17	18:45 Central		Water					X	X	5	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:	
Relinquished by:	Date/Time: 4/17/17 1415	Company	Received by:	Date/Time: 4-18-17 0908	Company TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.2

12/7/2020 (Rev. 1)

Received by OCD: 11/13/2025 11:14:36 AM

Released to Imaging: 11/14/2025 9:30:04 AM

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

Loc: 600
146714

COOLER RECEIPT FORM

Cooler Received/Opened On 4/18/2017 @ 0908

Time Samples Removed From Cooler 1232 Time Samples Placed In Storage_____ (2 Hour Window)

1. Tracking #_____7280_____(last 4 digits, FedEx) Courier: _FedEx_

IR Gun ID_160406069_ pH Strip Lot_____ Chlorine Strip Lot_____

2. Temperature of rep. sample or temp blank when opened: 3.2 Degrees Celsius

3. If Item #2 temperatures is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) _____

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (initial) _____

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) DA

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) DA

I certify that I attached a label with the unique LIMS number to each container (initial) DA

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 12/15/15

12/7/2020 (Rev. 1)

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc. Job Number: 600-146714-1

Login Number: 146714 **List Source: TestAmerica Houston**
List Number: 1
Creator: Crafton, Tommie S

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-146714-1

Login Number: 146714
List Number: 2
Creator: Armstrong, Daniel

List Source: TestAmerica Nashville
List Creation: 04/18/17 06:25 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.2C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-146714-1

Login Number: 146714
List Number: 3
Creator: Armstrong, Daniel

List Source: TestAmerica Nashville
List Creation: 04/18/17 06:36 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.2C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-146872-1
Client Project/Site: San Juan Site Characterization
Revision: 1

For:
CH2M Hill Constructors, Inc.
14701 St. Mary's Lane
Suite 300
Houston, Texas 77079-2923

Attn: Mr. John Ynfante

Steve A Stepanski

Authorized for release by:
12/7/2020 4:41:33 PM
Steve Stepanski, Project Mgmt. Assistant
(713)690-4444
steve.stepanski@Eurofinset.com

Designee for

Cathy Upton, Project Manager I
(713)690-4444
cathy.upton@testamericainc.com

LINKS
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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-146872-1
Project/Site: San Juan Site Characterization

Job ID: 600-146872-1

Laboratory: TestAmerica Houston

Narrative

CASE NARRATIVE

Client: CH2M Hill Constructors, Inc.

Project: San Juan Site Characterization

Report Number: 600-146872-1

COMMENTS
This report was revised to a Level 2 deliverable per client's request.

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
Note: All samples that require thermal preservation are considered acceptable if the arrival temperature is within 2°C of the required temperature or method specified range. For samples with a specified temperature of 4°C, samples with a temperature ranging from just above freezing temperature of water to 6°C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

The samples were received on 04/19/2017; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.5º C and 3.5º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)-Soil
Samples SJRP-SB15-1-2-04172017 (600-146872-1), SJRP-SB04-1-2-04172017 (600-146872-2), SJRP-MW16-1-2-04172017 (600-146872-3), SJRP-SB08-1-2-04182017 (600-146872-4), SJRP-SB05-1-2-04182017 (600-146872-5) and SJRP-SB05-1-2-04182017-2 (600-146872-6) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were prepared and analyzed on 04/19/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GC-MS)-Water
Samples SJRP-TB-04172017 (600-146872-7) and SJRP-EB-04172017 (600-146872-8) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/20/2017.

The following volatile sample was analyzed with significant headspace in the sample vial(s): SJRP-TB-04172017 (600-146872-7). Significant headspace is defined as a bubble greater than 6 mm in diameter.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-146872-1
Project/Site: San Juan Site Characterization

Job ID: 600-146872-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

GASOLINE RANGE ORGANICS (GRO)-Soil

Samples SJRP-SB15-1-2-04172017 (600-146872-1), SJRP-SB04-1-2-04172017 (600-146872-2), SJRP-MW16-1-2-04172017 (600-146872-3), SJRP-SB08-1-2-04182017 (600-146872-4), SJRP-SB05-1-2-04182017 (600-146872-5) and SJRP-SB05-1-2-04182017-2 (600-146872-6) were analyzed for gasoline range organics (GRO) in accordance with EPA SW-846 Method 8015C - GRO. The samples were analyzed on 04/27/2017.

Gasoline Range Organics (GRO)-C6-C10 failed the recovery criteria low for the MS/MSD of sample SJRP-SB08-1-2-04182017 (600-146872-4) in batch 490-425527. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) were within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GASOLINE RANGE ORGANICS (GRO)-Water

Sample SJRP-EB-04172017 (600-146872-8) was analyzed for gasoline range organics (GRO) in accordance with 8015C GRO. The samples were analyzed on 04/22/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DIESEL RANGE ORGANICS (DRO)-Soil

Samples SJRP-SB15-1-2-04172017 (600-146872-1), SJRP-SB04-1-2-04172017 (600-146872-2), SJRP-MW16-1-2-04172017 (600-146872-3), SJRP-SB08-1-2-04182017 (600-146872-4), SJRP-SB05-1-2-04182017 (600-146872-5) and SJRP-SB05-1-2-04182017-2 (600-146872-6) were analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 04/24/2017 and analyzed on 04/25/2017.

o-Terphenyl (Surr) failed the surrogate recovery criteria low for SJRP-SB08-1-2-04182017MS (600-146872-4MS). The parent sample's surrogate recovery was within limits. The MS sample has been qualified and reported.

Refer to the QC report for details.

Diesel Range Organics [C10-C28] exceeded the RPD limit for the MSD of sample SJRP-SB08-1-2-04182017MSD (600-146872-4) in batch 490-424776.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DIESEL RANGE ORGANICS (DRO)-Water

Sample SJRP-EB-04172017 (600-146872-8) was analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 04/22/2017 and analyzed on 04/24/2017.

o-Terphenyl (Surr) failed the surrogate recovery criteria low for LCS 490-424318/2-A. All LCS spike analytes and sample surrogate recoveries were within control limits; therefore, the data has been qualified and reported.

Refer to the QC report for details.

Diesel Range Organics [C10-C28] exceeded the RPD limit for LCSD 490-424318/3-A.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)-Soil

Samples SJRP-SB15-1-2-04172017 (600-146872-1), SJRP-SB04-1-2-04172017 (600-146872-2), SJRP-MW16-1-2-04172017 (600-146872-3), SJRP-SB08-1-2-04182017 (600-146872-4), SJRP-SB05-1-2-04182017 (600-146872-5) and SJRP-SB05-1-2-04182017-2 (600-146872-6) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-146872-1
Project/Site: San Juan Site Characterization

Job ID: 600-146872-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

samples were prepared on 04/26/2017 and 04/28/2017 and analyzed on 04/27/2017 and 04/28/2017.

Aluminum, Barium, Chromium, Manganese and Nickel were detected in method blank MB 600-211612/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Sodium was detected in method blank MB 600-211759/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

Due to the high concentration of target analytes, sample SJRP-SB08-1-2-04182017MS (600-146872-4) in batch 600-211709 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

The continuing calibration blank (CCB) in analytical batch 211796 contained Molybdenum above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

Samples SJRP-SB15-1-2-04172017 (600-146872-1)[5X], SJRP-SB08-1-2-04182017 (600-146872-4)[5X] and SJRP-SB05-1-2-04182017-2 (600-146872-6)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)-Water

Sample SJRP-EB-04172017 (600-146872-8) was analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 04/20/2017 and analyzed on 04/21/2017.

Molybdenum and Sodium were detected in method blank MB 600-211225/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY-Soil

Samples SJRP-SB15-1-2-04172017 (600-146872-1), SJRP-SB04-1-2-04172017 (600-146872-2), SJRP-MW16-1-2-04172017 (600-146872-3), SJRP-SB08-1-2-04182017 (600-146872-4), SJRP-SB05-1-2-04182017 (600-146872-5) and SJRP-SB05-1-2-04182017-2 (600-146872-6) were analyzed for total mercury in accordance with EPA SW-846 Method 7471A. The samples were prepared on 04/20/2017 and analyzed on 04/21/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY-Water

Sample SJRP-EB-04172017 (600-146872-8) was analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 04/20/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-146872-1
Project/Site: San Juan Site Characterization

Job ID: 600-146872-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

PERCENT SOLIDS

Samples SJRP-SB15-1-2-04172017 (600-146872-1), SJRP-SB04-1-2-04172017 (600-146872-2), SJRP-MW16-1-2-04172017 (600-146872-3), SJRP-SB08-1-2-04182017 (600-146872-4), SJRP-SB05-1-2-04182017 (600-146872-5) and SJRP-SB05-1-2-04182017-2 (600-146872-6) were analyzed for percent solids in accordance with EPA SW846 Method 3550C. The samples were analyzed on 04/19/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

Method(s) 3510C: The following sample formed emulsions during the extraction procedure: SJRP-EB-04172017 (600-146872-8). The emulsions were broken up using centrifugation

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL NSH
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL NSH
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU

Protocol References:

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-146872-1	SJRP-SB15-1-2-04172017	Solid	04/17/17 13:10	04/19/17 10:12
600-146872-2	SJRP-SB04-1-2-04172017	Solid	04/17/17 16:20	04/19/17 10:12
600-146872-3	SJRP-MW16-1-2-04172017	Solid	04/17/17 16:55	04/19/17 10:12
600-146872-4	SJRP-SB08-1-2-04182017	Solid	04/18/17 09:00	04/19/17 10:12
600-146872-5	SJRP-SB05-1-2-04182017	Solid	04/18/17 10:30	04/19/17 10:12
600-146872-6	SJRP-SB05-1-2-04182017-2	Solid	04/18/17 10:30	04/19/17 10:12
600-146872-7	SJRP-TB-04172017	Water	04/17/17 12:00	04/19/17 10:12
600-146872-8	SJRP-EB-04172017	Water	04/17/17 13:45	04/19/17 10:12

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Client Sample ID: SJRP-SB15-1-2-04172017
Date Collected: 04/17/17 13:10
Date Received: 04/19/17 10:12

Lab Sample ID: 600-146872-1
Matrix: Solid
Percent Solids: 84.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000691	U	0.00548	0.000691	mg/Kg	☼	04/19/17 11:30	04/19/17 16:53	1
Ethylbenzene	0.00112	U	0.00548	0.00112	mg/Kg	☼	04/19/17 11:30	04/19/17 16:53	1
Toluene	0.00151	U	0.00548	0.00151	mg/Kg	☼	04/19/17 11:30	04/19/17 16:53	1
Xylenes, Total	0.00124	U	0.00548	0.00124	mg/Kg	☼	04/19/17 11:30	04/19/17 16:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*64*		*61 - 130*	*04/19/17 11:30*	*04/19/17 16:53*	*1*
Dibromofluoromethane	*72*		*68 - 140*	*04/19/17 11:30*	*04/19/17 16:53*	*1*
Toluene-d8 (Surr)	*89*		*50 - 130*	*04/19/17 11:30*	*04/19/17 16:53*	*1*
4-Bromofluorobenzene	*102*		*57 - 140*	*04/19/17 11:30*	*04/19/17 16:53*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.18	U	6.37	3.18	mg/Kg	☼	04/24/17 13:21	04/27/17 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*56*		*50 - 150*	*04/24/17 13:21*	*04/27/17 18:04*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.95	U	5.89	2.95	mg/Kg	☼	04/24/17 12:01	04/25/17 16:05	1
ORO C24-C40	**3.52**	**J**	5.89	2.95	mg/Kg	☼	04/24/17 12:01	04/25/17 16:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*81*		*50 - 150*	*04/24/17 12:01*	*04/25/17 16:05*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**13900**	**B**	25.6	0.307	mg/Kg	☼	04/26/17 13:50	04/27/17 14:07	1
Arsenic	**4.25**		1.02	0.223	mg/Kg	☼	04/26/17 13:50	04/27/17 14:07	1
Barium	**83.4**	**B**	1.02	0.0307	mg/Kg	☼	04/26/17 13:50	04/27/17 14:07	1
Boron	**4.56**	**J**	20.4	0.395	mg/Kg	☼	04/26/17 13:50	04/27/17 14:07	1
Cadmium	**0.210**	**J**	0.256	0.0262	mg/Kg	☼	04/26/17 13:50	04/27/17 14:07	1
Calcium	**10300**		102	0.883	mg/Kg	☼	04/26/17 13:50	04/27/17 14:07	1
Chromium	**7.54**	**B**	0.511	0.0517	mg/Kg	☼	04/26/17 13:50	04/27/17 14:07	1
Cobalt	**5.64**		0.511	0.0691	mg/Kg	☼	04/26/17 13:50	04/27/17 14:07	1
Iron	**15800**		20.4	2.59	mg/Kg	☼	04/26/17 13:50	04/27/17 14:07	1
Lead	**10.4**		0.511	0.107	mg/Kg	☼	04/26/17 13:50	04/27/17 14:07	1
Magnesium	**4730**		102	1.96	mg/Kg	☼	04/26/17 13:50	04/27/17 14:07	1
Manganese	**292**	**B**	1.53	0.0389	mg/Kg	☼	04/26/17 13:50	04/27/17 14:07	1
Molybdenum	**3.61**	**B**	0.587	0.160	mg/Kg	☼	04/28/17 09:38	04/28/17 16:50	1
Nickel	**10.9**	**B**	1.02	0.120	mg/Kg	☼	04/26/17 13:50	04/27/17 14:07	1
Potassium	**1350**		102	11.2	mg/Kg	☼	04/26/17 13:50	04/27/17 14:07	1
Selenium	0.265	U	2.04	0.265	mg/Kg	☼	04/26/17 13:50	04/27/17 14:07	1
Sodium	**11700**	**B**	511	4.53	mg/Kg	☼	04/26/17 13:50	04/27/17 17:45	5

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0108**	**J**	0.0198	0.00418	mg/Kg	☼	04/20/17 13:54	04/21/17 08:59	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Client Sample ID: SJRP-SB15-1-2-04172017

Lab Sample ID: 600-146872-1
Date Collected: 04/17/17 13:10
Matrix: Solid
Date Received: 04/19/17 10:12
Percent Solids: 84.3

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.7		1.0	1.0	%			04/19/17 17:19	1
Percent Solids	84.3		1.0	1.0	%			04/19/17 17:19	1

Client Sample ID: SJRP-SB04-1-2-04172017

Lab Sample ID: 600-146872-2
Date Collected: 04/17/17 16:20
Matrix: Solid
Date Received: 04/19/17 10:12
Percent Solids: 84.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000695	U	0.00552	0.000695	mg/Kg	☼	04/19/17 11:30	04/19/17 17:17	1
Ethylbenzene	0.00113	U	0.00552	0.00113	mg/Kg	☼	04/19/17 11:30	04/19/17 17:17	1
Toluene	0.00152	U	0.00552	0.00152	mg/Kg	☼	04/19/17 11:30	04/19/17 17:17	1
Xylenes, Total	0.00125	U	0.00552	0.00125	mg/Kg	☼	04/19/17 11:30	04/19/17 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*71*		*61 - 130*	*04/19/17 11:30*	*04/19/17 17:17*	*1*
Dibromofluoromethane	*80*		*68 - 140*	*04/19/17 11:30*	*04/19/17 17:17*	*1*
Toluene-d8 (Surr)	*88*		*50 - 130*	*04/19/17 11:30*	*04/19/17 17:17*	*1*
4-Bromofluorobenzene	*103*		*57 - 140*	*04/19/17 11:30*	*04/19/17 17:17*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.26	U	6.51	3.26	mg/Kg	☼	04/24/17 13:21	04/27/17 18:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*57*		*50 - 150*	*04/24/17 13:21*	*04/27/17 18:34*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	4.51	J	5.89	2.95	mg/Kg	☼	04/24/17 12:01	04/25/17 16:21	1
ORO C24-C40	4.72	J	5.89	2.95	mg/Kg	☼	04/24/17 12:01	04/25/17 16:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*90*		*50 - 150*	*04/24/17 12:01*	*04/25/17 16:21*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	13900	B	26.1	0.313	mg/Kg	☼	04/26/17 13:50	04/27/17 14:09	1
Arsenic	3.95		1.04	0.227	mg/Kg	☼	04/26/17 13:50	04/27/17 14:09	1
Barium	147	B	1.04	0.0313	mg/Kg	☼	04/26/17 13:50	04/27/17 14:09	1
Boron	2.08	J	20.8	0.402	mg/Kg	☼	04/26/17 13:50	04/27/17 14:09	1
Cadmium	0.182	J	0.261	0.0267	mg/Kg	☼	04/26/17 13:50	04/27/17 14:09	1
Calcium	13800		104	0.900	mg/Kg	☼	04/26/17 13:50	04/27/17 14:09	1
Chromium	7.17	B	0.521	0.0527	mg/Kg	☼	04/26/17 13:50	04/27/17 14:09	1
Cobalt	8.16		0.521	0.0704	mg/Kg	☼	04/26/17 13:50	04/27/17 14:09	1
Iron	16800		20.8	2.64	mg/Kg	☼	04/26/17 13:50	04/27/17 14:09	1
Lead	9.99		0.521	0.109	mg/Kg	☼	04/26/17 13:50	04/27/17 14:09	1
Magnesium	4600		104	2.00	mg/Kg	☼	04/26/17 13:50	04/27/17 14:09	1
Manganese	512	B	1.56	0.0397	mg/Kg	☼	04/26/17 13:50	04/27/17 14:09	1
Molybdenum	1.06	B	0.571	0.155	mg/Kg	☼	04/28/17 09:38	04/28/17 16:52	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Client Sample ID: SJRP-SB04-1-2-04172017

Lab Sample ID: 600-146872-2
Date Collected: 04/17/17 16:20
Matrix: Solid
Date Received: 04/19/17 10:12
Percent Solids: 84.2

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	11.0	B	1.04	0.122	mg/Kg	☼	04/26/17 13:50	04/27/17 14:09	1
Potassium	1680		104	11.5	mg/Kg	☼	04/26/17 13:50	04/27/17 14:09	1
Selenium	0.339	J	2.08	0.270	mg/Kg	☼	04/26/17 13:50	04/27/17 14:09	1
Sodium	10400		104	0.923	mg/Kg	☼	04/26/17 13:50	04/27/17 14:09	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0113	J	0.0186	0.00393	mg/Kg	☼	04/20/17 13:54	04/21/17 09:02	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.8		1.0	1.0	%			04/19/17 17:19	1
Percent Solids	84.2		1.0	1.0	%			04/19/17 17:19	1

Client Sample ID: SJRP-MW16-1-2-04172017

Lab Sample ID: 600-146872-3
Date Collected: 04/17/17 16:55
Matrix: Solid
Date Received: 04/19/17 10:12
Percent Solids: 88.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000837	U	0.00665	0.000837	mg/Kg	☼	04/19/17 11:30	04/19/17 17:42	1
Ethylbenzene	0.00136	U	0.00665	0.00136	mg/Kg	☼	04/19/17 11:30	04/19/17 17:42	1
Toluene	0.00183	U	0.00665	0.00183	mg/Kg	☼	04/19/17 11:30	04/19/17 17:42	1
Xylenes, Total	0.00150	U	0.00665	0.00150	mg/Kg	☼	04/19/17 11:30	04/19/17 17:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*66*		*61 - 130*	*04/19/17 11:30*	*04/19/17 17:42*	*1*
Dibromofluoromethane	*78*		*68 - 140*	*04/19/17 11:30*	*04/19/17 17:42*	*1*
Toluene-d8 (Surr)	*87*		*50 - 130*	*04/19/17 11:30*	*04/19/17 17:42*	*1*
4-Bromofluorobenzene	*97*		*57 - 140*	*04/19/17 11:30*	*04/19/17 17:42*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.08	U	6.16	3.08	mg/Kg	☼	04/24/17 13:21	04/27/17 19:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*57*		*50 - 150*	*04/24/17 13:21*	*04/27/17 19:04*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	12.7		5.54	2.77	mg/Kg	☼	04/24/17 12:01	04/25/17 16:38	1
ORO C24-C40	12.6		5.54	2.77	mg/Kg	☼	04/24/17 12:01	04/25/17 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*76*		*50 - 150*	*04/24/17 12:01*	*04/25/17 16:38*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	14700	B	24.3	0.292	mg/Kg	☼	04/26/17 13:50	04/27/17 14:12	1
Arsenic	4.56		0.974	0.212	mg/Kg	☼	04/26/17 13:50	04/27/17 14:12	1
Barium	119	B	0.974	0.0292	mg/Kg	☼	04/26/17 13:50	04/27/17 14:12	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Client Sample ID: SJRP-MW16-1-2-04172017

Lab Sample ID: 600-146872-3
Date Collected: 04/17/17 16:55
Matrix: Solid
Date Received: 04/19/17 10:12
Percent Solids: 88.5

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2.84	J	19.5	0.376	mg/Kg	☼	04/26/17 13:50	04/27/17 14:12	1
Cadmium	0.170	J	0.243	0.0249	mg/Kg	☼	04/26/17 13:50	04/27/17 14:12	1
Calcium	3850		97.4	0.841	mg/Kg	☼	04/26/17 13:50	04/27/17 14:12	1
Chromium	7.74	B	0.487	0.0493	mg/Kg	☼	04/26/17 13:50	04/27/17 14:12	1
Cobalt	7.26		0.487	0.0658	mg/Kg	☼	04/26/17 13:50	04/27/17 14:12	1
Iron	16200		19.5	2.46	mg/Kg	☼	04/26/17 13:50	04/27/17 14:12	1
Lead	11.0		0.487	0.102	mg/Kg	☼	04/26/17 13:50	04/27/17 14:12	1
Magnesium	5130		97.4	1.87	mg/Kg	☼	04/26/17 13:50	04/27/17 14:12	1
Manganese	256	B	1.46	0.0371	mg/Kg	☼	04/26/17 13:50	04/27/17 14:12	1
Molybdenum	1.20	B	0.554	0.151	mg/Kg	☼	04/28/17 09:38	04/28/17 16:54	1
Nickel	10.7	B	0.974	0.114	mg/Kg	☼	04/26/17 13:50	04/27/17 14:12	1
Potassium	1470		97.4	10.7	mg/Kg	☼	04/26/17 13:50	04/27/17 14:12	1
Selenium	0.252	U	1.95	0.252	mg/Kg	☼	04/26/17 13:50	04/27/17 14:12	1
Sodium	8470		97.4	0.863	mg/Kg	☼	04/26/17 13:50	04/27/17 14:12	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0164	J	0.0186	0.00391	mg/Kg	☼	04/20/17 13:54	04/21/17 09:03	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	11.5		1.0	1.0	%			04/19/17 17:19	1
Percent Solids	88.5		1.0	1.0	%			04/19/17 17:19	1

Client Sample ID: SJRP-SB08-1-2-04182017

Lab Sample ID: 600-146872-4
Date Collected: 04/18/17 09:00
Matrix: Solid
Date Received: 04/19/17 10:12
Percent Solids: 77.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000734	U	0.00583	0.000734	mg/Kg	☼	04/19/17 11:30	04/19/17 18:06	1
Ethylbenzene	0.00119	U	0.00583	0.00119	mg/Kg	☼	04/19/17 11:30	04/19/17 18:06	1
Toluene	0.00161	U	0.00583	0.00161	mg/Kg	☼	04/19/17 11:30	04/19/17 18:06	1
Xylenes, Total	0.00132	U	0.00583	0.00132	mg/Kg	☼	04/19/17 11:30	04/19/17 18:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*66*		*61 - 130*	*04/19/17 11:30*	*04/19/17 18:06*	*1*
Dibromofluoromethane	*76*		*68 - 140*	*04/19/17 11:30*	*04/19/17 18:06*	*1*
Toluene-d8 (Surr)	*89*		*50 - 130*	*04/19/17 11:30*	*04/19/17 18:06*	*1*
4-Bromofluorobenzene	*102*		*57 - 140*	*04/19/17 11:30*	*04/19/17 18:06*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.80	U F2 F1	7.59	3.80	mg/Kg	☼	04/24/17 13:21	04/27/17 19:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*52*		*50 - 150*	*04/24/17 13:21*	*04/27/17 19:34*	*1*

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Client Sample ID: SJRP-SB08-1-2-04182017

Lab Sample ID: 600-146872-4
Date Collected: 04/18/17 09:00
Matrix: Solid
Date Received: 04/19/17 10:12
Percent Solids: 77.7

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	5.27	J F2	6.30	3.15	mg/Kg	☼	04/24/17 12:01	04/25/17 16:54	1
ORO C24-C40	4.59	J	6.30	3.15	mg/Kg	☼	04/24/17 12:01	04/25/17 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*78*		*50 - 150*	*04/24/17 12:01*	*04/25/17 16:54*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	14300	B	30.7	0.368	mg/Kg	☼	04/26/17 13:50	04/27/17 14:14	1
Arsenic	5.17	F1	1.23	0.267	mg/Kg	☼	04/26/17 13:50	04/27/17 14:14	1
Barium	80.6	F1 B	1.23	0.0368	mg/Kg	☼	04/26/17 13:50	04/27/17 14:14	1
Boron	0.473	U F1	24.5	0.473	mg/Kg	☼	04/26/17 13:50	04/27/17 14:14	1
Cadmium	0.129	J F1	0.307	0.0314	mg/Kg	☼	04/26/17 13:50	04/27/17 14:14	1
Calcium	2770	F2 F1	123	1.06	mg/Kg	☼	04/26/17 13:50	04/27/17 14:14	1
Chromium	7.47	B F1	0.613	0.0620	mg/Kg	☼	04/26/17 13:50	04/27/17 14:14	1
Cobalt	6.78	F1	0.613	0.0829	mg/Kg	☼	04/26/17 13:50	04/27/17 14:14	1
Iron	21900		24.5	3.10	mg/Kg	☼	04/26/17 13:50	04/27/17 14:14	1
Lead	19.5	F1	0.613	0.129	mg/Kg	☼	04/26/17 13:50	04/27/17 14:14	1
Magnesium	4460		123	2.35	mg/Kg	☼	04/26/17 13:50	04/27/17 14:14	1
Manganese	73.0	B F1	1.84	0.0467	mg/Kg	☼	04/26/17 13:50	04/27/17 14:14	1
Molybdenum	0.753	B	0.625	0.170	mg/Kg	☼	04/28/17 09:42	04/28/17 16:56	1
Nickel	9.19	B F1	1.23	0.143	mg/Kg	☼	04/26/17 13:50	04/27/17 14:14	1
Potassium	1560	F1	123	13.5	mg/Kg	☼	04/26/17 13:50	04/27/17 14:14	1
Selenium	0.318	U F1	2.45	0.318	mg/Kg	☼	04/26/17 13:50	04/27/17 14:14	1
Sodium	17400	B	613	5.43	mg/Kg	☼	04/26/17 13:50	04/27/17 17:47	5

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00663	J	0.0219	0.00461	mg/Kg	☼	04/20/17 13:54	04/21/17 09:05	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22.3		1.0	1.0	%			04/19/17 17:19	1
Percent Solids	77.7		1.0	1.0	%			04/19/17 17:19	1

Client Sample ID: SJRP-SB05-1-2-04182017

Lab Sample ID: 600-146872-5
Date Collected: 04/18/17 10:30
Matrix: Solid
Date Received: 04/19/17 10:12
Percent Solids: 84.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000754	U	0.00598	0.000754	mg/Kg	☼	04/19/17 11:30	04/19/17 19:19	1
Ethylbenzene	0.00122	U	0.00598	0.00122	mg/Kg	☼	04/19/17 11:30	04/19/17 19:19	1
Toluene	0.00165	U	0.00598	0.00165	mg/Kg	☼	04/19/17 11:30	04/19/17 19:19	1
Xylenes, Total	0.00135	U	0.00598	0.00135	mg/Kg	☼	04/19/17 11:30	04/19/17 19:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*69*		*61 - 130*	*04/19/17 11:30*	*04/19/17 19:19*	*1*
Dibromofluoromethane	*75*		*68 - 140*	*04/19/17 11:30*	*04/19/17 19:19*	*1*
Toluene-d8 (Surr)	*81*		*50 - 130*	*04/19/17 11:30*	*04/19/17 19:19*	*1*
4-Bromofluorobenzene	*99*		*57 - 140*	*04/19/17 11:30*	*04/19/17 19:19*	*1*

TestAmerica Houston

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.41	U	6.81	3.41	mg/Kg	☼	04/24/17 13:21	04/27/17 20:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*51*		*50 - 150*	*04/24/17 13:21*	*04/27/17 20:04*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	6.66		5.82	2.91	mg/Kg	☼	04/24/17 12:01	04/25/17 17:43	1
ORO C24-C40	5.76	J	5.82	2.91	mg/Kg	☼	04/24/17 12:01	04/25/17 17:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*93*		*50 - 150*	*04/24/17 12:01*	*04/25/17 17:43*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	14200		29.0	0.348	mg/Kg	☼	04/28/17 09:38	04/28/17 16:48	1
Arsenic	60.4		1.15	0.251	mg/Kg	☼	04/26/17 13:50	04/27/17 15:05	1
Barium	121	B	1.15	0.0345	mg/Kg	☼	04/26/17 13:50	04/27/17 15:05	1
Boron	55.4		23.0	0.444	mg/Kg	☼	04/26/17 13:50	04/27/17 15:05	1
Cadmium	28.1		0.287	0.0294	mg/Kg	☼	04/26/17 13:50	04/27/17 15:05	1
Calcium	3240		115	0.993	mg/Kg	☼	04/26/17 13:50	04/27/17 15:05	1
Chromium	7.80		0.580	0.0587	mg/Kg	☼	04/28/17 09:38	04/28/17 16:48	1
Cobalt	63.4		0.575	0.0777	mg/Kg	☼	04/26/17 13:50	04/27/17 15:05	1
Iron	18800		23.2	2.94	mg/Kg	☼	04/28/17 09:38	04/28/17 16:48	1
Lead	73.3		0.575	0.121	mg/Kg	☼	04/26/17 13:50	04/27/17 15:05	1
Magnesium	4760		115	2.21	mg/Kg	☼	04/26/17 13:50	04/27/17 15:05	1
Manganese	119	B	1.72	0.0438	mg/Kg	☼	04/26/17 13:50	04/27/17 15:05	1
Molybdenum	2.60	B	0.580	0.158	mg/Kg	☼	04/28/17 09:38	04/28/17 16:48	1
Nickel	7.71		1.16	0.136	mg/Kg	☼	04/28/17 09:38	04/28/17 16:48	1
Potassium	2020		115	12.6	mg/Kg	☼	04/26/17 13:50	04/27/17 15:05	1
Selenium	56.6		2.30	0.298	mg/Kg	☼	04/26/17 13:50	04/27/17 15:05	1
Sodium	10500	B	115	1.02	mg/Kg	☼	04/28/17 09:48	04/28/17 17:07	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0354		0.0195	0.00410	mg/Kg	☼	04/20/17 13:54	04/21/17 09:13	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.5		1.0	1.0	%			04/19/17 17:19	1
Percent Solids	84.5		1.0	1.0	%			04/19/17 17:19	1

Client Sample ID: SJRP-SB05-1-2-04182017-2 — **Lab Sample ID: 600-146872-6**
Date Collected: 04/18/17 10:30 — **Matrix: Solid**
Date Received: 04/19/17 10:12 — **Percent Solids: 85.4**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000810	U	0.00643	0.000810	mg/Kg	☼	04/19/17 11:30	04/19/17 19:43	1
Ethylbenzene	0.00131	U	0.00643	0.00131	mg/Kg	☼	04/19/17 11:30	04/19/17 19:43	1
Toluene	0.00177	U	0.00643	0.00177	mg/Kg	☼	04/19/17 11:30	04/19/17 19:43	1
Xylenes, Total	0.00145	U	0.00643	0.00145	mg/Kg	☼	04/19/17 11:30	04/19/17 19:43	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Client Sample ID: SJRP-SB05-1-2-04182017-2
Date Collected: 04/18/17 10:30
Date Received: 04/19/17 10:12

Lab Sample ID: 600-146872-6
Matrix: Solid
Percent Solids: 85.4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*70*		*61 - 130*	*04/19/17 11:30*	*04/19/17 19:43*	*1*
Dibromofluoromethane	*77*		*68 - 140*	*04/19/17 11:30*	*04/19/17 19:43*	*1*
Toluene-d8 (Surr)	*88*		*50 - 130*	*04/19/17 11:30*	*04/19/17 19:43*	*1*
4-Bromofluorobenzene	*101*		*57 - 140*	*04/19/17 11:30*	*04/19/17 19:43*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.26	U	6.52	3.26	mg/Kg	☼	04/24/17 13:21	04/27/17 20:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*61*		*50 - 150*	*04/24/17 13:21*	*04/27/17 20:34*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**10.9**		5.72	2.86	mg/Kg	☼	04/24/17 12:01	04/25/17 18:16	1
ORO C24-C40	**5.51**	**J**	5.72	2.86	mg/Kg	☼	04/24/17 12:01	04/25/17 18:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*90*		*50 - 150*	*04/24/17 12:01*	*04/25/17 18:16*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**16100**	**B**	141	1.69	mg/Kg	☼	04/26/17 13:50	04/27/17 17:59	5
Arsenic	**7.48**		1.13	0.245	mg/Kg	☼	04/26/17 13:50	04/27/17 14:27	1
Barium	**114**	**B**	1.13	0.0338	mg/Kg	☼	04/26/17 13:50	04/27/17 14:27	1
Boron	**2.54**	**J**	22.5	0.435	mg/Kg	☼	04/26/17 13:50	04/27/17 14:27	1
Cadmium	**0.203**	**J**	0.281	0.0288	mg/Kg	☼	04/26/17 13:50	04/27/17 14:27	1
Calcium	**26400**		113	0.973	mg/Kg	☼	04/26/17 13:50	04/27/17 14:27	1
Chromium	**8.84**	**B**	2.81	0.285	mg/Kg	☼	04/26/17 13:50	04/27/17 17:59	5
Cobalt	**6.89**		0.563	0.0761	mg/Kg	☼	04/26/17 13:50	04/27/17 14:27	1
Iron	**19100**		113	14.2	mg/Kg	☼	04/26/17 13:50	04/27/17 17:59	5
Lead	**13.1**		0.563	0.118	mg/Kg	☼	04/26/17 13:50	04/27/17 14:27	1
Magnesium	**5390**		113	2.16	mg/Kg	☼	04/26/17 13:50	04/27/17 14:27	1
Manganese	**191**	**B**	1.69	0.0429	mg/Kg	☼	04/26/17 13:50	04/27/17 14:27	1
Molybdenum	**2.06**	**B**	0.574	0.156	mg/Kg	☼	04/28/17 09:48	04/28/17 17:09	1
Nickel	**19.9**	**B**	5.63	0.659	mg/Kg	☼	04/26/17 13:50	04/27/17 17:59	5
Potassium	**1690**		113	12.4	mg/Kg	☼	04/26/17 13:50	04/27/17 14:27	1
Selenium	**1.00**	**J**	2.25	0.292	mg/Kg	☼	04/26/17 13:50	04/27/17 14:27	1
Sodium	**11900**	**B**	563	4.99	mg/Kg	☼	04/26/17 13:50	04/27/17 17:59	5

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0230**		0.0190	0.00399	mg/Kg	☼	04/20/17 13:54	04/21/17 09:19	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**14.6**		1.0	1.0	%			04/19/17 17:19	1
Percent Solids	**85.4**		1.0	1.0	%			04/19/17 17:19	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Client Sample ID: SJRP-TB-04172017

Lab Sample ID: 600-146872-7
Date Collected: 04/17/17 12:00
Matrix: Water
Date Received: 04/19/17 10:12

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/20/17 15:10	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/20/17 15:10	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/20/17 15:10	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/20/17 15:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*50 - 134*		*04/20/17 15:10*	*1*
Dibromofluoromethane	*82*		*62 - 130*		*04/20/17 15:10*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*04/20/17 15:10*	*1*
4-Bromofluorobenzene	*109*		*67 - 139*		*04/20/17 15:10*	*1*

Client Sample ID: SJRP-EB-04172017

Lab Sample ID: 600-146872-8
Date Collected: 04/17/17 13:45
Matrix: Water
Date Received: 04/19/17 10:12

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/20/17 15:39	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/20/17 15:39	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/20/17 15:39	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/20/17 15:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*50 - 134*		*04/20/17 15:39*	*1*
Dibromofluoromethane	*82*		*62 - 130*		*04/20/17 15:39*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*04/20/17 15:39*	*1*
4-Bromofluorobenzene	*104*		*67 - 139*		*04/20/17 15:39*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			04/22/17 12:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*133*		*50 - 150*		*04/22/17 12:12*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0827	U *	0.0909	0.0827	mg/L		04/22/17 15:41	04/24/17 12:48	1
ORO C24-C40	0.0827	U	0.0909	0.0827	mg/L		04/22/17 15:41	04/24/17 12:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*63*		*50 - 150*	*04/22/17 15:41*	*04/24/17 12:48*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		04/20/17 16:36	04/21/17 14:01	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		04/20/17 16:36	04/21/17 14:01	1
Barium	0.000530	U	0.0200	0.000530	mg/L		04/20/17 16:36	04/21/17 14:01	1
Boron	**0.0827**	**J**	0.200	0.0116	mg/L		04/20/17 16:36	04/21/17 14:01	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		04/20/17 16:36	04/21/17 14:01	1
Calcium	**0.117**	**J**	1.00	0.0240	mg/L		04/20/17 16:36	04/21/17 14:01	1

TestAmerica Houston

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Client Sample ID: SJRP-EB-04172017 **Lab Sample ID: 600-146872-8**
Date Collected: 04/17/17 13:45 **Matrix: Water**
Date Received: 04/19/17 10:12

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/20/17 16:36	04/21/17 14:01	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		04/20/17 16:36	04/21/17 14:01	1
Iron	0.0270	U	0.400	0.0270	mg/L		04/20/17 16:36	04/21/17 14:01	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/20/17 16:36	04/21/17 14:01	1
Magnesium	0.0555	U	1.00	0.0555	mg/L		04/20/17 16:36	04/21/17 14:01	1
Manganese	**0.000363**	**J**	0.0100	0.000360	mg/L		04/20/17 16:36	04/21/17 14:01	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		04/20/17 16:36	04/21/17 14:01	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		04/20/17 16:36	04/21/17 14:01	1
Potassium	0.0374	U	1.00	0.0374	mg/L		04/20/17 16:36	04/21/17 14:01	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/20/17 16:36	04/21/17 14:01	1
Sodium	**0.106**	**J B**	1.00	0.0214	mg/L		04/20/17 16:36	04/21/17 14:01	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000820	U	0.000200	0.0000820	mg/L		04/20/17 07:45	04/20/17 12:31	1

Definitions/Glossary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F2	MS/MSD RPD exceeds control limits
X	Surrogate is outside control limits
*	RPD of the LCS and LCSD exceeds the control limits

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	12DCE (61-130)	DBFM (68-140)	TOL (50-130)	BFB (57-140)
600-146872-1	SJRP-SB15-1-2-04172017	64	72	89	102
600-146872-2	SJRP-SB04-1-2-04172017	71	80	88	103
600-146872-3	SJRP-MW16-1-2-04172017	66	78	87	97
600-146872-4	SJRP-SB08-1-2-04182017	66	76	89	102
600-146872-4 MS	SJRP-SB08-1-2-04182017	68	81	97	109
600-146872-4 MSD	SJRP-SB08-1-2-04182017	73	83	97	103
600-146872-5	SJRP-SB05-1-2-04182017	69	75	81	99
600-146872-6	SJRP-SB05-1-2-04182017-2	70	77	88	101
LCS 600-211057/3	Lab Control Sample	75	84	101	109
LCSD 600-211057/4	Lab Control Sample Dup	78	81	97	113
MB 600-211057/6	Method Blank	82	79	81	100

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	12DCE (50-134)	DBFM (62-130)	TOL (70-130)	BFB (67-139)
600-146872-7	SJRP-TB-04172017	90	82	92	109
600-146872-8	SJRP-EB-04172017	90	82	93	104
LCS 600-211177/4	Lab Control Sample	87	83	90	103
LCSD 600-211177/5	Lab Control Sample Dup	88	85	91	104
MB 600-211177/7	Method Blank	88	83	95	108

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	TFT2 (50-150)
600-146872-1	SJRP-SB15-1-2-04172017	56
600-146872-2	SJRP-SB04-1-2-04172017	57
600-146872-3	SJRP-MW16-1-2-04172017	57
600-146872-4	SJRP-SB08-1-2-04182017	52
600-146872-4 MS	SJRP-SB08-1-2-04182017	51
600-146872-4 MSD	SJRP-SB08-1-2-04182017	64
600-146872-5	SJRP-SB05-1-2-04182017	51
600-146872-6	SJRP-SB05-1-2-04182017-2	61

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(50-150)
LCS 490-424627/2-A	Lab Control Sample	77
LCSD 490-424627/3-A	Lab Control Sample Dup	74
MB 490-424627/1-A	Method Blank	55

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(50-150)
600-146872-8	SJRP-EB-04172017	133
LCS 490-424212/5	Lab Control Sample	120
LCSD 490-424212/6	Lab Control Sample Dup	122
MB 490-424212/7	Method Blank	131

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		OTPH1
Lab Sample ID	Client Sample ID	(50-150)
600-146872-1	SJRP-SB15-1-2-04172017	81
600-146872-2	SJRP-SB04-1-2-04172017	90
600-146872-3	SJRP-MW16-1-2-04172017	76
600-146872-4	SJRP-SB08-1-2-04182017	78
600-146872-4 MS	SJRP-SB08-1-2-04182017	48 X
600-146872-4 MSD	SJRP-SB08-1-2-04182017	100
600-146872-5	SJRP-SB05-1-2-04182017	93
600-146872-6	SJRP-SB05-1-2-04182017-2	90
LCS 490-424615/2-A	Lab Control Sample	107
MB 490-424615/1-A	Method Blank	103

Surrogate Legend

OTPH = o-Terphenyl (Surr)

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		OTPH1
Lab Sample ID	Client Sample ID	(50-150)
600-146872-8	SJRP-EB-04172017	63
LCS 490-424318/2-A	Lab Control Sample	46 X

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		OTPH1							
Lab Sample ID	Client Sample ID	(50-150)							
LCSD 490-424318/3-A	Lab Control Sample Dup	71							
MB 490-424318/1-A	Method Blank	60							

Surrogate Legend

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-211057/6
Matrix: Solid
Analysis Batch: 211057

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			04/19/17 11:13	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			04/19/17 11:13	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			04/19/17 11:13	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			04/19/17 11:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*61 - 130*		*04/19/17 11:13*	*1*
Dibromofluoromethane	*79*		*68 - 140*		*04/19/17 11:13*	*1*
Toluene-d8 (Surr)	*81*		*50 - 130*		*04/19/17 11:13*	*1*
4-Bromofluorobenzene	*100*		*57 - 140*		*04/19/17 11:13*	*1*

Lab Sample ID: LCS 600-211057/3
Matrix: Solid
Analysis Batch: 211057

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.05986		mg/Kg		120	70 - 131		
Ethylbenzene			0.0500	0.05897		mg/Kg		118	66 - 130		
Toluene			0.0500	0.06055		mg/Kg		121	67 - 130		
Xylenes, Total			0.100	0.1157		mg/Kg		116	63 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*75*		*61 - 130*
Dibromofluoromethane	*84*		*68 - 140*
Toluene-d8 (Surr)	*101*		*50 - 130*
4-Bromofluorobenzene	*109*		*57 - 140*

Lab Sample ID: LCSD 600-211057/4
Matrix: Solid
Analysis Batch: 211057

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.05518		mg/Kg		110	70 - 131	8	30
Ethylbenzene			0.0500	0.05160		mg/Kg		103	66 - 130	13	30
Toluene			0.0500	0.05351		mg/Kg		107	67 - 130	12	30
Xylenes, Total			0.100	0.1004		mg/Kg		100	63 - 130	14	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*78*		*61 - 130*
Dibromofluoromethane	*81*		*68 - 140*
Toluene-d8 (Surr)	*97*		*50 - 130*
4-Bromofluorobenzene	*113*		*57 - 140*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 600-146872-4 MS — **Client Sample ID: SJRP-SB08-1-2-04182017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211057 — **Prep Batch: 211118**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.000734	U	0.0535	0.05508		mg/Kg	☼	103	70 - 131
Ethylbenzene	0.00119	U	0.0535	0.05207		mg/Kg	☼	97	66 - 130
Toluene	0.00161	U	0.0535	0.05311		mg/Kg	☼	99	67 - 130
Xylenes, Total	0.00132	U	0.107	0.1003		mg/Kg	☼	94	63 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*68*		*61 - 130*
Dibromofluoromethane	*81*		*68 - 140*
Toluene-d8 (Surr)	*97*		*50 - 130*
4-Bromofluorobenzene	*109*		*57 - 140*

Lab Sample ID: 600-146872-4 MSD — **Client Sample ID: SJRP-SB08-1-2-04182017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211057 — **Prep Batch: 211118**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.000734	U	0.0493	0.04466		mg/Kg	☼	91	70 - 131	21	30
Ethylbenzene	0.00119	U	0.0493	0.04108		mg/Kg	☼	83	66 - 130	24	30
Toluene	0.00161	U	0.0493	0.04324		mg/Kg	☼	88	67 - 130	20	30
Xylenes, Total	0.00132	U	0.0987	0.08138		mg/Kg	☼	82	63 - 130	21	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*73*		*61 - 130*
Dibromofluoromethane	*83*		*68 - 140*
Toluene-d8 (Surr)	*97*		*50 - 130*
4-Bromofluorobenzene	*103*		*57 - 140*

Lab Sample ID: MB 600-211177/7 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 211177

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/20/17 14:13	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/20/17 14:13	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/20/17 14:13	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/20/17 14:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*50 - 134*		*04/20/17 14:13*	*1*
Dibromofluoromethane	*83*		*62 - 130*		*04/20/17 14:13*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*04/20/17 14:13*	*1*
4-Bromofluorobenzene	*108*		*67 - 139*		*04/20/17 14:13*	*1*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-211177/4
Matrix: Water
Analysis Batch: 211177

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0100	0.009695		mg/L		97	70 - 130
Ethylbenzene	0.0100	0.009590		mg/L		96	70 - 130
Toluene	0.0100	0.01007		mg/L		101	70 - 130
Xylenes, Total	0.0200	0.01967		mg/L		98	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*50 - 134*
Dibromofluoromethane	*83*		*62 - 130*
Toluene-d8 (Surr)	*90*		*70 - 130*
4-Bromofluorobenzene	*103*		*67 - 139*

Lab Sample ID: LCSD 600-211177/5
Matrix: Water
Analysis Batch: 211177

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0100	0.009034		mg/L		90	70 - 130	7	20
Ethylbenzene	0.0100	0.008683		mg/L		87	70 - 130	10	20
Toluene	0.0100	0.009163		mg/L		92	70 - 130	9	20
Xylenes, Total	0.0200	0.01795		mg/L		90	70 - 130	9	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*50 - 134*
Dibromofluoromethane	*85*		*62 - 130*
Toluene-d8 (Surr)	*91*		*70 - 130*
4-Bromofluorobenzene	*104*		*67 - 139*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 490-424212/7
Matrix: Water
Analysis Batch: 424212

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			04/22/17 11:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*131*		*50 - 150*		*04/22/17 11:43*	*1*

Lab Sample ID: LCS 490-424212/5
Matrix: Water
Analysis Batch: 424212

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	1.00	0.9907		mg/L		99	66 - 140

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: LCS 490-424212/5
Matrix: Water
Analysis Batch: 424212

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	120		50 - 150

Lab Sample ID: LCSD 490-424212/6
Matrix: Water
Analysis Batch: 424212

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10			1.00	0.9503		mg/L		95	66 - 140	4	42

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	122		50 - 150

Lab Sample ID: MB 490-424627/1-A
Matrix: Solid
Analysis Batch: 425527

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 424627

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		04/24/17 13:21	04/27/17 14:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	55		50 - 150	04/24/17 13:21	04/27/17 14:34	1

Lab Sample ID: LCS 490-424627/2-A
Matrix: Solid
Analysis Batch: 425527

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 424627

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C6-C10			500	502.6		mg/Kg		101	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	77		50 - 150

Lab Sample ID: LCSD 490-424627/3-A
Matrix: Solid
Analysis Batch: 425527

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 424627

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10			500	493.7		mg/Kg		99	70 - 130	2	21

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	74		50 - 150

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: 600-146872-4 MS
Matrix: Solid
Analysis Batch: 425527

Client Sample ID: SJRP-SB08-1-2-04182017
Prep Type: Total/NA
Prep Batch: 424627

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	3.80	U F2 F1	759	306.2	F1	mg/Kg	☼	40	56 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*51*		*50 - 150*

Lab Sample ID: 600-146872-4 MSD
Matrix: Solid
Analysis Batch: 425527

Client Sample ID: SJRP-SB08-1-2-04182017
Prep Type: Total/NA
Prep Batch: 424627

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	3.80	U F2 F1	759	597.7	F2	mg/Kg	☼	79	56 - 130	64	21

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*64*		*50 - 150*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Lab Sample ID: MB 490-424318/1-A
Matrix: Water
Analysis Batch: 424485

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 424318

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0910	U	0.100	0.0910	mg/L		04/22/17 15:41	04/24/17 11:47	1
ORO C24-C40	0.0910	U	0.100	0.0910	mg/L		04/22/17 15:41	04/24/17 11:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*60*		*50 - 150*	*04/22/17 15:41*	*04/24/17 11:47*	*1*

Lab Sample ID: LCS 490-424318/2-A
Matrix: Water
Analysis Batch: 424485

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 424318

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	0.800	0.4380		mg/L		55	46 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*46*	*X*	*50 - 150*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Lab Sample ID: LCSD 490-424318/3-A
Matrix: Water
Analysis Batch: 424485

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 424318

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			0.800	0.7101	*	mg/L		89	46 - 132	47	31

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl (Surr)	*71*		*50 - 150*

Lab Sample ID: MB 490-424615/1-A
Matrix: Solid
Analysis Batch: 424776

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 424615

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.50	U	5.00	2.50	mg/Kg		04/24/17 12:01	04/25/17 15:49	1
ORO C24-C40	2.50	U	5.00	2.50	mg/Kg		04/24/17 12:01	04/25/17 15:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*103*		*50 - 150*	*04/24/17 12:01*	*04/25/17 15:49*	*1*

Lab Sample ID: LCS 490-424615/2-A
Matrix: Solid
Analysis Batch: 424776

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 424615

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			40.0	40.07		mg/Kg		100	54 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*107*		*50 - 150*

Lab Sample ID: 600-146872-4 MS
Matrix: Solid
Analysis Batch: 424776

Client Sample ID: SJRP-SB08-1-2-04182017
Prep Type: Total/NA
Prep Batch: 424615

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]	5.27	J F2	51.5	21.77		mg/Kg	☼	32	10 - 142		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
o-Terphenyl (Surr)	*48*	*X*	*50 - 150*

Lab Sample ID: 600-146872-4 MSD
Matrix: Solid
Analysis Batch: 424776

Client Sample ID: SJRP-SB08-1-2-04182017
Prep Type: Total/NA
Prep Batch: 424615

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	5.27	J F2	50.9	45.08	F2	mg/Kg	☼	78	10 - 142	70	47

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Lab Sample ID: 600-146872-4 MSD
Matrix: Solid
Analysis Batch: 424776

Client Sample ID: SJRP-SB08-1-2-04182017
Prep Type: Total/NA
Prep Batch: 424615

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl (Surr)	100		50 - 150

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-211225/1-A
Matrix: Water
Analysis Batch: 211320

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 211225

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		04/20/17 16:36	04/21/17 13:35	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		04/20/17 16:36	04/21/17 13:35	1
Barium	0.000530	U	0.0200	0.000530	mg/L		04/20/17 16:36	04/21/17 13:35	1
Boron	0.0116	U	0.200	0.0116	mg/L		04/20/17 16:36	04/21/17 13:35	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		04/20/17 16:36	04/21/17 13:35	1
Calcium	0.0240	U	1.00	0.0240	mg/L		04/20/17 16:36	04/21/17 13:35	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/20/17 16:36	04/21/17 13:35	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		04/20/17 16:36	04/21/17 13:35	1
Iron	0.0270	U	0.400	0.0270	mg/L		04/20/17 16:36	04/21/17 13:35	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/20/17 16:36	04/21/17 13:35	1
Magnesium	0.0555	U	1.00	0.0555	mg/L		04/20/17 16:36	04/21/17 13:35	1
Manganese	0.000360	U	0.0100	0.000360	mg/L		04/20/17 16:36	04/21/17 13:35	1
Molybdenum	0.001347	J	0.0100	0.000540	mg/L		04/20/17 16:36	04/21/17 13:35	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		04/20/17 16:36	04/21/17 13:35	1
Potassium	0.0374	U	1.00	0.0374	mg/L		04/20/17 16:36	04/21/17 13:35	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/20/17 16:36	04/21/17 13:35	1
Sodium	0.1326	J	1.00	0.0214	mg/L		04/20/17 16:36	04/21/17 13:35	1

Lab Sample ID: LCS 600-211225/2-A
Matrix: Water
Analysis Batch: 211320

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211225

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	10.01		mg/L		100	80 - 120
Arsenic	1.00	1.009		mg/L		101	80 - 120
Barium	1.00	0.9805		mg/L		98	80 - 120
Boron	1.00	1.006		mg/L		101	80 - 120
Cadmium	0.500	0.4997		mg/L		100	80 - 120
Calcium	10.0	9.967		mg/L		100	80 - 120
Chromium	1.00	1.002		mg/L		100	80 - 120
Cobalt	1.00	1.001		mg/L		100	80 - 120
Iron	10.0	10.09		mg/L		101	80 - 120
Lead	1.00	1.016		mg/L		102	80 - 120
Magnesium	10.0	10.02		mg/L		100	80 - 120
Manganese	1.00	1.015		mg/L		102	80 - 120
Molybdenum	1.00	0.9875		mg/L		99	80 - 120
Nickel	1.00	1.005		mg/L		101	80 - 120
Potassium	10.0	10.23		mg/L		102	80 - 120

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCS 600-211225/2-A
Matrix: Water
Analysis Batch: 211320

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211225

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Selenium	1.00	0.9980		mg/L		100	80 - 120
Sodium	10.0	10.00		mg/L		100	80 - 120

Lab Sample ID: MB 600-211612/1-A
Matrix: Solid
Analysis Batch: 211709

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 211612

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	1.935	J	25.0	0.300	mg/Kg		04/26/17 13:50	04/27/17 13:55	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		04/26/17 13:50	04/27/17 13:55	1
Barium	0.05500	J	1.00	0.0300	mg/Kg		04/26/17 13:50	04/27/17 13:55	1
Boron	0.386	U	20.0	0.386	mg/Kg		04/26/17 13:50	04/27/17 13:55	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		04/26/17 13:50	04/27/17 13:55	1
Calcium	0.864	U	100	0.864	mg/Kg		04/26/17 13:50	04/27/17 13:55	1
Chromium	0.1050	J	0.500	0.0506	mg/Kg		04/26/17 13:50	04/27/17 13:55	1
Cobalt	0.0676	U	0.500	0.0676	mg/Kg		04/26/17 13:50	04/27/17 13:55	1
Iron	2.53	U	20.0	2.53	mg/Kg		04/26/17 13:50	04/27/17 13:55	1
Lead	0.105	U	0.500	0.105	mg/Kg		04/26/17 13:50	04/27/17 13:55	1
Magnesium	1.92	U	100	1.92	mg/Kg		04/26/17 13:50	04/27/17 13:55	1
Manganese	0.04000	J	1.50	0.0381	mg/Kg		04/26/17 13:50	04/27/17 13:55	1
Nickel	0.7000	J	1.00	0.117	mg/Kg		04/26/17 13:50	04/27/17 13:55	1
Potassium	11.0	U	100	11.0	mg/Kg		04/26/17 13:50	04/27/17 13:55	1
Selenium	0.259	U	2.00	0.259	mg/Kg		04/26/17 13:50	04/27/17 13:55	1
Sodium	0.886	U	100	0.886	mg/Kg		04/26/17 13:50	04/27/17 13:55	1

Lab Sample ID: LCSSRM 600-211612/2-A
Matrix: Solid
Analysis Batch: 211709

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211612

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	7590	7094		mg/Kg		93.5	34.9 - 151.5
Arsenic	97.5	99.29		mg/Kg		101.8	69.2 - 145.6
Barium	306	285.5		mg/Kg		93.3	82.7 - 117.0
Boron	116	110.2		mg/Kg		95.0	73.0 - 127.6
Cadmium	76.6	75.97		mg/Kg		99.2	73.2 - 126.8
Calcium	5880	6097		mg/Kg		103.7	81.8 - 118.4
Chromium	103	98.42		mg/Kg		95.6	79.7 - 121.4
Cobalt	103	107.4		mg/Kg		104.3	83.3 - 116.5
Iron	14500	13180		mg/Kg		90.9	45.0 - 155.9
Lead	96.7	97.36		mg/Kg		100.7	81.7 - 117.9

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-211612/2-A
Matrix: Solid
Analysis Batch: 211709

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211612

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Magnesium	2680	2546		mg/Kg		95.0	75.4 - 124.6
Manganese	400	387.1		mg/Kg		96.8	81.0 - 119.0
Molybdenum	94.9	95.33		mg/Kg		100.5	78.5 - 121.2
Nickel	153	157.5		mg/Kg		102.9	73.2 - 126.8
Potassium	2230	2117		mg/Kg		94.9	69.5 - 130.5
Selenium	161	164.7		mg/Kg		102.3	77.6 - 123.0
Sodium	370	348.4		mg/Kg		94.2	70.5 - 129.7

Lab Sample ID: 600-146872-4 MS
Matrix: Solid
Analysis Batch: 211709

Client Sample ID: SJRP-SB08-1-2-04182017
Prep Type: Total/NA
Prep Batch: 211612

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	5.17	F1	119	127.3		mg/Kg	☼	102	75 - 125
Barium	80.6	F1 B	119	158.7	F1	mg/Kg	☼	65	75 - 125
Boron	0.473	U F1	119	77.01	F1	mg/Kg	☼	65	75 - 125
Cadmium	0.129	J F1	59.6	62.29		mg/Kg	☼	104	75 - 125
Calcium	2770	F2 F1	1190	3091	F1	mg/Kg	☼	27	75 - 125
Cobalt	6.78	F1	119	134.0		mg/Kg	☼	107	75 - 125
Lead	19.5	F1	119	141.9		mg/Kg	☼	103	75 - 125
Magnesium	4460		1190	5527		mg/Kg	☼	89	75 - 125
Manganese	73.0	B F1	119	185.3		mg/Kg	☼	94	75 - 125
Potassium	1560	F1	1190	2654		mg/Kg	☼	92	75 - 125
Selenium	0.318	U F1	119	121.6		mg/Kg	☼	102	75 - 125

Lab Sample ID: 600-146872-4 MS
Matrix: Solid
Analysis Batch: 211709

Client Sample ID: SJRP-SB08-1-2-04182017
Prep Type: Total/NA
Prep Batch: 211612

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	13700	B	1190	16070	4	mg/Kg	☼	199	75 - 125
Chromium	7.48	B	119	131.3		mg/Kg	☼	104	75 - 125
Iron	21800		1190	23680	4	mg/Kg	☼	160	75 - 125
Nickel	8.22	B	119	135.8		mg/Kg	☼	107	75 - 125
Sodium	17400	B	1190	16570	4	mg/Kg	☼	-68	75 - 125

Lab Sample ID: 600-146872-4 MSD
Matrix: Solid
Analysis Batch: 211709

Client Sample ID: SJRP-SB08-1-2-04182017
Prep Type: Total/NA
Prep Batch: 211612

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	5.17	F1	118	123.6		mg/Kg	☼	100	75 - 125	3	20
Barium	80.6	F1 B	118	169.0		mg/Kg	☼	75	75 - 125	6	20
Boron	0.473	U F1	118	65.97	F1	mg/Kg	☼	56	75 - 125	15	20

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-146872-4 MSD | **Client Sample ID: SJRP-SB08-1-2-04182017**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 211709 | **Prep Batch: 211612**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	0.129	J F1	59.1	61.18		mg/Kg	☼	103	75 - 125	2	20
Calcium	2770	F2 F1	1180	1651	F1 F2	mg/Kg	☼	-95	75 - 125	61	20
Cobalt	6.78	F1	118	132.5		mg/Kg	☼	106	75 - 125	1	20
Lead	19.5	F1	118	135.8		mg/Kg	☼	98	75 - 125	4	20
Magnesium	4460		1180	5819		mg/Kg	☼	115	75 - 125	5	20
Manganese	73.0	B F1	118	183.3		mg/Kg	☼	93	75 - 125	1	20
Potassium	1560	F1	1180	2764		mg/Kg	☼	102	75 - 125	4	20
Selenium	0.318	U F1	118	119.8		mg/Kg	☼	101	75 - 125	1	20

Lab Sample ID: 600-146872-4 MSD | **Client Sample ID: SJRP-SB08-1-2-04182017**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 211709 | **Prep Batch: 211612**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	13700	B	1180	18180	4	mg/Kg	☼	379	75 - 125	12	20
Chromium	7.48	B	118	131.3		mg/Kg	☼	105	75 - 125	0	20
Iron	21800		1180	26480	4	mg/Kg	☼	399	75 - 125	11	20
Nickel	8.22	B	118	137.4		mg/Kg	☼	109	75 - 125	1	20
Sodium	17400	B	1180	18800	4	mg/Kg	☼	120	75 - 125	13	20

Lab Sample ID: MB 600-211759/1-A | **Client Sample ID: Method Blank**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 211796 | **Prep Batch: 211759**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.300	U	25.0	0.300	mg/Kg		04/28/17 09:38	04/28/17 16:26	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		04/28/17 09:38	04/28/17 16:26	1
Barium	0.0300	U	1.00	0.0300	mg/Kg		04/28/17 09:38	04/28/17 16:26	1
Boron	0.386	U	20.0	0.386	mg/Kg		04/28/17 09:38	04/28/17 16:26	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		04/28/17 09:38	04/28/17 16:26	1
Calcium	0.864	U	100	0.864	mg/Kg		04/28/17 09:38	04/28/17 16:26	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		04/28/17 09:38	04/28/17 16:26	1
Cobalt	0.0676	U	0.500	0.0676	mg/Kg		04/28/17 09:38	04/28/17 16:26	1
Iron	2.53	U	20.0	2.53	mg/Kg		04/28/17 09:38	04/28/17 16:26	1
Lead	0.105	U	0.500	0.105	mg/Kg		04/28/17 09:38	04/28/17 16:26	1
Magnesium	1.92	U	100	1.92	mg/Kg		04/28/17 09:38	04/28/17 16:26	1
Manganese	0.0381	U	1.50	0.0381	mg/Kg		04/28/17 09:38	04/28/17 16:26	1
Nickel	0.117	U	1.00	0.117	mg/Kg		04/28/17 09:38	04/28/17 16:26	1
Selenium	0.259	U	2.00	0.259	mg/Kg		04/28/17 09:38	04/28/17 16:26	1
Sodium	21.36	J	100	0.886	mg/Kg		04/28/17 09:38	04/28/17 16:26	1

Lab Sample ID: MB 600-211759/1-A | **Client Sample ID: Method Blank**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 211796 | **Prep Batch: 211759**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	0.136	U	0.500	0.136	mg/Kg		04/28/17 09:38	04/28/17 17:58	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-211759/2-A
Matrix: Solid
Analysis Batch: 211796

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211759

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	7590	6940		mg/Kg		91.4	34.9 - 151.5
Arsenic	97.5	81.21		mg/Kg		83.3	69.2 - 145.6
Barium	306	282.2		mg/Kg		92.2	82.7 - 117.0
Boron	116	114.8		mg/Kg		99.0	73.0 - 127.6
Cadmium	76.6	73.75		mg/Kg		96.3	73.2 - 126.8
Calcium	5880	5507		mg/Kg		93.7	81.8 - 118.4
Chromium	103	94.87		mg/Kg		92.1	79.7 - 121.4
Cobalt	103	99.93		mg/Kg		97.0	83.3 - 116.5
Iron	14500	12930		mg/Kg		89.2	45.0 - 155.9
Lead	96.7	91.84		mg/Kg		95.0	81.7 - 117.9
Magnesium	2680	2527		mg/Kg		94.3	75.4 - 124.6
Manganese	400	376.1		mg/Kg		94.0	81.0 - 119.0
Nickel	153	141.0		mg/Kg		92.2	73.2 - 126.8
Selenium	161	145.7		mg/Kg		90.5	77.6 - 123.0
Sodium	370	325.7		mg/Kg		88.0	70.5 - 129.7

Lab Sample ID: LCSSRM 600-211759/2-A
Matrix: Solid
Analysis Batch: 211796

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211759

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Molybdenum	94.9	90.32		mg/Kg		95.2	78.5 - 121.2

Lab Sample ID: 600-146872-4 MS
Matrix: Solid
Analysis Batch: 211796

Client Sample ID: SJRP-SB08-1-2-04182017
Prep Type: Total/NA
Prep Batch: 211759

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Molybdenum	0.753	B	62.5	53.66		mg/Kg	☼	85	75 - 125

Lab Sample ID: 600-146872-4 MSD
Matrix: Solid
Analysis Batch: 211796

Client Sample ID: SJRP-SB08-1-2-04182017
Prep Type: Total/NA
Prep Batch: 211759

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Molybdenum	0.753	B	60.7	52.43		mg/Kg	☼	85	75 - 125	2	20

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-211155/7-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 211197 — **Prep Batch: 211155**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000820	U	0.000200	0.0000820	mg/L		04/20/17 07:45	04/20/17 11:39	1

Lab Sample ID: LCS 600-211155/8-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 211197 — **Prep Batch: 211155**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00300	0.003089		mg/L		103	70 - 130

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-211210/7-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211262 — **Prep Batch: 211210**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00336	U	0.0159	0.00336	mg/Kg		04/20/17 13:54	04/21/17 09:51	1

Lab Sample ID: LCSSRM 600-211210/8-A ^100 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211262 — **Prep Batch: 211210**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	20.2	25.14		mg/Kg		124.5	70.8 - 129.2

Lab Sample ID: 600-146872-4 MS — **Client Sample ID: SJRP-SB08-1-2-04182017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211262 — **Prep Batch: 211210**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00663	J	0.307	0.3288		mg/Kg	☼	105	75 - 125

Lab Sample ID: 600-146872-4 MSD — **Client Sample ID: SJRP-SB08-1-2-04182017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211262 — **Prep Batch: 211210**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00663	J	0.293	0.3277		mg/Kg	☼	110	75 - 125	0	20

Lab Sample ID: 600-146872-4 DU — **Client Sample ID: SJRP-SB08-1-2-04182017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211262 — **Prep Batch: 211210**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.00663	J	0.007842	J	mg/Kg	☼	17	20

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

GC/MS VOA

Analysis Batch: 211057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146872-1	SJRP-SB15-1-2-04172017	Total/NA	Solid	8260B	211118
600-146872-2	SJRP-SB04-1-2-04172017	Total/NA	Solid	8260B	211118
600-146872-3	SJRP-MW16-1-2-04172017	Total/NA	Solid	8260B	211118
600-146872-4	SJRP-SB08-1-2-04182017	Total/NA	Solid	8260B	211118
600-146872-5	SJRP-SB05-1-2-04182017	Total/NA	Solid	8260B	211118
600-146872-6	SJRP-SB05-1-2-04182017-2	Total/NA	Solid	8260B	211118
MB 600-211057/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-211057/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-211057/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
600-146872-4 MS	SJRP-SB08-1-2-04182017	Total/NA	Solid	8260B	211118
600-146872-4 MSD	SJRP-SB08-1-2-04182017	Total/NA	Solid	8260B	211118

Prep Batch: 211118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146872-1	SJRP-SB15-1-2-04172017	Total/NA	Solid	5035	
600-146872-2	SJRP-SB04-1-2-04172017	Total/NA	Solid	5035	
600-146872-3	SJRP-MW16-1-2-04172017	Total/NA	Solid	5035	
600-146872-4	SJRP-SB08-1-2-04182017	Total/NA	Solid	5035	
600-146872-5	SJRP-SB05-1-2-04182017	Total/NA	Solid	5035	
600-146872-6	SJRP-SB05-1-2-04182017-2	Total/NA	Solid	5035	
600-146872-4 MS	SJRP-SB08-1-2-04182017	Total/NA	Solid	5035	
600-146872-4 MSD	SJRP-SB08-1-2-04182017	Total/NA	Solid	5035	

Analysis Batch: 211177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146872-7	SJRP-TB-04172017	Total/NA	Water	8260B	
600-146872-8	SJRP-EB-04172017	Total/NA	Water	8260B	
MB 600-211177/7	Method Blank	Total/NA	Water	8260B	
LCS 600-211177/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-211177/5	Lab Control Sample Dup	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 424212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146872-8	SJRP-EB-04172017	Total/NA	Water	8015C	
MB 490-424212/7	Method Blank	Total/NA	Water	8015C	
LCS 490-424212/5	Lab Control Sample	Total/NA	Water	8015C	
LCSD 490-424212/6	Lab Control Sample Dup	Total/NA	Water	8015C	

Prep Batch: 424627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146872-1	SJRP-SB15-1-2-04172017	Total/NA	Solid	5030B	
600-146872-2	SJRP-SB04-1-2-04172017	Total/NA	Solid	5030B	
600-146872-3	SJRP-MW16-1-2-04172017	Total/NA	Solid	5030B	
600-146872-4	SJRP-SB08-1-2-04182017	Total/NA	Solid	5030B	
600-146872-5	SJRP-SB05-1-2-04182017	Total/NA	Solid	5030B	
600-146872-6	SJRP-SB05-1-2-04182017-2	Total/NA	Solid	5030B	
MB 490-424627/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 490-424627/2-A	Lab Control Sample	Total/NA	Solid	5030B	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

GC VOA (Continued)

Prep Batch: 424627 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 490-424627/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
600-146872-4 MS	SJRP-SB08-1-2-04182017	Total/NA	Solid	5030B	
600-146872-4 MSD	SJRP-SB08-1-2-04182017	Total/NA	Solid	5030B	

Analysis Batch: 425527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146872-1	SJRP-SB15-1-2-04172017	Total/NA	Solid	8015C	424627
600-146872-2	SJRP-SB04-1-2-04172017	Total/NA	Solid	8015C	424627
600-146872-3	SJRP-MW16-1-2-04172017	Total/NA	Solid	8015C	424627
600-146872-4	SJRP-SB08-1-2-04182017	Total/NA	Solid	8015C	424627
600-146872-5	SJRP-SB05-1-2-04182017	Total/NA	Solid	8015C	424627
600-146872-6	SJRP-SB05-1-2-04182017-2	Total/NA	Solid	8015C	424627
MB 490-424627/1-A	Method Blank	Total/NA	Solid	8015C	424627
LCS 490-424627/2-A	Lab Control Sample	Total/NA	Solid	8015C	424627
LCSD 490-424627/3-A	Lab Control Sample Dup	Total/NA	Solid	8015C	424627
600-146872-4 MS	SJRP-SB08-1-2-04182017	Total/NA	Solid	8015C	424627
600-146872-4 MSD	SJRP-SB08-1-2-04182017	Total/NA	Solid	8015C	424627

GC Semi VOA

Prep Batch: 424318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146872-8	SJRP-EB-04172017	Total/NA	Water	3510C	
MB 490-424318/1-A	Method Blank	Total/NA	Water	3510C	
LCS 490-424318/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 490-424318/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 424485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146872-8	SJRP-EB-04172017	Total/NA	Water	8015C	424318
MB 490-424318/1-A	Method Blank	Total/NA	Water	8015C	424318
LCS 490-424318/2-A	Lab Control Sample	Total/NA	Water	8015C	424318
LCSD 490-424318/3-A	Lab Control Sample Dup	Total/NA	Water	8015C	424318

Prep Batch: 424615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146872-1	SJRP-SB15-1-2-04172017	Total/NA	Solid	3550C	
600-146872-2	SJRP-SB04-1-2-04172017	Total/NA	Solid	3550C	
600-146872-3	SJRP-MW16-1-2-04172017	Total/NA	Solid	3550C	
600-146872-4	SJRP-SB08-1-2-04182017	Total/NA	Solid	3550C	
600-146872-5	SJRP-SB05-1-2-04182017	Total/NA	Solid	3550C	
600-146872-6	SJRP-SB05-1-2-04182017-2	Total/NA	Solid	3550C	
MB 490-424615/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-424615/2-A	Lab Control Sample	Total/NA	Solid	3550C	
600-146872-4 MS	SJRP-SB08-1-2-04182017	Total/NA	Solid	3550C	
600-146872-4 MSD	SJRP-SB08-1-2-04182017	Total/NA	Solid	3550C	

Analysis Batch: 424776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146872-1	SJRP-SB15-1-2-04172017	Total/NA	Solid	8015C	424615

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

GC Semi VOA (Continued)

Analysis Batch: 424776 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146872-2	SJRP-SB04-1-2-04172017	Total/NA	Solid	8015C	424615
600-146872-3	SJRP-MW16-1-2-04172017	Total/NA	Solid	8015C	424615
600-146872-4	SJRP-SB08-1-2-04182017	Total/NA	Solid	8015C	424615
600-146872-5	SJRP-SB05-1-2-04182017	Total/NA	Solid	8015C	424615
600-146872-6	SJRP-SB05-1-2-04182017-2	Total/NA	Solid	8015C	424615
MB 490-424615/1-A	Method Blank	Total/NA	Solid	8015C	424615
LCS 490-424615/2-A	Lab Control Sample	Total/NA	Solid	8015C	424615
600-146872-4 MS	SJRP-SB08-1-2-04182017	Total/NA	Solid	8015C	424615
600-146872-4 MSD	SJRP-SB08-1-2-04182017	Total/NA	Solid	8015C	424615

Metals

Prep Batch: 211155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146872-8	SJRP-EB-04172017	Total/NA	Water	7470A	
MB 600-211155/7-A	Method Blank	Total/NA	Water	7470A	
LCS 600-211155/8-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 211197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146872-8	SJRP-EB-04172017	Total/NA	Water	7470A	211155
MB 600-211155/7-A	Method Blank	Total/NA	Water	7470A	211155
LCS 600-211155/8-A	Lab Control Sample	Total/NA	Water	7470A	211155

Prep Batch: 211210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146872-1	SJRP-SB15-1-2-04172017	Total/NA	Solid	7471A	
600-146872-2	SJRP-SB04-1-2-04172017	Total/NA	Solid	7471A	
600-146872-3	SJRP-MW16-1-2-04172017	Total/NA	Solid	7471A	
600-146872-4	SJRP-SB08-1-2-04182017	Total/NA	Solid	7471A	
600-146872-5	SJRP-SB05-1-2-04182017	Total/NA	Solid	7471A	
600-146872-6	SJRP-SB05-1-2-04182017-2	Total/NA	Solid	7471A	
MB 600-211210/7-A	Method Blank	Total/NA	Solid	7471A	
LCSSRM 600-211210/8-A ^100	Lab Control Sample	Total/NA	Solid	7471A	
600-146872-4 MS	SJRP-SB08-1-2-04182017	Total/NA	Solid	7471A	
600-146872-4 MSD	SJRP-SB08-1-2-04182017	Total/NA	Solid	7471A	
600-146872-4 DU	SJRP-SB08-1-2-04182017	Total/NA	Solid	7471A	

Prep Batch: 211225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146872-8	SJRP-EB-04172017	Total/NA	Water	3010A	
MB 600-211225/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-211225/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 211262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146872-1	SJRP-SB15-1-2-04172017	Total/NA	Solid	7471A	211210
600-146872-2	SJRP-SB04-1-2-04172017	Total/NA	Solid	7471A	211210
600-146872-3	SJRP-MW16-1-2-04172017	Total/NA	Solid	7471A	211210
600-146872-4	SJRP-SB08-1-2-04182017	Total/NA	Solid	7471A	211210

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Metals (Continued)

Analysis Batch: 211262 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146872-5	SJRP-SB05-1-2-04182017	Total/NA	Solid	7471A	211210
600-146872-6	SJRP-SB05-1-2-04182017-2	Total/NA	Solid	7471A	211210
MB 600-211210/7-A	Method Blank	Total/NA	Solid	7471A	211210
LCSSRM 600-211210/8-A ^100	Lab Control Sample	Total/NA	Solid	7471A	211210
600-146872-4 MS	SJRP-SB08-1-2-04182017	Total/NA	Solid	7471A	211210
600-146872-4 MSD	SJRP-SB08-1-2-04182017	Total/NA	Solid	7471A	211210
600-146872-4 DU	SJRP-SB08-1-2-04182017	Total/NA	Solid	7471A	211210

Analysis Batch: 211320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146872-8	SJRP-EB-04172017	Total/NA	Water	6010B	211225
MB 600-211225/1-A	Method Blank	Total/NA	Water	6010B	211225
LCS 600-211225/2-A	Lab Control Sample	Total/NA	Water	6010B	211225

Prep Batch: 211612

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146872-1	SJRP-SB15-1-2-04172017	Total/NA	Solid	3050B	
600-146872-2	SJRP-SB04-1-2-04172017	Total/NA	Solid	3050B	
600-146872-3	SJRP-MW16-1-2-04172017	Total/NA	Solid	3050B	
600-146872-4	SJRP-SB08-1-2-04182017	Total/NA	Solid	3050B	
600-146872-5	SJRP-SB05-1-2-04182017	Total/NA	Solid	3050B	
600-146872-6	SJRP-SB05-1-2-04182017-2	Total/NA	Solid	3050B	
MB 600-211612/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-211612/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-146872-4 MS	SJRP-SB08-1-2-04182017	Total/NA	Solid	3050B	
600-146872-4 MSD	SJRP-SB08-1-2-04182017	Total/NA	Solid	3050B	

Analysis Batch: 211709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146872-1	SJRP-SB15-1-2-04172017	Total/NA	Solid	6010B	211612
600-146872-1	SJRP-SB15-1-2-04172017	Total/NA	Solid	6010B	211612
600-146872-2	SJRP-SB04-1-2-04172017	Total/NA	Solid	6010B	211612
600-146872-3	SJRP-MW16-1-2-04172017	Total/NA	Solid	6010B	211612
600-146872-4	SJRP-SB08-1-2-04182017	Total/NA	Solid	6010B	211612
600-146872-4	SJRP-SB08-1-2-04182017	Total/NA	Solid	6010B	211612
600-146872-5	SJRP-SB05-1-2-04182017	Total/NA	Solid	6010B	211612
600-146872-6	SJRP-SB05-1-2-04182017-2	Total/NA	Solid	6010B	211612
600-146872-6	SJRP-SB05-1-2-04182017-2	Total/NA	Solid	6010B	211612
MB 600-211612/1-A	Method Blank	Total/NA	Solid	6010B	211612
LCSSRM 600-211612/2-A	Lab Control Sample	Total/NA	Solid	6010B	211612
600-146872-4 MS	SJRP-SB08-1-2-04182017	Total/NA	Solid	6010B	211612
600-146872-4 MS	SJRP-SB08-1-2-04182017	Total/NA	Solid	6010B	211612
600-146872-4 MSD	SJRP-SB08-1-2-04182017	Total/NA	Solid	6010B	211612
600-146872-4 MSD	SJRP-SB08-1-2-04182017	Total/NA	Solid	6010B	211612

Prep Batch: 211759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146872-1	SJRP-SB15-1-2-04172017	Total/NA	Solid	3050B	
600-146872-2	SJRP-SB04-1-2-04172017	Total/NA	Solid	3050B	
600-146872-3	SJRP-MW16-1-2-04172017	Total/NA	Solid	3050B	
600-146872-4	SJRP-SB08-1-2-04182017	Total/NA	Solid	3050B	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Metals (Continued)

Prep Batch: 211759 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146872-5	SJRP-SB05-1-2-04182017	Total/NA	Solid	3050B	
600-146872-5	SJRP-SB05-1-2-04182017	Total/NA	Solid	3050B	
600-146872-6	SJRP-SB05-1-2-04182017-2	Total/NA	Solid	3050B	
MB 600-211759/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-211759/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-146872-4 MS	SJRP-SB08-1-2-04182017	Total/NA	Solid	3050B	
600-146872-4 MSD	SJRP-SB08-1-2-04182017	Total/NA	Solid	3050B	

Analysis Batch: 211796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146872-1	SJRP-SB15-1-2-04172017	Total/NA	Solid	6010B	211759
600-146872-2	SJRP-SB04-1-2-04172017	Total/NA	Solid	6010B	211759
600-146872-3	SJRP-MW16-1-2-04172017	Total/NA	Solid	6010B	211759
600-146872-4	SJRP-SB08-1-2-04182017	Total/NA	Solid	6010B	211759
600-146872-5	SJRP-SB05-1-2-04182017	Total/NA	Solid	6010B	211759
600-146872-5	SJRP-SB05-1-2-04182017	Total/NA	Solid	6010B	211759
600-146872-6	SJRP-SB05-1-2-04182017-2	Total/NA	Solid	6010B	211759
MB 600-211759/1-A	Method Blank	Total/NA	Solid	6010B	211759
MB 600-211759/1-A	Method Blank	Total/NA	Solid	6010B	211759
LCSSRM 600-211759/2-A	Lab Control Sample	Total/NA	Solid	6010B	211759
LCSSRM 600-211759/2-A	Lab Control Sample	Total/NA	Solid	6010B	211759
600-146872-4 MS	SJRP-SB08-1-2-04182017	Total/NA	Solid	6010B	211759
600-146872-4 MSD	SJRP-SB08-1-2-04182017	Total/NA	Solid	6010B	211759

General Chemistry

Analysis Batch: 211133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146872-1	SJRP-SB15-1-2-04172017	Total/NA	Solid	2540B	
600-146872-2	SJRP-SB04-1-2-04172017	Total/NA	Solid	2540B	
600-146872-3	SJRP-MW16-1-2-04172017	Total/NA	Solid	2540B	
600-146872-4	SJRP-SB08-1-2-04182017	Total/NA	Solid	2540B	
600-146872-5	SJRP-SB05-1-2-04182017	Total/NA	Solid	2540B	
600-146872-6	SJRP-SB05-1-2-04182017-2	Total/NA	Solid	2540B	
600-146872-4 MS	SJRP-SB08-1-2-04182017	Total/NA	Solid	2540B	
600-146872-4 MSD	SJRP-SB08-1-2-04182017	Total/NA	Solid	2540B	

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Client Sample ID: SJRP-SB15-1-2-04172017 — **Lab Sample ID: 600-146872-1**
Date Collected: 04/17/17 13:10 — **Matrix: Solid**
Date Received: 04/19/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			211133	04/19/17 17:19	B1K	TAL HOU

Client Sample ID: SJRP-SB15-1-2-04172017 — **Lab Sample ID: 600-146872-1**
Date Collected: 04/17/17 13:10 — **Matrix: Solid**
Date Received: 04/19/17 10:12 — **Percent Solids: 84.3**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.405 g	5 mL	211118	04/19/17 11:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	211057	04/19/17 16:53	WS1	TAL HOU
Total/NA	Prep	5030B			5.45 g	5.0 mL	424627	04/24/17 13:21	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	425527	04/27/17 18:04	A1B	TAL NSH
Total/NA	Prep	3550C			25.16 g	1.00 mL	424615	04/24/17 12:01	MNM	TAL NSH
Total/NA	Analysis	8015C		1			424776	04/25/17 16:05	A1B	TAL NSH
Total/NA	Prep	3050B			1.01 g	50 mL	211759	04/28/17 09:38	DCL	TAL HOU
Total/NA	Analysis	6010B		1			211796	04/28/17 16:50	DCL	TAL HOU
Total/NA	Prep	3050B			1.16 g	50 mL	211612	04/26/17 13:50	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211709	04/27/17 14:07	DCL	TAL HOU
Total/NA	Prep	3050B			1.16 g	50 mL	211612	04/26/17 13:50	JAH	TAL HOU
Total/NA	Analysis	6010B		5			211709	04/27/17 17:45	DCL	TAL HOU
Total/NA	Prep	7471A			.61 g	50 mL	211210	04/20/17 13:54	DDE	TAL HOU
Total/NA	Analysis	7471A		1			211262	04/21/17 08:59	DDE	TAL HOU

Client Sample ID: SJRP-SB04-1-2-04172017 — **Lab Sample ID: 600-146872-2**
Date Collected: 04/17/17 16:20 — **Matrix: Solid**
Date Received: 04/19/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			211133	04/19/17 17:19	B1K	TAL HOU

Client Sample ID: SJRP-SB04-1-2-04172017 — **Lab Sample ID: 600-146872-2**
Date Collected: 04/17/17 16:20 — **Matrix: Solid**
Date Received: 04/19/17 10:12 — **Percent Solids: 84.2**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.382 g	5 mL	211118	04/19/17 11:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	211057	04/19/17 17:17	WS1	TAL HOU
Total/NA	Prep	5030B			5.33 g	5.0 mL	424627	04/24/17 13:21	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	425527	04/27/17 18:34	A1B	TAL NSH
Total/NA	Prep	3550C			25.20 g	1.00 mL	424615	04/24/17 12:01	MNM	TAL NSH
Total/NA	Analysis	8015C		1			424776	04/25/17 16:21	A1B	TAL NSH
Total/NA	Prep	3050B			1.04 g	50 mL	211759	04/28/17 09:38	DCL	TAL HOU
Total/NA	Analysis	6010B		1			211796	04/28/17 16:52	DCL	TAL HOU
Total/NA	Prep	3050B			1.14 g	50 mL	211612	04/26/17 13:50	JAH	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Client Sample ID: SJRP-SB04-1-2-04172017 — Lab Sample ID: 600-146872-2

Date Collected: 04/17/17 16:20 — **Matrix: Solid**
Date Received: 04/19/17 10:12 — **Percent Solids: 84.2**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		1			211709	04/27/17 14:09	DCL	TAL HOU
Total/NA	Prep	7471A			.65 g	50 mL	211210	04/20/17 13:54	DDE	TAL HOU
Total/NA	Analysis	7471A		1			211262	04/21/17 09:02	DDE	TAL HOU

Client Sample ID: SJRP-MW16-1-2-04172017 — Lab Sample ID: 600-146872-3

Date Collected: 04/17/17 16:55 — **Matrix: Solid**
Date Received: 04/19/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			211133	04/19/17 17:19	B1K	TAL HOU

Client Sample ID: SJRP-MW16-1-2-04172017 — Lab Sample ID: 600-146872-3

Date Collected: 04/17/17 16:55 — **Matrix: Solid**
Date Received: 04/19/17 10:12 — **Percent Solids: 88.5**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.249 g	5 mL	211118	04/19/17 11:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	211057	04/19/17 17:42	WS1	TAL HOU
Total/NA	Prep	5030B			5.12 g	5.0 mL	424627	04/24/17 13:21	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	425527	04/27/17 19:04	A1B	TAL NSH
Total/NA	Prep	3550C			25.48 g	1.00 mL	424615	04/24/17 12:01	MNM	TAL NSH
Total/NA	Analysis	8015C		1			424776	04/25/17 16:38	A1B	TAL NSH
Total/NA	Prep	3050B			1.02 g	50 mL	211759	04/28/17 09:38	DCL	TAL HOU
Total/NA	Analysis	6010B		1			211796	04/28/17 16:54	DCL	TAL HOU
Total/NA	Prep	3050B			1.16 g	50 mL	211612	04/26/17 13:50	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211709	04/27/17 14:12	DCL	TAL HOU
Total/NA	Prep	7471A			.62 g	50 mL	211210	04/20/17 13:54	DDE	TAL HOU
Total/NA	Analysis	7471A		1			211262	04/21/17 09:03	DDE	TAL HOU

Client Sample ID: SJRP-SB08-1-2-04182017 — Lab Sample ID: 600-146872-4

Date Collected: 04/18/17 09:00 — **Matrix: Solid**
Date Received: 04/19/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			211133	04/19/17 17:19	B1K	TAL HOU

Client Sample ID: SJRP-SB08-1-2-04182017 — Lab Sample ID: 600-146872-4

Date Collected: 04/18/17 09:00 — **Matrix: Solid**
Date Received: 04/19/17 10:12 — **Percent Solids: 77.7**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.523 g	5 mL	211118	04/19/17 11:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	211057	04/19/17 18:06	WS1	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.23 g	5.0 mL	424627	04/24/17 13:21	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	425527	04/27/17 19:34	A1B	TAL NSH
Total/NA	Prep	3550C			25.53 g	1.00 mL	424615	04/24/17 12:01	MNM	TAL NSH
Total/NA	Analysis	8015C		1			424776	04/25/17 16:54	A1B	TAL NSH
Total/NA	Prep	3050B			1.03 g	50 mL	211759	04/28/17 09:42	DCL	TAL HOU
Total/NA	Analysis	6010B		1			211796	04/28/17 16:56	DCL	TAL HOU
Total/NA	Prep	3050B			1.05 g	50 mL	211612	04/26/17 13:50	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211709	04/27/17 14:14	DCL	TAL HOU
Total/NA	Prep	3050B			1.05 g	50 mL	211612	04/26/17 13:50	JAH	TAL HOU
Total/NA	Analysis	6010B		5			211709	04/27/17 17:47	DCL	TAL HOU
Total/NA	Prep	7471A			.60 g	50 mL	211210	04/20/17 13:54	DDE	TAL HOU
Total/NA	Analysis	7471A		1			211262	04/21/17 09:05	DDE	TAL HOU

Client Sample ID: SJRP-SB05-1-2-04182017
Lab Sample ID: 600-146872-5

Date Collected: 04/18/17 10:30
Matrix: Solid
Date Received: 04/19/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			211133	04/19/17 17:19	B1K	TAL HOU

Client Sample ID: SJRP-SB05-1-2-04182017
Lab Sample ID: 600-146872-5

Date Collected: 04/18/17 10:30
Matrix: Solid
Date Received: 04/19/17 10:12
Percent Solids: 84.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.946 g	5 mL	211118	04/19/17 11:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	211057	04/19/17 19:19	WS1	TAL HOU
Total/NA	Prep	5030B			5.02 g	5.0 mL	424627	04/24/17 13:21	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	425527	04/27/17 20:04	A1B	TAL NSH
Total/NA	Prep	3550C			25.44 g	1.00 mL	424615	04/24/17 12:01	MNM	TAL NSH
Total/NA	Analysis	8015C		1			424776	04/25/17 17:43	A1B	TAL NSH
Total/NA	Prep	3050B			1.02 g	50 mL	211759	04/28/17 09:38	DCL	TAL HOU
Total/NA	Analysis	6010B		1			211796	04/28/17 16:48	DCL	TAL HOU
Total/NA	Prep	3050B			1.03 g	50 mL	211759	04/28/17 09:48	DCL	TAL HOU
Total/NA	Analysis	6010B		1			211796	04/28/17 17:07	DCL	TAL HOU
Total/NA	Prep	3050B			1.03 g	50 mL	211612	04/26/17 13:50	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211709	04/27/17 15:05	DCL	TAL HOU
Total/NA	Prep	7471A			.62 g	50 mL	211210	04/20/17 13:54	DDE	TAL HOU
Total/NA	Analysis	7471A		1			211262	04/21/17 09:13	DDE	TAL HOU

Client Sample ID: SJRP-SB05-1-2-04182017-2
Lab Sample ID: 600-146872-6

Date Collected: 04/18/17 10:30
Matrix: Solid
Date Received: 04/19/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			211133	04/19/17 17:19	B1K	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Client Sample ID: SJRP-SB05-1-2-04182017-2

Lab Sample ID: 600-146872-6
Date Collected: 04/18/17 10:30
Matrix: Solid
Date Received: 04/19/17 10:12
Percent Solids: 85.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.555 g	5 mL	211118	04/19/17 11:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	211057	04/19/17 19:43	WS1	TAL HOU
Total/NA	Prep	5030B			5.17 g	5.0 mL	424627	04/24/17 13:21	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	425527	04/27/17 20:34	A1B	TAL NSH
Total/NA	Prep	3550C			25.60 g	1.00 mL	424615	04/24/17 12:01	MNM	TAL NSH
Total/NA	Analysis	8015C		1			424776	04/25/17 18:16	A1B	TAL NSH
Total/NA	Prep	3050B			1.02 g	50 mL	211759	04/28/17 09:48	DCL	TAL HOU
Total/NA	Analysis	6010B		1			211796	04/28/17 17:09	DCL	TAL HOU
Total/NA	Prep	3050B			1.04 g	50 mL	211612	04/26/17 13:50	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211709	04/27/17 14:27	DCL	TAL HOU
Total/NA	Prep	3050B			1.04 g	50 mL	211612	04/26/17 13:50	JAH	TAL HOU
Total/NA	Analysis	6010B		5			211709	04/27/17 17:59	DCL	TAL HOU
Total/NA	Prep	7471A			.63 g	50 mL	211210	04/20/17 13:54	DDE	TAL HOU
Total/NA	Analysis	7471A		1			211262	04/21/17 09:19	DDE	TAL HOU

Client Sample ID: SJRP-TB-04172017

Lab Sample ID: 600-146872-7
Date Collected: 04/17/17 12:00
Matrix: Water
Date Received: 04/19/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	211177	04/20/17 15:10	KLV	TAL HOU

Client Sample ID: SJRP-EB-04172017

Lab Sample ID: 600-146872-8
Date Collected: 04/17/17 13:45
Matrix: Water
Date Received: 04/19/17 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	211177	04/20/17 15:39	KLV	TAL HOU
Total/NA	Analysis	8015C		1	5 mL	5 mL	424212	04/22/17 12:12	GWM	TAL NSH
Total/NA	Prep	3510C			275 mL	1 mL	424318	04/22/17 15:41	JKG	TAL NSH
Total/NA	Analysis	8015C		1			424485	04/24/17 12:48	GMH	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	211225	04/20/17 16:36	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211320	04/21/17 14:01	DCL	TAL HOU
Total/NA	Prep	7470A			40 mL	40 mL	211155	04/20/17 07:45	DDE	TAL HOU
Total/NA	Analysis	7470A		1			211197	04/20/17 12:31	DDE	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146872-1

Laboratory: TestAmerica Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	16-046-0	08-04-17
Louisiana	NELAP	6	01967	06-30-17
Oklahoma	State Program	6	2015-050	08-31-17
Texas	NELAP	6	T104704223-17-21	10-31-17
USDA	Federal		P330-14-00192	06-06-17

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	A2LA		NA: NELAP & A2LA	12-31-17
A2LA	ISO/IEC 17025		0453.07	12-31-17
Alaska (UST)	State Program	10	UST-087	09-01-17
Arizona	State Program	9	AZ0473	05-05-17
Arkansas DEQ	State Program	6	88-0737	04-25-18
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-17
Florida	NELAP	4	E87358	06-30-17
Georgia	State Program	4	N/A	12-31-17
Illinois	NELAP	5	200010	12-09-17
Iowa	State Program	7	131	04-01-18
Kansas	NELAP	7	E-10229	10-31-17
Kentucky (UST)	State Program	4	19	06-30-17
Kentucky (WW)	State Program	4	90038	12-31-17
Louisiana	NELAP	6	30613	06-30-17
Maine	State Program	1	TN00032	11-03-17
Maryland	State Program	3	316	03-31-18
Massachusetts	State Program	1	M-TN032	06-30-17
Minnesota	NELAP	5	047-999-345	12-31-17
Mississippi	State Program	4	N/A	06-30-17
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-17
New Hampshire	NELAP	1	2963	10-09-17
New Jersey	NELAP	2	TN965	06-30-17
New York	NELAP	2	11342	03-31-18
North Carolina (WW/SW)	State Program	4	387	12-31-17
North Dakota	State Program	8	R-146	06-30-17
Ohio VAP	State Program	5	CL0033	07-10-17
Oklahoma	State Program	6	9412	08-31-17
Oregon	NELAP	10	TN200001	04-27-17 *
Pennsylvania	NELAP	3	68-00585	06-30-17
Rhode Island	State Program	1	LAO00268	12-30-17
South Carolina	State Program	4	84009 (001)	02-18-17 *
South Carolina (Do Not Use - DW)	State Program	4	84009 (002)	12-16-17
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-17
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-17
Virginia	NELAP	3	460152	06-14-17
Washington	State Program	10	C789	07-19-17

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc. TestAmerica Job ID: 600-146872-1
Project/Site: San Juan Site Characterization

Laboratory: TestAmerica Nashville (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
West Virginia DEP	State Program	3	219	02-28-18
Wisconsin	State Program	5	998020430	08-31-17
Wyoming (UST)	A2LA	8	453.07	12-31-17

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Katherine Mozaki	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-52002-15345.10
Client Contact: Jeffrey Minchak	Phone: 9043826573	E-Mail: cathy.upton@testamericainc.com		Page: Page 10 of 10
Company: CH2M Hill, Inc.				Job #:
Address: 3721 Rutledge Rd. NE Suite B-1	Due Date Requested:			
City: Albuquerque	TAT Requested (days):			
State, Zip: NM, 87109				
Phone: 281-721-8546(Tel)	PO #: Purchase Order Requested			
Email: Jeffrey.Minchak@ch2m.com	WO #: WD225383			
Project Name: Kinder Morgan Bloomfield, NM San Juan	Project #: 60005961-Analysis group BTEX/GRO/DRO/Metals			
Site: San Juan Site Characterization	SSOW#:			

Analysis Requested

Preservation Code
A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
Other:

600-146872 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO - Diesel and Oil Range Organics	8015C_GRO - GRO Range (C6-C10)	6010B, 7471A - NMWQCC List Metals	8260B - 5035 BTEX	Moisture	Waters	6010B, 7470A - NMWQCC List Metals	8260B_LL - BTEX Only	8015C_GRO - GRO Range (C6-C10)	8015C_DRO - Diesel and Oil Range Organics	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N		D	A	A	N		
SJRP-SB15-1-2-04172017	4/17/17	1310	G	Solid	N	N												
SJRP-SB04-1-2-04172017	4/17/17	1620	G	Solid	N	N												
SJRP-MW16-1-2-04172017	4/17/17	1655	G	Solid	N	N												2 coolers, COC in cooler 1
SJRP-SB08-1-2-04182017	4/18/17	900	G	Solid	N	N												
SJRP-SB08-1-2-0418-2017-MS	4/18/17	900	G	Solid	N	N												
SJRP-SB08-1-2-04182017-MSD	4/18/17	900	G	Solid	N	N												
SJRP-SB05-1-2-04182017	4/18/17	1030	G	Solid	N	N												
SJRP-SB05-1-2-04182017-2	4/18/17	1035	G	Solid	N	N												
			G	Solid														
SJRP-TB-04172017	4/17/17	1200	G	Solid	N	N												
SJRP-EB-04172017	4/17/17	1345	G	Water	N	N												

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	4/18/17/1200	CH2M		4-19-17 612	
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Katherine Mouzakis	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-52002-15345.10
Client Contact: Jeffrey Minchak	Phone: 9043806573	E-Mail: cathy.upton@testamericainc.com		Page: Page 10 of 10
Company: CH2M Hill, Inc.				Job #:
Address: 3721 Rutledge Rd. NE Suite B-1	Due Date Requested:			
City: Albuquerque	TAT Requested (days):			
State, Zip: NM, 87109				
Phone: 281-721-8546(Tel)	PO #: Purchase Order Requested			
Email: Jeffrey.Minchak@ch2m.com	WO #: WD225383			
Project Name: Kinder Morgan Bloomfield, NM San Juan	Project #: 60005961-Analysis group BTEX/GRO/DRO/Metals			
Site: San Juan Site Characterization	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO - Diesel and Oil Range Organics	8015C_GRO - GRO Range (C6-C10)	6010B, 7471A - NMWQCC List Metals	8260B - 5035 BTEX	Moisture			Waters	6010B, 7470A - NMWQCC List Metals	8260B_LL - BTEX Only	8015C_GRO - GRO Range (C6-C10)	8015C_DRO - Diesel and Oil Range Organics		Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	N	N	N	N				D	A	A	N		X	
			G	Solid																	
COC in Cooler 1			G	Solid																	Cooler 2
			G	Solid																	
Samples from 4/17/17 and 4/18/17			G	Solid																	
			G	Solid																	
			G	Solid																	
			G	Solid																	
			G	Solid																	
			G	Solid																	
			G	Water																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 4/18/17/1200	Company	Received by:	Date/Time: 4/19/17 1012	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:


FedEx
TRK# 0221 7246 6874 7831
WED – 19 APR 3:00P
STANDARD OVERNIGHT
XH LKSA
77040
TX-US IAH


FedEx
TRK# 0221 7246 6874 7739
WED – 19 APR 3:00P
STANDARD OVERNIGHT
XH LKSA
77040
TX-US IAH

TestAmerica Houston

Loc: 600
146872

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Receipt Ch

Date/Time Received: '17 APR 19 10:12

JOB NUMBER: _____ CLIENT: CHZM

UNPACKED BY: _____ CARRIER/DRIVER: FE

Custody Seal Present: ☒ YES ☐ NO Number of Coolers Received: 2

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Them CF	Corrected Temp (°C)
RW	Y / N	Y / N	3.7	605	-.2	3.5
BW	Y / N	Y / N	1.7	1	1	1.5
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☒ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☒ YES ☐ NO

pH paper Lot #_____

VOA headspace acceptable (5-6mm): ☒ YES ☐ NO ☐ NA

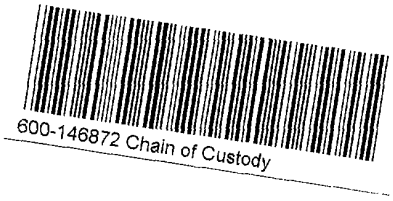
	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	☒	☐

COMMENTS:

FE 4/19/17

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM



Cooler Received/Opened On 04-21-2017 @ 09:35

Time Samples Removed From Cooler 14:47 Time Samples Placed In Storage _____ (2 Hour Window)

1. Tracking # 1527 (last 4 digits, FedEx) Courier: _FedEx_

IR Gun ID 97310166 pH Strip Lot _____ Chlorine Strip Lot _____

2. Temperature of rep. sample or temp blank when opened: 4.9 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...(NA)

4. Were custody seals on outside of cooler? (YES)...NO...NA

If yes, how many and where: 1 FRONT

5. Were the seals intact, signed, and dated correctly? (YES)..NO...NA

6. Were custody papers inside cooler? (YES)..NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) _____

7. Were custody seals on containers: YES (NO) and Intact YES...NO...(NA)

Were these signed and dated correctly? YES...NO...(NA)

8. Packing mat'l used? (Bubblewrap) (Plastic bag) Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)...NO...NA

12. Did all container labels and tags agree with custody papers? (YES)...NO...NA

13a. Were VOA vials received? (YES)...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...(NA)

14. Was there a Trip Blank in this cooler? YES..(NO)..NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (initial) _____

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..(NA)

b. Did the bottle labels indicate that the correct preservatives were used (YES)...NO...NA

16. Was residual chlorine present? YES...NO..(NA)

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) HG

17. Were custody papers properly filled out (ink, signed, etc)? (YES)...NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)...NO...NA

19. Were correct containers used for the analysis requested? (YES)...NO...NA

20. Was sufficient amount of sample sent in each container? (YES)..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) HG

I certify that I attached a label with the unique LIMS number to each container (initial) HG

21. Were there Non-Conformance issues at login? YES..(NO) Was a NCM generated? YES..(NO)..# _____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 12.15.15

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

Loc: 600
146872

COOLER RECEIPT FORM

Cooler Received/Opened On 4/21/2017 @ 0935

Time Samples Removed From Cooler 15:19 Time Samples Placed In Storage_____ (2 Hour Window)

1. Tracking # 1078 (last 4 digits, FedEx) Courier: _FedEx_

   IR Gun ID_160406069_ pH Strip Lot NA Chlorine Strip Lot NA

2. Temperature of rep. sample or temp blank when opened: 3.3 *Degrees Celsius*

3. If Item #2 temperatures is 0°C or less, was the representative sample or temp blank frozen? YES NO (NA)

4. Were custody seals on outside of cooler? YES..(NO)..NA

   If yes, how many and where: NA

5. Were the seals intact, signed, and dated correctly? YES...NO...(NA)

6. Were custody papers inside cooler? YES..(NO)..NA

I certify that I opened the cooler and answered questions 1-6 (initial) _____

7. Were custody seals on containers: YES (NO) and Intact YES...NO...(NA)

   Were these signed and dated correctly? YES...NO...(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)...NO...NA

12. Did all container labels and tags agree with custody papers? (YES)...NO...NA

13a. Were VOA vials received? YES..(NO)..NA

b. Was there any observable headspace present in any VOA vial? YES...NO...(NA)

14. Was there a Trip Blank in this cooler? YES...NO...(NA) If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (initial) HG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..(NA)

b. Did the bottle labels indicate that the correct preservatives were used (YES)...NO...NA

16. was residual chlorine present? YES...NO...(NA)

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) HG

17. Were custody papers properly filled out (ink, signed, etc)? (YES)..NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)..NO...NA

19. Were correct containers used for the analysis requested? (YES)..NO...NA

20. Was sufficient amount of sample sent in each container? (YES)..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) HG

I certify that I attached a label with the unique LIMS number to each container (initial) HG

21. Were there Non-Conformance issues at login? YES..(NO) Was a NCM generated? YES..(NO)..#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 12/15/15

12/7/2020 (Rev. 1)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Loc: 600
146872
#1
B

Cooler Received/Opened On 4/21/2017 @ 0935

Time Samples Removed From Cooler 15:05 Time Samples Placed In Storage_____ (2 Hour Window)

1. Tracking # 1089 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 160656843 pH Strip Lot_____ Chlorine Strip Lot_____

2. Temperature of rep. sample or temp blank when opened: 4.6 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where:_____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) HG

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES NO NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) _____

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HG

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HG

I certify that I attached a label with the unique LIMS number to each container (intial) HG

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 12/15/15

12/7/2020 (Rev. 1)

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TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Loc: 600
146872

TestAmerica
LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Upton, Cathy L		lo: 6524.1	
Client Contact: Shipping/Receiving	Phone:	E-Mail: cathy.upton@testamericainc.com	New Mexico	Page 1 of 1	
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):		Job #: 600-146872-1	
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 5/1/2017				
City: Nashville	TAT Requested (days):				
State, Zip: TN, 37204					
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:				
Email:	WO #:				
Project Name: San Juan Site Characterization	Project #: 60005961				
Site:	SSOW#:				

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO/3550C DRO/ORO	8015C_GRO/5030B_H Standard GRO Range (C6-C10)	8015C_DRO/3510C_LVI DRO/ORO	8015C_GRO/5030B GRO Range (C6-C10)	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
SJRP-SB15-1-2-04172017 (600-146872-1)	4/17/17	13:10 Central		Solid			X	X			2	
SJRP-SB04-1-2-04172017 (600-146872-2)	4/17/17	16:20 Central		Solid			X	X			2	
SJRP-MW16-1-2-04172017 (600-146872-3)	4/17/17	16:55 Central		Solid			X	X			2	
SJRP-SB08-1-2-04182017 (600-146872-4)	4/18/17	09:00 Central		Solid			X	X			2	
SJRP-SB08-1-2-04182017 (600-146872-4MS)	4/18/17	09:00 Central	MS	Solid			X	X			2	
SJRP-SB08-1-2-04182017 (600-146872-4MSD)	4/18/17	09:00 Central	MSD	Solid			X	X			2	
SJRP-SB05-1-2-04182017 (600-146872-5)	4/18/17	10:30 Central		Solid			X	X			2	
SJRP-SB05-1-2-04182017-2 (600-146872-6)	4/18/17	10:30 Central		Solid			X	X			2	
SJRP-EB-04172017 (600-146872-8)	4/17/17	13:45 Central		Water					X	X	5	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 4-20-17 1700	Company	Received by: 4.9/3.3/4.6	Date/Time: 4/21/17 0935	Company TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

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12/7/2020 (Rev. 1)
Received by OCD: 11/13/2025 11:14:36 AM
Released to Imaging: 11/14/2025 9:30:04 AM

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc. Job Number: 600-146872-1

Login Number: 146872 **List Source: TestAmerica Houston**
List Number: 1
Creator: Crafton, Tommie S

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.5 1.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-146872-1

Login Number: 146872
List Number: 2
Creator: Gundi, Hozar K

List Source: TestAmerica Nashville
List Creation: 04/21/17 05:48 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-146872-1

Login Number: 146872
List Number: 3
Creator: Gundi, Hozar K

List Source: TestAmerica Nashville
List Creation: 04/21/17 05:50 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-146872-1

Login Number: 146872
List Number: 4
Creator: Gundi, Hozar K

List Source: TestAmerica Nashville
List Creation: 04/21/17 05:51 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Appendix D
Laboratory Analytical Reports

eurofins | Environment Testing America



ANALYTICAL REPORT

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-146941-1
Client Project/Site: San Juan Site Characterization
Revision: 1

For:
CH2M Hill Constructors, Inc.
14701 St. Mary's Lane
Suite 300
Houston, Texas 77079-2923

Attn: Mr. John Ynfante

Steve A Stepanski

Authorized for release by:
12/7/2020 4:43:30 PM
Steve Stepanski, Project Mgmt. Assistant
(713)690-4444
steve.stepanski@Eurofinset.com

Designee for

Cathy Upton, Project Manager I
(713)690-4444
cathy.upton@testamericainc.com

LINKS
Review your project results through TotalAccess
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Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-146941-1
Project/Site: San Juan Site Characterization

Job ID: 600-146941-1

Laboratory: TestAmerica Houston

Narrative

CASE NARRATIVE

Client: CH2M Hill Constructors, Inc.

Project: San Juan Site Characterization

Report Number: 600-146941-1

COMMENTS
This report was revised to a Level 2 deliverable per client's request.

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
Note: All samples that require thermal preservation are considered acceptable if the arrival temperature is within 2°C of the required temperature or method specified range. For samples with a specified temperature of 4°C, samples with a temperature ranging from just above freezing temperature of water to 6°C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

The samples were received on 04/20/2017; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.7º C and 0.8º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)-Soil
Samples SJRP-SB01-1-2-04192017 (600-146941-1), SJRP-SB01-1-2-04192017-2 (600-146941-2), SJRP-MW15-1-2-04192017 (600-146941-3), SJRP-SB02-1-2-04192017 (600-146941-4) and SJRP-SB02-1-2-04192017-2 (600-146941-5) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were prepared and analyzed on 04/20/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GC-MS)-Water
Samples SJRP-TB-04192017-2 (600-146941-6) and SJRP-EB-04192017-2 (600-146941-7) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/25/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GASOLINE RANGE ORGANICS (GRO)-Soil
Samples SJRP-SB01-1-2-04192017 (600-146941-1), SJRP-SB01-1-2-04192017-2 (600-146941-2), SJRP-MW15-1-2-04192017 (600-146941-3), SJRP-SB02-1-2-04192017 (600-146941-4) and SJRP-SB02-1-2-04192017-2 (600-146941-5) were analyzed for gasoline range organics (GRO) in accordance with EPA SW-846 Method 8015C - GRO. The samples were analyzed on 04/27/2017 and 04/28/2017.

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-146941-1
Project/Site: San Juan Site Characterization

Job ID: 600-146941-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

a,a,a-Trifluorotoluene failed the surrogate recovery criteria high for SJRP-MW15-1-2-04192017MS (600-146941-3MS).
a,a,a-Trifluorotoluene failed the surrogate recovery criteria high for SJRP-MW15-1-2-04192017MSD (600-146941-3MSD). The surrogate recoveries were within acceptance limits on the other column; therefore, the data have been reported.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GASOLINE RANGE ORGANICS (GRO)-Water
Sample SJRP-EB-04192017-2 (600-146941-7) was analyzed for gasoline range organics (GRO) in accordance with 8015C GRO. The samples were analyzed on 04/22/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DIESEL RANGE ORGANICS (DRO)-Soil
Samples SJRP-SB01-1-2-04192017 (600-146941-1), SJRP-SB01-1-2-04192017-2 (600-146941-2), SJRP-MW15-1-2-04192017 (600-146941-3), SJRP-SB02-1-2-04192017 (600-146941-4) and SJRP-SB02-1-2-04192017-2 (600-146941-5) were analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared and analyzed on 04/25/2017.

ORO C24-C40 was detected in method blank MB 490-424863/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DIESEL RANGE ORGANICS (DRO)-Water
Sample SJRP-EB-04192017-2 (600-146941-7) was analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 04/22/2017 and analyzed on 04/24/2017.

o-Terphenyl (Surr) failed the surrogate recovery criteria low for LCS 490-424318/2-A. All LCS spike analytes and sample surrogate recoveries were within control limits; therefore, the data has been qualified and reported.

Refer to the QC report for details.

Diesel Range Organics [C10-C28] exceeded the RPD limit for LCSD 490-424318/3-A.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)-Soil
Samples SJRP-SB01-1-2-04192017 (600-146941-1), SJRP-SB01-1-2-04192017-2 (600-146941-2), SJRP-MW15-1-2-04192017 (600-146941-3), SJRP-SB02-1-2-04192017 (600-146941-4) and SJRP-SB02-1-2-04192017-2 (600-146941-5) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 05/02/2017 and analyzed on 05/03/2017 and 05/04/2017.

Aluminum and Molybdenum were detected in method blank MB 600-212036/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-146941-1
Project/Site: San Juan Site Characterization

Job ID: 600-146941-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

Due to the high concentrations of target analytes, samples SJRP-MW15-1-2-04192017 (600-146941-3) MS/MSD in batch 600-212257 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

Samples SJRP-MW15-1-2-04192017 (600-146941-3)[10X], SJRP-SB02-1-2-04192017 (600-146941-4)[5X] and SJRP-SB02-1-2-04192017-2 (600-146941-5)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)-Water
Sample SJRP-EB-04192017-2 (600-146941-7) was analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 04/28/2017 and analyzed on 05/01/2017, 05/02/2017 and 05/03/2017.

Iron, Manganese, Nickel and Molybdenum were detected in method blank MB 600-211781/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY-Soil
Samples SJRP-SB01-1-2-04192017 (600-146941-1), SJRP-SB01-1-2-04192017-2 (600-146941-2), SJRP-MW15-1-2-04192017 (600-146941-3), SJRP-SB02-1-2-04192017 (600-146941-4) and SJRP-SB02-1-2-04192017-2 (600-146941-5) were analyzed for total mercury in accordance with EPA SW-846 Method 7471A. The samples were prepared on 04/20/2017 and analyzed on 04/21/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY-Water
Sample SJRP-EB-04192017-2 (600-146941-7) was analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 04/21/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PERCENT SOLIDS
Samples SJRP-SB01-1-2-04192017 (600-146941-1), SJRP-SB01-1-2-04192017-2 (600-146941-2), SJRP-MW15-1-2-04192017 (600-146941-3), SJRP-SB02-1-2-04192017 (600-146941-4) and SJRP-SB02-1-2-04192017-2 (600-146941-5) were analyzed for percent solids in accordance with EPA SW846 Method 3550C. The samples were analyzed on 04/20/2017 and 04/21/2017.

Percent Moisture exceeded the RPD limit for the duplicate of sample 600-146923-6.

Percent Moisture exceeded the RPD limit for the duplicate of sample 600-146979-1.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
Method(s) 3510C: The following sample formed emulsions during the extraction procedure: SJRP-EB-04192017-2 (600-146941-7). The emulsions were broken up using centrifugation

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL NSH
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL NSH
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU

Protocol References:

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-146941-1	SJRP-SB01-1-2-04192017	Solid	04/19/17 09:00	04/20/17 09:56
600-146941-2	SJRP-SB01-1-2-04192017-2	Solid	04/19/17 09:00	04/20/17 09:56
600-146941-3	SJRP-MW15-1-2-04192017	Solid	04/19/17 12:05	04/20/17 09:56
600-146941-4	SJRP-SB02-1-2-04192017	Solid	04/19/17 12:50	04/20/17 09:56
600-146941-5	SJRP-SB02-1-2-04192017-2	Solid	04/19/17 12:50	04/20/17 09:56
600-146941-6	SJRP-TB-04192017-2	Water	04/19/17 12:00	04/20/17 09:56
600-146941-7	SJRP-EB-04192017-2	Water	04/19/17 13:40	04/20/17 09:56

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Client Sample ID: SJRP-SB01-1-2-04192017
Date Collected: 04/19/17 09:00
Date Received: 04/20/17 09:56

Lab Sample ID: 600-146941-1
Matrix: Solid
Percent Solids: 80.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000780	U	0.00619	0.000780	mg/Kg	☼	04/20/17 12:15	04/20/17 17:53	1
Ethylbenzene	0.00126	U	0.00619	0.00126	mg/Kg	☼	04/20/17 12:15	04/20/17 17:53	1
Toluene	0.00171	U	0.00619	0.00171	mg/Kg	☼	04/20/17 12:15	04/20/17 17:53	1
Xylenes, Total	0.00140	U	0.00619	0.00140	mg/Kg	☼	04/20/17 12:15	04/20/17 17:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*61 - 130*	*04/20/17 12:15*	*04/20/17 17:53*	*1*
Dibromofluoromethane	*83*		*68 - 140*	*04/20/17 12:15*	*04/20/17 17:53*	*1*
Toluene-d8 (Surr)	*86*		*50 - 130*	*04/20/17 12:15*	*04/20/17 17:53*	*1*
4-Bromofluorobenzene	*109*		*57 - 140*	*04/20/17 12:15*	*04/20/17 17:53*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.65	U	7.31	3.65	mg/Kg	☼	04/24/17 13:21	04/27/17 15:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*54*		*50 - 150*	*04/24/17 13:21*	*04/27/17 15:34*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3.07	U	6.14	3.07	mg/Kg	☼	04/25/17 10:36	04/25/17 21:49	1
ORO C24-C40	**3.19**	**J B**	6.14	3.07	mg/Kg	☼	04/25/17 10:36	04/25/17 21:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*79*		*50 - 150*	*04/25/17 10:36*	*04/25/17 21:49*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**12900**	**B**	26.7	0.320	mg/Kg	☼	05/02/17 14:44	05/03/17 15:43	1
Arsenic	**4.06**		1.07	0.232	mg/Kg	☼	05/02/17 14:44	05/03/17 15:43	1
Barium	**137**		1.07	0.0320	mg/Kg	☼	05/02/17 14:44	05/03/17 15:43	1
Boron	**3.74**	**J**	21.3	0.412	mg/Kg	☼	05/02/17 14:44	05/03/17 15:43	1
Cadmium	**0.187**	**J**	0.267	0.0273	mg/Kg	☼	05/02/17 14:44	05/03/17 15:43	1
Calcium	**13900**		107	0.921	mg/Kg	☼	05/02/17 14:44	05/03/17 15:43	1
Chromium	**6.19**		0.533	0.0540	mg/Kg	☼	05/02/17 14:44	05/03/17 15:43	1
Cobalt	**10.0**		0.533	0.0721	mg/Kg	☼	05/02/17 14:44	05/03/17 15:43	1
Iron	**18300**		21.3	2.70	mg/Kg	☼	05/02/17 14:44	05/03/17 15:43	1
Lead	**29.2**		0.533	0.112	mg/Kg	☼	05/02/17 14:44	05/03/17 17:47	1
Magnesium	**4090**		107	2.05	mg/Kg	☼	05/02/17 14:44	05/03/17 15:43	1
Manganese	**475**		1.60	0.0406	mg/Kg	☼	05/02/17 14:44	05/03/17 15:43	1
Molybdenum	**1.33**	**B**	0.533	0.145	mg/Kg	☼	05/02/17 14:44	05/03/17 15:43	1
Nickel	**10.2**		1.07	0.125	mg/Kg	☼	05/02/17 14:44	05/03/17 15:43	1
Potassium	**1500**		107	11.7	mg/Kg	☼	05/02/17 14:44	05/03/17 15:43	1
Selenium	**0.453**	**J**	2.13	0.276	mg/Kg	☼	05/02/17 14:44	05/03/17 15:43	1
Sodium	**7770**		107	0.945	mg/Kg	☼	05/02/17 14:44	05/03/17 15:43	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0185**	**J**	0.0203	0.00429	mg/Kg	☼	04/20/17 13:54	04/21/17 09:26	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Client Sample ID: SJRP-SB01-1-2-04192017

Lab Sample ID: 600-146941-1
Date Collected: 04/19/17 09:00
Matrix: Solid
Date Received: 04/20/17 09:56
Percent Solids: 80.9

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**19.1**		1.0	1.0	%			04/21/17 17:01	1
Percent Solids	**80.9**		1.0	1.0	%			04/21/17 17:01	1

Client Sample ID: SJRP-SB01-1-2-04192017-2

Lab Sample ID: 600-146941-2
Date Collected: 04/19/17 09:00
Matrix: Solid
Date Received: 04/20/17 09:56
Percent Solids: 79.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000647	U	0.00514	0.000647	mg/Kg	☼	04/20/17 12:15	04/20/17 18:18	1
Ethylbenzene	0.00105	U	0.00514	0.00105	mg/Kg	☼	04/20/17 12:15	04/20/17 18:18	1
Toluene	0.00142	U	0.00514	0.00142	mg/Kg	☼	04/20/17 12:15	04/20/17 18:18	1
Xylenes, Total	0.00116	U	0.00514	0.00116	mg/Kg	☼	04/20/17 12:15	04/20/17 18:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*61 - 130*	*04/20/17 12:15*	*04/20/17 18:18*	*1*
Dibromofluoromethane	*80*		*68 - 140*	*04/20/17 12:15*	*04/20/17 18:18*	*1*
Toluene-d8 (Surr)	*85*		*50 - 130*	*04/20/17 12:15*	*04/20/17 18:18*	*1*
4-Bromofluorobenzene	*110*		*57 - 140*	*04/20/17 12:15*	*04/20/17 18:18*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.77	U	7.53	3.77	mg/Kg	☼	04/24/17 13:21	04/27/17 16:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*51*		*50 - 150*	*04/24/17 13:21*	*04/27/17 16:04*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3.14	U	6.29	3.14	mg/Kg	☼	04/25/17 10:36	04/25/17 22:05	1
ORO C24-C40	**3.72**	**J B**	6.29	3.14	mg/Kg	☼	04/25/17 10:36	04/25/17 22:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*79*		*50 - 150*	*04/25/17 10:36*	*04/25/17 22:05*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**12900**	**B**	31.3	0.376	mg/Kg	☼	05/02/17 14:44	05/03/17 15:45	1
Arsenic	**4.65**		1.25	0.273	mg/Kg	☼	05/02/17 14:44	05/03/17 15:45	1
Barium	**130**		1.25	0.0376	mg/Kg	☼	05/02/17 14:44	05/03/17 15:45	1
Boron	**3.75**	**J**	25.1	0.484	mg/Kg	☼	05/02/17 14:44	05/03/17 15:45	1
Cadmium	**0.182**	**J**	0.313	0.0321	mg/Kg	☼	05/02/17 14:44	05/03/17 15:45	1
Calcium	**10500**		125	1.08	mg/Kg	☼	05/02/17 14:44	05/03/17 15:45	1
Chromium	**6.72**		0.626	0.0634	mg/Kg	☼	05/02/17 14:44	05/03/17 15:45	1
Cobalt	**11.5**		0.626	0.0847	mg/Kg	☼	05/02/17 14:44	05/03/17 15:45	1
Iron	**19000**		25.1	3.17	mg/Kg	☼	05/02/17 14:44	05/03/17 15:45	1
Lead	**19.2**		0.626	0.132	mg/Kg	☼	05/02/17 14:44	05/03/17 17:49	1
Magnesium	**4290**		125	2.41	mg/Kg	☼	05/02/17 14:44	05/03/17 15:45	1
Manganese	**580**		1.88	0.0477	mg/Kg	☼	05/02/17 14:44	05/03/17 15:45	1
Molybdenum	**1.05**	**B**	0.626	0.170	mg/Kg	☼	05/02/17 14:44	05/03/17 15:45	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Client Sample ID: SJRP-SB01-1-2-04192017-2

Lab Sample ID: 600-146941-2
Date Collected: 04/19/17 09:00
Matrix: Solid
Date Received: 04/20/17 09:56
Percent Solids: 79.0

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	11.5		1.25	0.147	mg/Kg	☼	05/02/17 14:44	05/03/17 15:45	1
Potassium	1560		125	13.8	mg/Kg	☼	05/02/17 14:44	05/03/17 15:45	1
Selenium	0.388	J	2.51	0.325	mg/Kg	☼	05/02/17 14:44	05/03/17 15:45	1
Sodium	8140		125	1.11	mg/Kg	☼	05/02/17 14:44	05/03/17 15:45	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0170	J	0.0212	0.00446	mg/Kg	☼	04/20/17 13:54	04/21/17 09:28	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21.0		1.0	1.0	%			04/21/17 17:01	1
Percent Solids	79.0		1.0	1.0	%			04/21/17 17:01	1

Client Sample ID: SJRP-MW15-1-2-04192017

Lab Sample ID: 600-146941-3
Date Collected: 04/19/17 12:05
Matrix: Solid
Date Received: 04/20/17 09:56
Percent Solids: 86.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000923	U	0.00733	0.000923	mg/Kg	☼	04/20/17 12:15	04/20/17 16:40	1
Ethylbenzene	0.00149	U	0.00733	0.00149	mg/Kg	☼	04/20/17 12:15	04/20/17 16:40	1
Toluene	0.00202	U	0.00733	0.00202	mg/Kg	☼	04/20/17 12:15	04/20/17 16:40	1
Xylenes, Total	0.00334	J	0.00733	0.00166	mg/Kg	☼	04/20/17 12:15	04/20/17 16:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*61 - 130*	*04/20/17 12:15*	*04/20/17 16:40*	*1*
Dibromofluoromethane	*83*		*68 - 140*	*04/20/17 12:15*	*04/20/17 16:40*	*1*
Toluene-d8 (Surr)	*88*		*50 - 130*	*04/20/17 12:15*	*04/20/17 16:40*	*1*
4-Bromofluorobenzene	*113*		*57 - 140*	*04/20/17 12:15*	*04/20/17 16:40*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.22	U	6.44	3.22	mg/Kg	☼	04/24/17 13:21	04/28/17 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*53*		*50 - 150*	*04/24/17 13:21*	*04/28/17 13:48*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	4.13	J	5.57	2.78	mg/Kg	☼	04/25/17 10:36	04/25/17 22:22	1
ORO C24-C40	7.94	B	5.57	2.78	mg/Kg	☼	04/25/17 10:36	04/25/17 22:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*88*		*50 - 150*	*04/25/17 10:36*	*04/25/17 22:22*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	14200	B	25.2	0.302	mg/Kg	☼	05/02/17 14:44	05/03/17 15:48	1
Arsenic	5.52		1.01	0.219	mg/Kg	☼	05/02/17 14:44	05/03/17 15:48	1
Barium	85.4	F1	1.01	0.0302	mg/Kg	☼	05/02/17 14:44	05/03/17 15:48	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Client Sample ID: SJRP-MW15-1-2-04192017

Lab Sample ID: 600-146941-3
Date Collected: 04/19/17 12:05
Matrix: Solid
Date Received: 04/20/17 09:56
Percent Solids: 86.4

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	3.09	J F1	20.1	0.388	mg/Kg	☼	05/02/17 14:44	05/03/17 15:48	1
Cadmium	0.221	J	0.252	0.0258	mg/Kg	☼	05/02/17 14:44	05/03/17 15:48	1
Calcium	19500	F2	101	0.869	mg/Kg	☼	05/02/17 14:44	05/03/17 15:48	1
Chromium	6.72		0.503	0.0509	mg/Kg	☼	05/02/17 14:44	05/03/17 15:48	1
Cobalt	8.62		0.503	0.0680	mg/Kg	☼	05/02/17 14:44	05/03/17 15:48	1
Iron	19400		20.1	2.55	mg/Kg	☼	05/02/17 14:44	05/03/17 15:48	1
Lead	20.5		5.03	1.06	mg/Kg	☼	05/02/17 14:44	05/03/17 17:51	10
Magnesium	4120		101	1.93	mg/Kg	☼	05/02/17 14:44	05/03/17 15:48	1
Manganese	423		1.51	0.0383	mg/Kg	☼	05/02/17 14:44	05/03/17 15:48	1
Molybdenum	1.20	F1 B	0.503	0.137	mg/Kg	☼	05/02/17 14:44	05/03/17 15:48	1
Nickel	11.2		1.01	0.118	mg/Kg	☼	05/02/17 14:44	05/03/17 15:48	1
Potassium	1570	F1	101	11.1	mg/Kg	☼	05/02/17 14:44	05/03/17 15:48	1
Selenium	0.523	J	2.01	0.261	mg/Kg	☼	05/02/17 14:44	05/03/17 15:48	1
Sodium	13600		1010	8.91	mg/Kg	☼	05/02/17 14:44	05/04/17 13:21	10

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0334		0.0197	0.00414	mg/Kg	☼	04/20/17 13:54	04/21/17 09:30	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	13.6		1.0	1.0	%			04/20/17 16:48	1
Percent Solids	86.4		1.0	1.0	%			04/20/17 16:48	1

Client Sample ID: SJRP-SB02-1-2-04192017

Lab Sample ID: 600-146941-4
Date Collected: 04/19/17 12:50
Matrix: Solid
Date Received: 04/20/17 09:56
Percent Solids: 83.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000752	U	0.00597	0.000752	mg/Kg	☼	04/20/17 12:15	04/20/17 18:42	1
Ethylbenzene	0.00122	U	0.00597	0.00122	mg/Kg	☼	04/20/17 12:15	04/20/17 18:42	1
Toluene	0.00165	U	0.00597	0.00165	mg/Kg	☼	04/20/17 12:15	04/20/17 18:42	1
Xylenes, Total	0.00135	U	0.00597	0.00135	mg/Kg	☼	04/20/17 12:15	04/20/17 18:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*61 - 130*	*04/20/17 12:15*	*04/20/17 18:42*	*1*
Dibromofluoromethane	*87*		*68 - 140*	*04/20/17 12:15*	*04/20/17 18:42*	*1*
Toluene-d8 (Surr)	*85*		*50 - 130*	*04/20/17 12:15*	*04/20/17 18:42*	*1*
4-Bromofluorobenzene	*111*		*57 - 140*	*04/20/17 12:15*	*04/20/17 18:42*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.42	U	6.84	3.42	mg/Kg	☼	04/24/17 13:21	04/27/17 17:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*56*		*50 - 150*	*04/24/17 13:21*	*04/27/17 17:04*	*1*

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Client Sample ID: SJRP-SB02-1-2-04192017

Date Collected: 04/19/17 12:50
Date Received: 04/20/17 09:56

Lab Sample ID: 600-146941-4

Matrix: Solid
Percent Solids: 83.5

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.93	U	5.86	2.93	mg/Kg	☼	04/25/17 10:36	04/25/17 23:11	1
ORO C24-C40	5.91	B	5.86	2.93	mg/Kg	☼	04/25/17 10:36	04/25/17 23:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*87*		*50 - 150*	*04/25/17 10:36*	*04/25/17 23:11*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	10800	B	28.0	0.336	mg/Kg	☼	05/02/17 14:44	05/03/17 16:02	1
Arsenic	3.26		1.12	0.244	mg/Kg	☼	05/02/17 14:44	05/03/17 16:02	1
Barium	109		1.12	0.0336	mg/Kg	☼	05/02/17 14:44	05/03/17 16:02	1
Boron	4.46	J	22.4	0.432	mg/Kg	☼	05/02/17 14:44	05/03/17 16:02	1
Cadmium	0.157	J	0.280	0.0287	mg/Kg	☼	05/02/17 14:44	05/03/17 16:02	1
Calcium	21600		112	0.967	mg/Kg	☼	05/02/17 14:44	05/03/17 16:02	1
Chromium	24.0		0.560	0.0566	mg/Kg	☼	05/02/17 14:44	05/03/17 16:02	1
Cobalt	7.22		0.560	0.0757	mg/Kg	☼	05/02/17 14:44	05/03/17 16:02	1
Iron	13400		22.4	2.83	mg/Kg	☼	05/02/17 14:44	05/03/17 16:02	1
Lead	13.2		2.80	0.588	mg/Kg	☼	05/02/17 14:44	05/03/17 18:03	5
Magnesium	3620		112	2.15	mg/Kg	☼	05/02/17 14:44	05/03/17 16:02	1
Manganese	906		8.40	0.213	mg/Kg	☼	05/02/17 14:44	05/03/17 18:03	5
Molybdenum	1.18	B	0.560	0.152	mg/Kg	☼	05/02/17 14:44	05/03/17 16:02	1
Nickel	8.60		1.12	0.131	mg/Kg	☼	05/02/17 14:44	05/03/17 16:02	1
Potassium	1280		112	12.3	mg/Kg	☼	05/02/17 14:44	05/03/17 16:02	1
Selenium	0.375	J	2.24	0.290	mg/Kg	☼	05/02/17 14:44	05/03/17 16:02	1
Sodium	9090		112	0.992	mg/Kg	☼	05/02/17 14:44	05/03/17 16:02	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0175	J	0.0194	0.00408	mg/Kg	☼	04/20/17 13:54	04/21/17 09:42	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.5		1.0	1.0	%			04/20/17 16:48	1
Percent Solids	83.5		1.0	1.0	%			04/20/17 16:48	1

Client Sample ID: SJRP-SB02-1-2-04192017-2

Date Collected: 04/19/17 12:50
Date Received: 04/20/17 09:56

Lab Sample ID: 600-146941-5

Matrix: Solid
Percent Solids: 82.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000688	U	0.00546	0.000688	mg/Kg	☼	04/20/17 12:15	04/20/17 19:07	1
Ethylbenzene	0.00111	U	0.00546	0.00111	mg/Kg	☼	04/20/17 12:15	04/20/17 19:07	1
Toluene	0.00151	U	0.00546	0.00151	mg/Kg	☼	04/20/17 12:15	04/20/17 19:07	1
Xylenes, Total	0.00123	U	0.00546	0.00123	mg/Kg	☼	04/20/17 12:15	04/20/17 19:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*61 - 130*	*04/20/17 12:15*	*04/20/17 19:07*	*1*
Dibromofluoromethane	*81*		*68 - 140*	*04/20/17 12:15*	*04/20/17 19:07*	*1*
Toluene-d8 (Surr)	*88*		*50 - 130*	*04/20/17 12:15*	*04/20/17 19:07*	*1*
4-Bromofluorobenzene	*111*		*57 - 140*	*04/20/17 12:15*	*04/20/17 19:07*	*1*

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.38	U	6.77	3.38	mg/Kg	☼	04/24/17 13:21	04/27/17 17:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*56*		*50 - 150*	*04/24/17 13:21*	*04/27/17 17:34*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.94	U	5.89	2.94	mg/Kg	☼	04/25/17 10:36	04/25/17 23:28	1
ORO C24-C40	**7.42**	**B**	5.89	2.94	mg/Kg	☼	04/25/17 10:36	04/25/17 23:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*94*		*50 - 150*	*04/25/17 10:36*	*04/25/17 23:28*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**12500**	**B**	26.8	0.322	mg/Kg	☼	05/02/17 14:44	05/03/17 16:04	1
Arsenic	**3.53**		1.07	0.234	mg/Kg	☼	05/02/17 14:44	05/03/17 16:04	1
Barium	**155**		1.07	0.0322	mg/Kg	☼	05/02/17 14:44	05/03/17 16:04	1
Boron	**4.80**	**J**	21.5	0.414	mg/Kg	☼	05/02/17 14:44	05/03/17 16:04	1
Cadmium	**0.150**	**J**	0.268	0.0275	mg/Kg	☼	05/02/17 14:44	05/03/17 16:04	1
Calcium	**17900**		107	0.927	mg/Kg	☼	05/02/17 14:44	05/03/17 16:04	1
Chromium	**12.3**		0.536	0.0543	mg/Kg	☼	05/02/17 14:44	05/03/17 16:04	1
Cobalt	**7.88**		0.536	0.0725	mg/Kg	☼	05/02/17 14:44	05/03/17 16:04	1
Iron	**16600**		21.5	2.71	mg/Kg	☼	05/02/17 14:44	05/03/17 16:04	1
Lead	**10.6**		2.68	0.563	mg/Kg	☼	05/02/17 14:44	05/03/17 18:06	5
Magnesium	**4170**		107	2.06	mg/Kg	☼	05/02/17 14:44	05/03/17 16:04	1
Manganese	**733**		8.05	0.204	mg/Kg	☼	05/02/17 14:44	05/03/17 18:06	5
Molybdenum	**0.778**	**B**	0.536	0.146	mg/Kg	☼	05/02/17 14:44	05/03/17 16:04	1
Nickel	**9.17**		1.07	0.126	mg/Kg	☼	05/02/17 14:44	05/03/17 16:04	1
Potassium	**1370**		107	11.8	mg/Kg	☼	05/02/17 14:44	05/03/17 16:04	1
Selenium	0.278	U	2.15	0.278	mg/Kg	☼	05/02/17 14:44	05/03/17 16:04	1
Sodium	**10700**		107	0.951	mg/Kg	☼	05/02/17 14:44	05/03/17 16:04	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0131**	**J**	0.0187	0.00395	mg/Kg	☼	04/20/17 13:54	04/21/17 09:43	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**17.5**		1.0	1.0	%			04/20/17 16:48	1
Percent Solids	**82.5**		1.0	1.0	%			04/20/17 16:48	1

Client Sample ID: SJRP-TB-04192017-2 **Lab Sample ID: 600-146941-6**
Date Collected: 04/19/17 12:00 **Matrix: Water**
Date Received: 04/20/17 09:56

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/25/17 14:38	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/25/17 14:38	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/25/17 14:38	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/25/17 14:38	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Client Sample ID: SJRP-TB-04192017-2

Lab Sample ID: 600-146941-6
Matrix: Water
Date Collected: 04/19/17 12:00
Date Received: 04/20/17 09:56

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*92*		*50 - 134*		*04/25/17 14:38*	*1*
Dibromofluoromethane	*85*		*62 - 130*		*04/25/17 14:38*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*04/25/17 14:38*	*1*
4-Bromofluorobenzene	*102*		*67 - 139*		*04/25/17 14:38*	*1*

Client Sample ID: SJRP-EB-04192017-2

Lab Sample ID: 600-146941-7
Matrix: Water
Date Collected: 04/19/17 13:40
Date Received: 04/20/17 09:56

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/25/17 15:07	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/25/17 15:07	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/25/17 15:07	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/25/17 15:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*92*		*50 - 134*		*04/25/17 15:07*	*1*
Dibromofluoromethane	*84*		*62 - 130*		*04/25/17 15:07*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*04/25/17 15:07*	*1*
4-Bromofluorobenzene	*98*		*67 - 139*		*04/25/17 15:07*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			04/22/17 12:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	*130*		*50 - 150*		*04/22/17 12:42*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0827	U *	0.0909	0.0827	mg/L		04/22/17 15:41	04/24/17 13:03	1
ORO C24-C40	0.0827	U	0.0909	0.0827	mg/L		04/22/17 15:41	04/24/17 13:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	*65*		*50 - 150*	*04/22/17 15:41*	*04/24/17 13:03*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		04/28/17 11:10	05/01/17 15:26	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		04/28/17 11:10	05/01/17 15:26	1
Barium	**0.000900**	**J**	0.0200	0.000530	mg/L		04/28/17 11:10	05/01/17 15:26	1
Boron	**0.0142**	**J**	0.200	0.0116	mg/L		04/28/17 11:10	05/01/17 15:26	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		04/28/17 11:10	05/01/17 15:26	1
Calcium	**0.0553**	**J**	1.00	0.0240	mg/L		04/28/17 11:10	05/01/17 15:26	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/28/17 11:10	05/01/17 15:26	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		04/28/17 11:10	05/01/17 15:26	1
Iron	0.0270	U	0.400	0.0270	mg/L		04/28/17 11:10	05/01/17 15:26	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/28/17 11:10	05/01/17 15:26	1
Magnesium	0.0555	U	1.00	0.0555	mg/L		04/28/17 11:10	05/01/17 15:26	1
Manganese	**0.000700**	**J B**	0.0100	0.000360	mg/L		04/28/17 11:10	05/01/17 15:26	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Client Sample ID: SJRP-EB-04192017-2
Date Collected: 04/19/17 13:40
Date Received: 04/20/17 09:56

Lab Sample ID: 600-146941-7
Matrix: Water

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	**0.00232**	**J B**	0.0100	0.000540	mg/L		04/28/17 11:10	05/02/17 15:36	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		04/28/17 11:10	05/01/17 15:26	1
Potassium	0.0374	U	1.00	0.0374	mg/L		04/28/17 11:10	05/01/17 15:26	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/28/17 11:10	05/01/17 15:26	1
Sodium	**0.0909**	**J**	1.00	0.0214	mg/L		04/28/17 11:10	05/03/17 14:46	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000820	U	0.000200	0.0000820	mg/L		04/21/17 07:11	04/21/17 11:03	1

Definitions/Glossary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	RPD of the LCS and LCSD exceeds the control limits
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)

Definitions/Glossary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(61-130)	(68-140)	(50-130)	(57-140)
600-146941-1	SJRP-SB01-1-2-04192017	82	83	86	109
600-146941-2	SJRP-SB01-1-2-04192017-2	84	80	85	110
600-146941-3	SJRP-MW15-1-2-04192017	88	83	88	113
600-146941-3 MS	SJRP-MW15-1-2-04192017	90	90	96	118
600-146941-3 MSD	SJRP-MW15-1-2-04192017	96	94	101	112
600-146941-4	SJRP-SB02-1-2-04192017	88	87	85	111
600-146941-5	SJRP-SB02-1-2-04192017-2	86	81	88	111
LCS 600-211159/3	Lab Control Sample	83	92	107	119
LCSD 600-211159/4	Lab Control Sample Dup	85	89	106	119
MB 600-211159/6	Method Blank	80	81	94	110

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(50-134)	(62-130)	(70-130)	(67-139)
600-146941-6	SJRP-TB-04192017-2	92	85	96	102
600-146941-7	SJRP-EB-04192017-2	92	84	96	98
LCS 600-211505/4	Lab Control Sample	92	88	92	98
LCSD 600-211505/5	Lab Control Sample Dup	92	86	93	99
MB 600-211505/7	Method Blank	92	83	95	102

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		TFT1	TFT2
Lab Sample ID	Client Sample ID	(50-150)	(50-150)
600-146941-1	SJRP-SB01-1-2-04192017		54
600-146941-2	SJRP-SB01-1-2-04192017-2		51
600-146941-3	SJRP-MW15-1-2-04192017		53
600-146941-3 MS	SJRP-MW15-1-2-04192017	268 X	73
600-146941-3 MSD	SJRP-MW15-1-2-04192017	180 X	55
600-146941-4	SJRP-SB02-1-2-04192017		56
600-146941-5	SJRP-SB02-1-2-04192017-2		56
LCS 490-424627/2-A	Lab Control Sample		77
LCSD 490-424627/3-A	Lab Control Sample Dup		74

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		TFT1	TFT2
Lab Sample ID	Client Sample ID	(50-150)	(50-150)
MB 490-424627/1-A	Method Blank		62
MB 490-424627/1-A	Method Blank		55
MB 490-425109/1-A	Method Blank		53

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(50-150)
600-146941-7	SJRP-EB-04192017-2	130
LCS 490-424212/5	Lab Control Sample	120
LCSD 490-424212/6	Lab Control Sample Dup	122
MB 490-424212/7	Method Blank	131

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		OTPH1
Lab Sample ID	Client Sample ID	(50-150)
600-146941-1	SJRP-SB01-1-2-04192017	79
600-146941-2	SJRP-SB01-1-2-04192017-2	79
600-146941-3	SJRP-MW15-1-2-04192017	88
600-146941-3 MS	SJRP-MW15-1-2-04192017	107
600-146941-3 MSD	SJRP-MW15-1-2-04192017	79
600-146941-4	SJRP-SB02-1-2-04192017	87
600-146941-5	SJRP-SB02-1-2-04192017-2	94
LCS 490-424863/2-A	Lab Control Sample	71
MB 490-424863/1-A	Method Blank	76

Surrogate Legend

OTPH = o-Terphenyl (Surr)

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		OTPH1
Lab Sample ID	Client Sample ID	(50-150)
600-146941-7	SJRP-EB-04192017-2	65
LCS 490-424318/2-A	Lab Control Sample	46 X
LCSD 490-424318/3-A	Lab Control Sample Dup	71

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
		OTPH1								
Lab Sample ID	Client Sample ID	(50-150)								
MB 490-424318/1-A	Method Blank	60								

Surrogate Legend

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-211159/6
Matrix: Solid
Analysis Batch: 211159

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			04/20/17 11:11	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			04/20/17 11:11	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			04/20/17 11:11	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			04/20/17 11:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*61 - 130*		*04/20/17 11:11*	*1*
Dibromofluoromethane	*81*		*68 - 140*		*04/20/17 11:11*	*1*
Toluene-d8 (Surr)	*94*		*50 - 130*		*04/20/17 11:11*	*1*
4-Bromofluorobenzene	*110*		*57 - 140*		*04/20/17 11:11*	*1*

Lab Sample ID: LCS 600-211159/3
Matrix: Solid
Analysis Batch: 211159

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.05145		mg/Kg		103	70 - 131		
Ethylbenzene			0.0500	0.05196		mg/Kg		104	66 - 130		
Toluene			0.0500	0.05317		mg/Kg		106	67 - 130		
Xylenes, Total			0.100	0.1003		mg/Kg		100	63 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*83*		*61 - 130*
Dibromofluoromethane	*92*		*68 - 140*
Toluene-d8 (Surr)	*107*		*50 - 130*
4-Bromofluorobenzene	*119*		*57 - 140*

Lab Sample ID: LCSD 600-211159/4
Matrix: Solid
Analysis Batch: 211159

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.05152		mg/Kg		103	70 - 131	0	30
Ethylbenzene			0.0500	0.04792		mg/Kg		96	66 - 130	8	30
Toluene			0.0500	0.04920		mg/Kg		98	67 - 130	8	30
Xylenes, Total			0.100	0.09327		mg/Kg		93	63 - 130	7	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*61 - 130*
Dibromofluoromethane	*89*		*68 - 140*
Toluene-d8 (Surr)	*106*		*50 - 130*
4-Bromofluorobenzene	*119*		*57 - 140*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 600-146941-3 MS — **Client Sample ID: SJRP-MW15-1-2-04192017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211159 — **Prep Batch: 211220**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.000923	U	0.0653	0.06063		mg/Kg	☼	93	70 - 131
Ethylbenzene	0.00149	U	0.0653	0.05734		mg/Kg	☼	88	66 - 130
Toluene	0.00202	U	0.0653	0.05774		mg/Kg	☼	88	67 - 130
Xylenes, Total	0.00334	J	0.131	0.1164		mg/Kg	☼	87	63 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*61 - 130*
Dibromofluoromethane	*90*		*68 - 140*
Toluene-d8 (Surr)	*96*		*50 - 130*
4-Bromofluorobenzene	*118*		*57 - 140*

Lab Sample ID: 600-146941-3 MSD — **Client Sample ID: SJRP-MW15-1-2-04192017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211159 — **Prep Batch: 211220**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.000923	U	0.0667	0.06579		mg/Kg	☼	99	70 - 131	8	30
Ethylbenzene	0.00149	U	0.0667	0.06366		mg/Kg	☼	95	66 - 130	10	30
Toluene	0.00202	U	0.0667	0.06418		mg/Kg	☼	96	67 - 130	11	30
Xylenes, Total	0.00334	J	0.133	0.1279		mg/Kg	☼	93	63 - 130	9	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*61 - 130*
Dibromofluoromethane	*94*		*68 - 140*
Toluene-d8 (Surr)	*101*		*50 - 130*
4-Bromofluorobenzene	*112*		*57 - 140*

Lab Sample ID: MB 600-211505/7 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 211505

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/25/17 14:10	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/25/17 14:10	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/25/17 14:10	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/25/17 14:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*50 - 134*		*04/25/17 14:10*	*1*
Dibromofluoromethane	*83*		*62 - 130*		*04/25/17 14:10*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*04/25/17 14:10*	*1*
4-Bromofluorobenzene	*102*		*67 - 139*		*04/25/17 14:10*	*1*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-211505/4
Matrix: Water
Analysis Batch: 211505

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0100	0.009201		mg/L		92	70 - 130
Ethylbenzene	0.0100	0.009200		mg/L		92	70 - 130
Toluene	0.0100	0.009607		mg/L		96	70 - 130
Xylenes, Total	0.0200	0.01877		mg/L		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*50 - 134*
Dibromofluoromethane	*88*		*62 - 130*
Toluene-d8 (Surr)	*92*		*70 - 130*
4-Bromofluorobenzene	*98*		*67 - 139*

Lab Sample ID: LCSD 600-211505/5
Matrix: Water
Analysis Batch: 211505

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0100	0.008675		mg/L		87	70 - 130	6	20
Ethylbenzene	0.0100	0.008653		mg/L		87	70 - 130	6	20
Toluene	0.0100	0.009016		mg/L		90	70 - 130	6	20
Xylenes, Total	0.0200	0.01753		mg/L		88	70 - 130	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*50 - 134*
Dibromofluoromethane	*86*		*62 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*
4-Bromofluorobenzene	*99*		*67 - 139*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 490-424212/7
Matrix: Water
Analysis Batch: 424212

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			04/22/17 11:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*131*		*50 - 150*		*04/22/17 11:43*	*1*

Lab Sample ID: LCS 490-424212/5
Matrix: Water
Analysis Batch: 424212

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	1.00	0.9907		mg/L		99	66 - 140

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: LCS 490-424212/5
Matrix: Water
Analysis Batch: 424212

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	120		50 - 150

Lab Sample ID: LCSD 490-424212/6
Matrix: Water
Analysis Batch: 424212

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10			1.00	0.9503		mg/L		95	66 - 140	4	42

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	122		50 - 150

Lab Sample ID: MB 490-424627/1-A
Matrix: Solid
Analysis Batch: 425527

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 424627

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		04/24/17 13:21	04/27/17 14:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	55		50 - 150	04/24/17 13:21	04/27/17 14:34	1

Lab Sample ID: MB 490-424627/1-A
Matrix: Solid
Analysis Batch: 425527

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 424627

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		04/24/17 13:21	04/28/17 12:18	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	62		50 - 150	04/24/17 13:21	04/28/17 12:18	1

Lab Sample ID: LCS 490-424627/2-A
Matrix: Solid
Analysis Batch: 425527

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 424627

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C6-C10			500	502.6		mg/Kg		101	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	77		50 - 150

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: LCSD 490-424627/3-A
Matrix: Solid
Analysis Batch: 425527

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 424627

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10			500	493.7		mg/Kg		99	70 - 130	2	21

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*74*		*50 - 150*

Lab Sample ID: 600-146941-3 MS
Matrix: Solid
Analysis Batch: 425527

Client Sample ID: SJRP-MW15-1-2-04192017
Prep Type: Total/NA
Prep Batch: 424627

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	3.22	U	644	596.4		mg/Kg	☼	93	56 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*268*	*X*	*50 - 150*
a,a,a-Trifluorotoluene	*73*		*50 - 150*

Lab Sample ID: 600-146941-3 MSD
Matrix: Solid
Analysis Batch: 425527

Client Sample ID: SJRP-MW15-1-2-04192017
Prep Type: Total/NA
Prep Batch: 424627

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	3.22	U	644	579.5		mg/Kg	☼	90	56 - 130	3	21

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*180*	*X*	*50 - 150*
a,a,a-Trifluorotoluene	*55*		*50 - 150*

Lab Sample ID: MB 490-425109/1-A
Matrix: Solid
Analysis Batch: 425527

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 425109

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		04/26/17 09:36	04/27/17 15:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*53*		*50 - 150*	*04/26/17 09:36*	*04/27/17 15:04*	*1*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Lab Sample ID: MB 490-424318/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 424485 — **Prep Batch: 424318**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0910	U	0.100	0.0910	mg/L		04/22/17 15:41	04/24/17 11:47	1
ORO C24-C40	0.0910	U	0.100	0.0910	mg/L		04/22/17 15:41	04/24/17 11:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*60*		*50 - 150*	*04/22/17 15:41*	*04/24/17 11:47*	*1*

Lab Sample ID: LCS 490-424318/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 424485 — **Prep Batch: 424318**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	0.800	0.4380		mg/L		55	46 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*46*	*X*	*50 - 150*

Lab Sample ID: LCSD 490-424318/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 424485 — **Prep Batch: 424318**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	0.800	0.7101	*	mg/L		89	46 - 132	47	31

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl (Surr)	*71*		*50 - 150*

Lab Sample ID: MB 490-424863/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 424776 — **Prep Batch: 424863**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.50	U	5.00	2.50	mg/Kg		04/25/17 10:36	04/25/17 21:16	1
ORO C24-C40	2.668	J	5.00	2.50	mg/Kg		04/25/17 10:36	04/25/17 21:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*76*		*50 - 150*	*04/25/17 10:36*	*04/25/17 21:16*	*1*

Lab Sample ID: LCS 490-424863/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 424776 — **Prep Batch: 424863**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	40.0	27.09		mg/Kg		68	54 - 130

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Lab Sample ID: LCS 490-424863/2-A
Matrix: Solid
Analysis Batch: 424776

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 424863

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	71		50 - 150

Lab Sample ID: 600-146941-3 MS
Matrix: Solid
Analysis Batch: 424776

Client Sample ID: SJRP-MW15-1-2-04192017
Prep Type: Total/NA
Prep Batch: 424863

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	4.13	J	45.7	46.03		mg/Kg	☼	92	10 - 142

Surrogate	MS %Recovery	MS Qualifier	Limits
o-Terphenyl (Surr)	107		50 - 150

Lab Sample ID: 600-146941-3 MSD
Matrix: Solid
Analysis Batch: 424776

Client Sample ID: SJRP-MW15-1-2-04192017
Prep Type: Total/NA
Prep Batch: 424863

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	4.13	J	46.0	43.63		mg/Kg	☼	86	10 - 142	5	47

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl (Surr)	79		50 - 150

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-211781/1-A
Matrix: Water
Analysis Batch: 211942

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 211781

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		04/28/17 11:10	05/01/17 14:59	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		04/28/17 11:10	05/01/17 14:59	1
Barium	0.000530	U	0.0200	0.000530	mg/L		04/28/17 11:10	05/01/17 14:59	1
Boron	0.0116	U	0.200	0.0116	mg/L		04/28/17 11:10	05/01/17 14:59	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		04/28/17 11:10	05/01/17 14:59	1
Calcium	0.0240	U	1.00	0.0240	mg/L		04/28/17 11:10	05/01/17 14:59	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		04/28/17 11:10	05/01/17 14:59	1
Iron	0.1794	J	0.400	0.0270	mg/L		04/28/17 11:10	05/01/17 14:59	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/28/17 11:10	05/01/17 14:59	1
Magnesium	0.0555	U	1.00	0.0555	mg/L		04/28/17 11:10	05/01/17 14:59	1
Manganese	0.002900	J	0.0100	0.000360	mg/L		04/28/17 11:10	05/01/17 14:59	1
Nickel	0.001100	J	0.0100	0.000800	mg/L		04/28/17 11:10	05/01/17 14:59	1
Potassium	0.0374	U	1.00	0.0374	mg/L		04/28/17 11:10	05/01/17 14:59	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/28/17 11:10	05/01/17 14:59	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: MB 600-211781/1-A
Matrix: Water
Analysis Batch: 211942

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 211781

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/28/17 11:10	05/01/17 17:20	1

Lab Sample ID: MB 600-211781/1-A
Matrix: Water
Analysis Batch: 212025

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 211781

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	0.001794	J	0.0100	0.000540	mg/L		04/28/17 11:10	05/02/17 15:23	1

Lab Sample ID: MB 600-211781/1-A
Matrix: Water
Analysis Batch: 212162

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 211781

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	0.0214	U	1.00	0.0214	mg/L		04/28/17 11:10	05/03/17 14:28	1

Lab Sample ID: LCS 600-211781/2-A
Matrix: Water
Analysis Batch: 211942

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211781

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	10.12		mg/L		101	80 - 120
Arsenic	1.00	1.025		mg/L		103	80 - 120
Barium	1.00	1.036		mg/L		104	80 - 120
Boron	1.00	1.004		mg/L		100	80 - 120
Cadmium	0.500	0.5144		mg/L		103	80 - 120
Calcium	10.0	10.17		mg/L		102	80 - 120
Chromium	1.00	1.022		mg/L		102	80 - 120
Cobalt	1.00	1.025		mg/L		103	80 - 120
Iron	10.0	10.18		mg/L		102	80 - 120
Lead	1.00	1.022		mg/L		102	80 - 120
Magnesium	10.0	10.15		mg/L		102	80 - 120
Manganese	1.00	1.022		mg/L		102	80 - 120
Nickel	1.00	1.025		mg/L		103	80 - 120
Potassium	10.0	10.19		mg/L		102	80 - 120
Selenium	1.00	1.019		mg/L		102	80 - 120

Lab Sample ID: LCS 600-211781/2-A
Matrix: Water
Analysis Batch: 212025

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211781

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Molybdenum	1.00	1.051		mg/L		105	80 - 120

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCS 600-211781/2-A
Matrix: Water
Analysis Batch: 212162

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211781

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	10.0	10.51		mg/L		105	80 - 120

Lab Sample ID: MB 600-212036/1-A
Matrix: Solid
Analysis Batch: 212162

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 212036

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.7050	J	25.0	0.300	mg/Kg		05/02/17 14:44	05/03/17 15:33	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		05/02/17 14:44	05/03/17 15:33	1
Barium	0.0300	U	1.00	0.0300	mg/Kg		05/02/17 14:44	05/03/17 15:33	1
Boron	0.386	U	20.0	0.386	mg/Kg		05/02/17 14:44	05/03/17 15:33	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		05/02/17 14:44	05/03/17 15:33	1
Calcium	0.864	U	100	0.864	mg/Kg		05/02/17 14:44	05/03/17 15:33	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		05/02/17 14:44	05/03/17 15:33	1
Cobalt	0.0676	U	0.500	0.0676	mg/Kg		05/02/17 14:44	05/03/17 15:33	1
Iron	2.53	U	20.0	2.53	mg/Kg		05/02/17 14:44	05/03/17 15:33	1
Magnesium	1.92	U	100	1.92	mg/Kg		05/02/17 14:44	05/03/17 15:33	1
Manganese	0.0381	U	1.50	0.0381	mg/Kg		05/02/17 14:44	05/03/17 15:33	1
Molybdenum	0.2200	J	0.500	0.136	mg/Kg		05/02/17 14:44	05/03/17 15:33	1
Nickel	0.117	U	1.00	0.117	mg/Kg		05/02/17 14:44	05/03/17 15:33	1
Potassium	11.0	U	100	11.0	mg/Kg		05/02/17 14:44	05/03/17 15:33	1
Selenium	0.259	U	2.00	0.259	mg/Kg		05/02/17 14:44	05/03/17 15:33	1
Sodium	0.886	U	100	0.886	mg/Kg		05/02/17 14:44	05/03/17 15:33	1

Lab Sample ID: MB 600-212036/1-A
Matrix: Solid
Analysis Batch: 212162

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 212036

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.105	U	0.500	0.105	mg/Kg		05/02/17 14:44	05/03/17 17:36	1

Lab Sample ID: LCSSRM 600-212036/2-A
Matrix: Solid
Analysis Batch: 212162

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 212036

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	7590	6472		mg/Kg		85.3	34.9 - 151.5
Arsenic	97.5	95.55		mg/Kg		98.0	69.2 - 145.6
Barium	306	289.6		mg/Kg		94.6	82.7 - 117.0
Boron	116	114.8		mg/Kg		99.0	73.0 - 127.6
Cadmium	76.6	73.12		mg/Kg		95.5	73.2 - 126.8
Calcium	5880	5959		mg/Kg		101.3	81.8 - 118.4
Chromium	103	96.05		mg/Kg		93.3	79.7 - 121.4

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCSSRM 600-212036/2-A
Matrix: Solid
Analysis Batch: 212162

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 212036

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	103	102.7		mg/Kg		99.7	83.3 - 116.5
Iron	14500	12770		mg/Kg		88.1	45.0 - 155.9
Magnesium	2680	2505		mg/Kg		93.5	75.4 - 124.6
Manganese	400	364.6		mg/Kg		91.2	81.0 - 119.0
Molybdenum	94.9	91.18		mg/Kg		96.1	78.5 - 121.2
Nickel	153	150.0		mg/Kg		98.0	73.2 - 126.8
Potassium	2230	2051		mg/Kg		92.0	69.5 - 130.5
Selenium	161	160.1		mg/Kg		99.4	77.6 - 123.0
Sodium	370	345.4		mg/Kg		93.4	70.5 - 129.7

Lab Sample ID: LCSSRM 600-212036/2-A
Matrix: Solid
Analysis Batch: 212162

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 212036

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	96.7	90.26		mg/Kg		93.3	81.7 - 117.9

Lab Sample ID: 600-146941-3 MS
Matrix: Solid
Analysis Batch: 212162

Client Sample ID: SJRP-MW15-1-2-04192017
Prep Type: Total/NA
Prep Batch: 212036

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	14200	B	508	17280	4	mg/Kg	☼	613	75 - 125
Arsenic	5.52		50.8	51.72		mg/Kg	☼	91	75 - 125
Barium	85.4	F1	50.8	132.2		mg/Kg	☼	92	75 - 125
Boron	3.09	J F1	50.8	33.62	F1	mg/Kg	☼	60	75 - 125
Cadmium	0.221	J	25.4	24.02		mg/Kg	☼	94	75 - 125
Calcium	19500	F2	508	12610	4	mg/Kg	☼	-1359	75 - 125
Chromium	6.72		50.8	54.66		mg/Kg	☼	94	75 - 125
Cobalt	8.62		50.8	57.60		mg/Kg	☼	97	75 - 125
Iron	19400		508	20990	4	mg/Kg	☼	309	75 - 125
Magnesium	4120		508	4918	4	mg/Kg	☼	157	75 - 125
Manganese	423		50.8	346.1	4	mg/Kg	☼	-151	75 - 125
Molybdenum	1.20	F1 B	50.8	37.79	F1	mg/Kg	☼	72	75 - 125
Nickel	11.2		50.8	59.02		mg/Kg	☼	94	75 - 125
Potassium	1570	F1	508	2117		mg/Kg	☼	108	75 - 125
Selenium	0.523	J	50.8	46.96		mg/Kg	☼	91	75 - 125

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-146941-3 MS — **Client Sample ID: SJRP-MW15-1-2-04192017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 212162 — **Prep Batch: 212036**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	20.5		50.8	72.88		mg/Kg	☼	103	75 - 125

Lab Sample ID: 600-146941-3 MS — **Client Sample ID: SJRP-MW15-1-2-04192017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 212257 — **Prep Batch: 212036**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	13600		508	13690	4	mg/Kg	☼	23	75 - 125

Lab Sample ID: 600-146941-3 MSD — **Client Sample ID: SJRP-MW15-1-2-04192017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 212162 — **Prep Batch: 212036**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	14200	B	521	15660	4	mg/Kg	☼	287	75 - 125	10	20
Arsenic	5.52		52.1	53.90		mg/Kg	☼	93	75 - 125	4	20
Barium	85.4	F1	52.1	123.2	F1	mg/Kg	☼	73	75 - 125	7	20
Boron	3.09	J F1	52.1	33.33	F1	mg/Kg	☼	58	75 - 125	1	20
Cadmium	0.221	J	26.1	24.49		mg/Kg	☼	93	75 - 125	2	20
Calcium	19500	F2	521	21260	4 F2	mg/Kg	☼	336	75 - 125	51	20
Chromium	6.72		52.1	55.72		mg/Kg	☼	94	75 - 125	2	20
Cobalt	8.62		52.1	56.76		mg/Kg	☼	92	75 - 125	1	20
Iron	19400		521	18960	4	mg/Kg	☼	-89	75 - 125	10	20
Magnesium	4120		521	4332	4	mg/Kg	☼	41	75 - 125	13	20
Manganese	423		52.1	324.8	4	mg/Kg	☼	-188	75 - 125	6	20
Molybdenum	1.20	F1 B	52.1	39.71	F1	mg/Kg	☼	74	75 - 125	5	20
Nickel	11.2		52.1	58.85		mg/Kg	☼	91	75 - 125	0	20
Potassium	1570	F1	521	1891	F1	mg/Kg	☼	61	75 - 125	11	20
Selenium	0.523	J	52.1	49.45		mg/Kg	☼	94	75 - 125	5	20

Lab Sample ID: 600-146941-3 MSD — **Client Sample ID: SJRP-MW15-1-2-04192017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 212162 — **Prep Batch: 212036**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	20.5		52.1	72.71		mg/Kg	☼	100	75 - 125	0	20

Lab Sample ID: 600-146941-3 MSD — **Client Sample ID: SJRP-MW15-1-2-04192017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 212257 — **Prep Batch: 212036**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sodium	13600		521	12490	4	mg/Kg	☼	-208	75 - 125	9	20

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-211245/7-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 211298 — **Prep Batch: 211245**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000820	U	0.000200	0.0000820	mg/L		04/21/17 07:11	04/21/17 10:46	1

Lab Sample ID: LCS 600-211245/8-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 211298 — **Prep Batch: 211245**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00300	0.003062		mg/L		102	70 - 130

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-211210/7-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211262 — **Prep Batch: 211210**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00336	U	0.0159	0.00336	mg/Kg		04/20/17 13:54	04/21/17 09:51	1

Lab Sample ID: LCSSRM 600-211210/8-A ^100 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211262 — **Prep Batch: 211210**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	20.2	25.14		mg/Kg		124.5	70.8 - 129.2

Lab Sample ID: 600-146941-3 MS — **Client Sample ID: SJRP-MW15-1-2-04192017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211262 — **Prep Batch: 211210**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0334		0.285	0.3186		mg/Kg	☼	100	75 - 125

Lab Sample ID: 600-146941-3 MSD — **Client Sample ID: SJRP-MW15-1-2-04192017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211262 — **Prep Batch: 211210**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.0334		0.289	0.3279		mg/Kg	☼	102	75 - 125	3	20

Lab Sample ID: 600-146941-3 DU — **Client Sample ID: SJRP-MW15-1-2-04192017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211262 — **Prep Batch: 211210**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.0334		0.03408		mg/Kg	☼	2	20

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

GC/MS VOA

Analysis Batch: 211159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146941-1	SJRP-SB01-1-2-04192017	Total/NA	Solid	8260B	211220
600-146941-2	SJRP-SB01-1-2-04192017-2	Total/NA	Solid	8260B	211220
600-146941-3	SJRP-MW15-1-2-04192017	Total/NA	Solid	8260B	211220
600-146941-4	SJRP-SB02-1-2-04192017	Total/NA	Solid	8260B	211220
600-146941-5	SJRP-SB02-1-2-04192017-2	Total/NA	Solid	8260B	211220
MB 600-211159/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-211159/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-211159/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
600-146941-3 MS	SJRP-MW15-1-2-04192017	Total/NA	Solid	8260B	211220
600-146941-3 MSD	SJRP-MW15-1-2-04192017	Total/NA	Solid	8260B	211220

Prep Batch: 211220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146941-1	SJRP-SB01-1-2-04192017	Total/NA	Solid	5035	
600-146941-2	SJRP-SB01-1-2-04192017-2	Total/NA	Solid	5035	
600-146941-3	SJRP-MW15-1-2-04192017	Total/NA	Solid	5035	
600-146941-4	SJRP-SB02-1-2-04192017	Total/NA	Solid	5035	
600-146941-5	SJRP-SB02-1-2-04192017-2	Total/NA	Solid	5035	
600-146941-3 MS	SJRP-MW15-1-2-04192017	Total/NA	Solid	5035	
600-146941-3 MSD	SJRP-MW15-1-2-04192017	Total/NA	Solid	5035	

Analysis Batch: 211505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146941-6	SJRP-TB-04192017-2	Total/NA	Water	8260B	
600-146941-7	SJRP-EB-04192017-2	Total/NA	Water	8260B	
MB 600-211505/7	Method Blank	Total/NA	Water	8260B	
LCS 600-211505/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-211505/5	Lab Control Sample Dup	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 424212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146941-7	SJRP-EB-04192017-2	Total/NA	Water	8015C	
MB 490-424212/7	Method Blank	Total/NA	Water	8015C	
LCS 490-424212/5	Lab Control Sample	Total/NA	Water	8015C	
LCSD 490-424212/6	Lab Control Sample Dup	Total/NA	Water	8015C	

Prep Batch: 424627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146941-1	SJRP-SB01-1-2-04192017	Total/NA	Solid	5030B	
600-146941-2	SJRP-SB01-1-2-04192017-2	Total/NA	Solid	5030B	
600-146941-3	SJRP-MW15-1-2-04192017	Total/NA	Solid	5030B	
600-146941-4	SJRP-SB02-1-2-04192017	Total/NA	Solid	5030B	
600-146941-5	SJRP-SB02-1-2-04192017-2	Total/NA	Solid	5030B	
MB 490-424627/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 490-424627/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 490-424627/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
600-146941-3 MS	SJRP-MW15-1-2-04192017	Total/NA	Solid	5030B	
600-146941-3 MSD	SJRP-MW15-1-2-04192017	Total/NA	Solid	5030B	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

GC VOA (Continued)

Prep Batch: 425109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-425109/1-A	Method Blank	Total/NA	Solid	5030B	

Analysis Batch: 425527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146941-1	SJRP-SB01-1-2-04192017	Total/NA	Solid	8015C	424627
600-146941-2	SJRP-SB01-1-2-04192017-2	Total/NA	Solid	8015C	424627
600-146941-3	SJRP-MW15-1-2-04192017	Total/NA	Solid	8015C	424627
600-146941-4	SJRP-SB02-1-2-04192017	Total/NA	Solid	8015C	424627
600-146941-5	SJRP-SB02-1-2-04192017-2	Total/NA	Solid	8015C	424627
MB 490-424627/1-A	Method Blank	Total/NA	Solid	8015C	424627
MB 490-424627/1-A	Method Blank	Total/NA	Solid	8015C	424627
MB 490-425109/1-A	Method Blank	Total/NA	Solid	8015C	425109
LCS 490-424627/2-A	Lab Control Sample	Total/NA	Solid	8015C	424627
LCSD 490-424627/3-A	Lab Control Sample Dup	Total/NA	Solid	8015C	424627
600-146941-3 MS	SJRP-MW15-1-2-04192017	Total/NA	Solid	8015C	424627
600-146941-3 MSD	SJRP-MW15-1-2-04192017	Total/NA	Solid	8015C	424627

GC Semi VOA

Prep Batch: 424318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146941-7	SJRP-EB-04192017-2	Total/NA	Water	3510C	
MB 490-424318/1-A	Method Blank	Total/NA	Water	3510C	
LCS 490-424318/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 490-424318/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 424485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146941-7	SJRP-EB-04192017-2	Total/NA	Water	8015C	424318
MB 490-424318/1-A	Method Blank	Total/NA	Water	8015C	424318
LCS 490-424318/2-A	Lab Control Sample	Total/NA	Water	8015C	424318
LCSD 490-424318/3-A	Lab Control Sample Dup	Total/NA	Water	8015C	424318

Analysis Batch: 424776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146941-1	SJRP-SB01-1-2-04192017	Total/NA	Solid	8015C	424863
600-146941-2	SJRP-SB01-1-2-04192017-2	Total/NA	Solid	8015C	424863
600-146941-3	SJRP-MW15-1-2-04192017	Total/NA	Solid	8015C	424863
600-146941-4	SJRP-SB02-1-2-04192017	Total/NA	Solid	8015C	424863
600-146941-5	SJRP-SB02-1-2-04192017-2	Total/NA	Solid	8015C	424863
MB 490-424863/1-A	Method Blank	Total/NA	Solid	8015C	424863
LCS 490-424863/2-A	Lab Control Sample	Total/NA	Solid	8015C	424863
600-146941-3 MS	SJRP-MW15-1-2-04192017	Total/NA	Solid	8015C	424863
600-146941-3 MSD	SJRP-MW15-1-2-04192017	Total/NA	Solid	8015C	424863

Prep Batch: 424863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146941-1	SJRP-SB01-1-2-04192017	Total/NA	Solid	3550C	
600-146941-2	SJRP-SB01-1-2-04192017-2	Total/NA	Solid	3550C	
600-146941-3	SJRP-MW15-1-2-04192017	Total/NA	Solid	3550C	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

GC Semi VOA (Continued)

Prep Batch: 424863 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146941-4	SJRP-SB02-1-2-04192017	Total/NA	Solid	3550C	
600-146941-5	SJRP-SB02-1-2-04192017-2	Total/NA	Solid	3550C	
MB 490-424863/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-424863/2-A	Lab Control Sample	Total/NA	Solid	3550C	
600-146941-3 MS	SJRP-MW15-1-2-04192017	Total/NA	Solid	3550C	
600-146941-3 MSD	SJRP-MW15-1-2-04192017	Total/NA	Solid	3550C	

Metals

Prep Batch: 211210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146941-1	SJRP-SB01-1-2-04192017	Total/NA	Solid	7471A	
600-146941-2	SJRP-SB01-1-2-04192017-2	Total/NA	Solid	7471A	
600-146941-3	SJRP-MW15-1-2-04192017	Total/NA	Solid	7471A	
600-146941-4	SJRP-SB02-1-2-04192017	Total/NA	Solid	7471A	
600-146941-5	SJRP-SB02-1-2-04192017-2	Total/NA	Solid	7471A	
MB 600-211210/7-A	Method Blank	Total/NA	Solid	7471A	
LCSSRM 600-211210/8-A ^100	Lab Control Sample	Total/NA	Solid	7471A	
600-146941-3 MS	SJRP-MW15-1-2-04192017	Total/NA	Solid	7471A	
600-146941-3 MSD	SJRP-MW15-1-2-04192017	Total/NA	Solid	7471A	
600-146941-3 DU	SJRP-MW15-1-2-04192017	Total/NA	Solid	7471A	

Prep Batch: 211245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146941-7	SJRP-EB-04192017-2	Total/NA	Water	7470A	
MB 600-211245/7-A	Method Blank	Total/NA	Water	7470A	
LCS 600-211245/8-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 211262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146941-1	SJRP-SB01-1-2-04192017	Total/NA	Solid	7471A	211210
600-146941-2	SJRP-SB01-1-2-04192017-2	Total/NA	Solid	7471A	211210
600-146941-3	SJRP-MW15-1-2-04192017	Total/NA	Solid	7471A	211210
600-146941-4	SJRP-SB02-1-2-04192017	Total/NA	Solid	7471A	211210
600-146941-5	SJRP-SB02-1-2-04192017-2	Total/NA	Solid	7471A	211210
MB 600-211210/7-A	Method Blank	Total/NA	Solid	7471A	211210
LCSSRM 600-211210/8-A ^100	Lab Control Sample	Total/NA	Solid	7471A	211210
600-146941-3 MS	SJRP-MW15-1-2-04192017	Total/NA	Solid	7471A	211210
600-146941-3 MSD	SJRP-MW15-1-2-04192017	Total/NA	Solid	7471A	211210
600-146941-3 DU	SJRP-MW15-1-2-04192017	Total/NA	Solid	7471A	211210

Analysis Batch: 211298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146941-7	SJRP-EB-04192017-2	Total/NA	Water	7470A	211245
MB 600-211245/7-A	Method Blank	Total/NA	Water	7470A	211245
LCS 600-211245/8-A	Lab Control Sample	Total/NA	Water	7470A	211245

Prep Batch: 211781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146941-7	SJRP-EB-04192017-2	Total/NA	Water	3010A	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Metals (Continued)

Prep Batch: 211781 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-211781/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-211781/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 211942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146941-7	SJRP-EB-04192017-2	Total/NA	Water	6010B	211781
MB 600-211781/1-A	Method Blank	Total/NA	Water	6010B	211781
MB 600-211781/1-A	Method Blank	Total/NA	Water	6010B	211781
LCS 600-211781/2-A	Lab Control Sample	Total/NA	Water	6010B	211781

Analysis Batch: 212025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146941-7	SJRP-EB-04192017-2	Total/NA	Water	6010B	211781
MB 600-211781/1-A	Method Blank	Total/NA	Water	6010B	211781
LCS 600-211781/2-A	Lab Control Sample	Total/NA	Water	6010B	211781

Prep Batch: 212036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146941-1	SJRP-SB01-1-2-04192017	Total/NA	Solid	3050B	
600-146941-2	SJRP-SB01-1-2-04192017-2	Total/NA	Solid	3050B	
600-146941-3	SJRP-MW15-1-2-04192017	Total/NA	Solid	3050B	
600-146941-4	SJRP-SB02-1-2-04192017	Total/NA	Solid	3050B	
600-146941-5	SJRP-SB02-1-2-04192017-2	Total/NA	Solid	3050B	
MB 600-212036/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-212036/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-146941-3 MS	SJRP-MW15-1-2-04192017	Total/NA	Solid	3050B	
600-146941-3 MSD	SJRP-MW15-1-2-04192017	Total/NA	Solid	3050B	

Analysis Batch: 212162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146941-1	SJRP-SB01-1-2-04192017	Total/NA	Solid	6010B	212036
600-146941-1	SJRP-SB01-1-2-04192017	Total/NA	Solid	6010B	212036
600-146941-2	SJRP-SB01-1-2-04192017-2	Total/NA	Solid	6010B	212036
600-146941-2	SJRP-SB01-1-2-04192017-2	Total/NA	Solid	6010B	212036
600-146941-3	SJRP-MW15-1-2-04192017	Total/NA	Solid	6010B	212036
600-146941-3	SJRP-MW15-1-2-04192017	Total/NA	Solid	6010B	212036
600-146941-4	SJRP-SB02-1-2-04192017	Total/NA	Solid	6010B	212036
600-146941-4	SJRP-SB02-1-2-04192017	Total/NA	Solid	6010B	212036
600-146941-5	SJRP-SB02-1-2-04192017-2	Total/NA	Solid	6010B	212036
600-146941-5	SJRP-SB02-1-2-04192017-2	Total/NA	Solid	6010B	212036
600-146941-7	SJRP-EB-04192017-2	Total/NA	Water	6010B	211781
MB 600-211781/1-A	Method Blank	Total/NA	Water	6010B	211781
MB 600-212036/1-A	Method Blank	Total/NA	Solid	6010B	212036
MB 600-212036/1-A	Method Blank	Total/NA	Solid	6010B	212036
LCS 600-211781/2-A	Lab Control Sample	Total/NA	Water	6010B	211781
LCSSRM 600-212036/2-A	Lab Control Sample	Total/NA	Solid	6010B	212036
LCSSRM 600-212036/2-A	Lab Control Sample	Total/NA	Solid	6010B	212036
600-146941-3 MS	SJRP-MW15-1-2-04192017	Total/NA	Solid	6010B	212036
600-146941-3 MS	SJRP-MW15-1-2-04192017	Total/NA	Solid	6010B	212036
600-146941-3 MSD	SJRP-MW15-1-2-04192017	Total/NA	Solid	6010B	212036
600-146941-3 MSD	SJRP-MW15-1-2-04192017	Total/NA	Solid	6010B	212036

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Analysis Batch: 212257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146941-3	SJRP-MW15-1-2-04192017	Total/NA	Solid	6010B	212036
600-146941-3 MS	SJRP-MW15-1-2-04192017	Total/NA	Solid	6010B	212036
600-146941-3 MSD	SJRP-MW15-1-2-04192017	Total/NA	Solid	6010B	212036

General Chemistry

Analysis Batch: 211226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146941-3	SJRP-MW15-1-2-04192017	Total/NA	Solid	2540B	
600-146941-4	SJRP-SB02-1-2-04192017	Total/NA	Solid	2540B	
600-146941-5	SJRP-SB02-1-2-04192017-2	Total/NA	Solid	2540B	
600-146941-3 MS	SJRP-MW15-1-2-04192017	Total/NA	Solid	2540B	
600-146941-3 MSD	SJRP-MW15-1-2-04192017	Total/NA	Solid	2540B	

Analysis Batch: 211329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-146941-1	SJRP-SB01-1-2-04192017	Total/NA	Solid	2540B	
600-146941-2	SJRP-SB01-1-2-04192017-2	Total/NA	Solid	2540B	

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Client Sample ID: SJRP-SB01-1-2-04192017 — Lab Sample ID: 600-146941-1

Date Collected: 04/19/17 09:00 — **Matrix: Solid**
Date Received: 04/20/17 09:56

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			211329	04/21/17 17:01	B1K	TAL HOU

Client Sample ID: SJRP-SB01-1-2-04192017 — Lab Sample ID: 600-146941-1

Date Collected: 04/19/17 09:00 — **Matrix: Solid**
Date Received: 04/20/17 09:56 — **Percent Solids: 80.9**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.997 g	5 mL	211220	04/20/17 12:15	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	211159	04/20/17 17:53	WS1	TAL HOU
Total/NA	Prep	5030B			5.05 g	5.0 mL	424627	04/24/17 13:21	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	425527	04/27/17 15:34	A1B	TAL NSH
Total/NA	Prep	3550C			25.20 g	1 mL	424863	04/25/17 10:36	MNM	TAL NSH
Total/NA	Analysis	8015C		1			424776	04/25/17 21:49	A1B	TAL NSH
Total/NA	Prep	3050B			1.16 g	50 mL	212036	05/02/17 14:44	JAH	TAL HOU
Total/NA	Analysis	6010B		1			212162	05/03/17 15:43	DCL	TAL HOU
Total/NA	Prep	3050B			1.16 g	50 mL	212036	05/02/17 14:44	JAH	TAL HOU
Total/NA	Analysis	6010B		1			212162	05/03/17 17:47	DCL	TAL HOU
Total/NA	Prep	7471A			.62 g	50 mL	211210	04/20/17 13:54	DDE	TAL HOU
Total/NA	Analysis	7471A		1			211262	04/21/17 09:26	DDE	TAL HOU

Client Sample ID: SJRP-SB01-1-2-04192017-2 — Lab Sample ID: 600-146941-2

Date Collected: 04/19/17 09:00 — **Matrix: Solid**
Date Received: 04/20/17 09:56

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			211329	04/21/17 17:01	B1K	TAL HOU

Client Sample ID: SJRP-SB01-1-2-04192017-2 — Lab Sample ID: 600-146941-2

Date Collected: 04/19/17 09:00 — **Matrix: Solid**
Date Received: 04/20/17 09:56 — **Percent Solids: 79.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.16 g	5 mL	211220	04/20/17 12:15	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	211159	04/20/17 18:18	WS1	TAL HOU
Total/NA	Prep	5030B			5.10 g	5.0 mL	424627	04/24/17 13:21	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	425527	04/27/17 16:04	A1B	TAL NSH
Total/NA	Prep	3550C			25.16 g	1 mL	424863	04/25/17 10:36	MNM	TAL NSH
Total/NA	Analysis	8015C		1			424776	04/25/17 22:05	A1B	TAL NSH
Total/NA	Prep	3050B			1.01 g	50 mL	212036	05/02/17 14:44	JAH	TAL HOU
Total/NA	Analysis	6010B		1			212162	05/03/17 15:45	DCL	TAL HOU
Total/NA	Prep	3050B			1.01 g	50 mL	212036	05/02/17 14:44	JAH	TAL HOU
Total/NA	Analysis	6010B		1			212162	05/03/17 17:49	DCL	TAL HOU
Total/NA	Prep	7471A			.61 g	50 mL	211210	04/20/17 13:54	DDE	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Client Sample ID: SJRP-SB01-1-2-04192017-2 — Lab Sample ID: 600-146941-2

Date Collected: 04/19/17 09:00 — **Matrix: Solid**
Date Received: 04/20/17 09:56 — **Percent Solids: 79.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1			211262	04/21/17 09:28	DDE	TAL HOU

Client Sample ID: SJRP-MW15-1-2-04192017 — Lab Sample ID: 600-146941-3

Date Collected: 04/19/17 12:05 — **Matrix: Solid**
Date Received: 04/20/17 09:56

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			211226	04/20/17 16:48	B1K	TAL HOU

Client Sample ID: SJRP-MW15-1-2-04192017 — Lab Sample ID: 600-146941-3

Date Collected: 04/19/17 12:05 — **Matrix: Solid**
Date Received: 04/20/17 09:56 — **Percent Solids: 86.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3.948 g	5 mL	211220	04/20/17 12:15	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	211159	04/20/17 16:40	WS1	TAL HOU
Total/NA	Prep	5030B			5.12 g	5.0 mL	424627	04/24/17 13:21	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	425527	04/28/17 13:48	A1B	TAL NSH
Total/NA	Prep	3550C			25.99 g	1 mL	424863	04/25/17 10:36	MNM	TAL NSH
Total/NA	Analysis	8015C		1			424776	04/25/17 22:22	A1B	TAL NSH
Total/NA	Prep	3050B			1.15 g	50 mL	212036	05/02/17 14:44	JAH	TAL HOU
Total/NA	Analysis	6010B		1			212162	05/03/17 15:48	DCL	TAL HOU
Total/NA	Prep	3050B			1.15 g	50 mL	212036	05/02/17 14:44	JAH	TAL HOU
Total/NA	Analysis	6010B		10			212162	05/03/17 17:51	DCL	TAL HOU
Total/NA	Prep	3050B			1.15 g	50 mL	212036	05/02/17 14:44	JAH	TAL HOU
Total/NA	Analysis	6010B		10			212257	05/04/17 13:21	DCL	TAL HOU
Total/NA	Prep	7471A			.60 g	50 mL	211210	04/20/17 13:54	DDE	TAL HOU
Total/NA	Analysis	7471A		1			211262	04/21/17 09:30	DDE	TAL HOU

Client Sample ID: SJRP-SB02-1-2-04192017 — Lab Sample ID: 600-146941-4

Date Collected: 04/19/17 12:50 — **Matrix: Solid**
Date Received: 04/20/17 09:56

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			211226	04/20/17 16:48	B1K	TAL HOU

Client Sample ID: SJRP-SB02-1-2-04192017 — Lab Sample ID: 600-146941-4

Date Collected: 04/19/17 12:50 — **Matrix: Solid**
Date Received: 04/20/17 09:56 — **Percent Solids: 83.5**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.017 g	5 mL	211220	04/20/17 12:15	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	211159	04/20/17 18:42	WS1	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.12 g	5.0 mL	424627	04/24/17 13:21	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	425527	04/27/17 17:04	A1B	TAL NSH
Total/NA	Prep	3550C			25.56 g	1 mL	424863	04/25/17 10:36	MNM	TAL NSH
Total/NA	Analysis	8015C		1			424776	04/25/17 23:11	A1B	TAL NSH
Total/NA	Prep	3050B			1.07 g	50 mL	212036	05/02/17 14:44	JAH	TAL HOU
Total/NA	Analysis	6010B		1			212162	05/03/17 16:02	DCL	TAL HOU
Total/NA	Prep	3050B			1.07 g	50 mL	212036	05/02/17 14:44	JAH	TAL HOU
Total/NA	Analysis	6010B		5			212162	05/03/17 18:03	DCL	TAL HOU
Total/NA	Prep	7471A			.63 g	50 mL	211210	04/20/17 13:54	DDE	TAL HOU
Total/NA	Analysis	7471A		1			211262	04/21/17 09:42	DDE	TAL HOU

Client Sample ID: SJRP-SB02-1-2-04192017-2

Lab Sample ID: 600-146941-5

Date Collected: 04/19/17 12:50

Matrix: Solid

Date Received: 04/20/17 09:56

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			211226	04/20/17 16:48	B1K	TAL HOU

Client Sample ID: SJRP-SB02-1-2-04192017-2

Lab Sample ID: 600-146941-5

Date Collected: 04/19/17 12:50

Matrix: Solid

Date Received: 04/20/17 09:56

Percent Solids: 82.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.553 g	5 mL	211220	04/20/17 12:15	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	211159	04/20/17 19:07	WS1	TAL HOU
Total/NA	Prep	5030B			5.31 g	5.0 mL	424627	04/24/17 13:21	CU	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	425527	04/27/17 17:34	A1B	TAL NSH
Total/NA	Prep	3550C			25.73 g	1 mL	424863	04/25/17 10:36	MNM	TAL NSH
Total/NA	Analysis	8015C		1			424776	04/25/17 23:28	A1B	TAL NSH
Total/NA	Prep	3050B			1.13 g	50 mL	212036	05/02/17 14:44	JAH	TAL HOU
Total/NA	Analysis	6010B		1			212162	05/03/17 16:04	DCL	TAL HOU
Total/NA	Prep	3050B			1.13 g	50 mL	212036	05/02/17 14:44	JAH	TAL HOU
Total/NA	Analysis	6010B		5			212162	05/03/17 18:06	DCL	TAL HOU
Total/NA	Prep	7471A			.66 g	50 mL	211210	04/20/17 13:54	DDE	TAL HOU
Total/NA	Analysis	7471A		1			211262	04/21/17 09:43	DDE	TAL HOU

Client Sample ID: SJRP-TB-04192017-2

Lab Sample ID: 600-146941-6

Date Collected: 04/19/17 12:00

Matrix: Water

Date Received: 04/20/17 09:56

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	211505	04/25/17 14:38	KLV	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Client Sample ID: SJRP-EB-04192017-2
Date Collected: 04/19/17 13:40
Date Received: 04/20/17 09:56

Lab Sample ID: 600-146941-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	211505	04/25/17 15:07	KLV	TAL HOU
Total/NA	Analysis	8015C		1	5 mL	5 mL	424212	04/22/17 12:42	GWM	TAL NSH
Total/NA	Prep	3510C			275 mL	1 mL	424318	04/22/17 15:41	JKG	TAL NSH
Total/NA	Analysis	8015C		1			424485	04/24/17 13:03	GMH	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	211781	04/28/17 11:10	JAH	TAL HOU
Total/NA	Analysis	6010B		1			212025	05/02/17 15:36	DCL	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	211781	04/28/17 11:10	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211942	05/01/17 15:26	DCL	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	211781	04/28/17 11:10	JAH	TAL HOU
Total/NA	Analysis	6010B		1			212162	05/03/17 14:46	DCL	TAL HOU
Total/NA	Prep	7470A			40 mL	40 mL	211245	04/21/17 07:11	DDE	TAL HOU
Total/NA	Analysis	7470A		1			211298	04/21/17 11:03	DDE	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-146941-1

Laboratory: TestAmerica Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	16-046-0	08-04-17
Louisiana	NELAP	6	01967	06-30-17
Oklahoma	State Program	6	2015-050	08-31-17
Texas	NELAP	6	T104704223-17-21	10-31-17
USDA	Federal		P330-14-00192	06-06-17

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	A2LA		NA: NELAP & A2LA	12-31-17
A2LA	ISO/IEC 17025		0453.07	12-31-17
Alaska (UST)	State Program	10	UST-087	09-01-17
Arizona	State Program	9	AZ0473	05-05-17 *
Arkansas DEQ	State Program	6	88-0737	04-25-18
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-17
Florida	NELAP	4	E87358	06-30-17
Georgia	State Program	4	N/A	12-31-17
Illinois	NELAP	5	200010	12-09-17
Iowa	State Program	7	131	04-01-18
Kansas	NELAP	7	E-10229	10-31-17
Kentucky (UST)	State Program	4	19	06-30-17
Kentucky (WW)	State Program	4	90038	12-31-17
Louisiana	NELAP	6	30613	06-30-17
Maine	State Program	1	TN00032	11-03-17
Maryland	State Program	3	316	03-31-18
Massachusetts	State Program	1	M-TN032	06-30-17
Minnesota	NELAP	5	047-999-345	12-31-17
Mississippi	State Program	4	N/A	06-30-17
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-17
New Hampshire	NELAP	1	2963	10-09-17
New Jersey	NELAP	2	TN965	06-30-17
New York	NELAP	2	11342	03-31-18
North Carolina (WW/SW)	State Program	4	387	12-31-17
North Dakota	State Program	8	R-146	06-30-17
Ohio VAP	State Program	5	CL0033	07-10-17
Oklahoma	State Program	6	9412	08-31-17
Oregon	NELAP	10	TN200001	04-27-17 *
Pennsylvania	NELAP	3	68-00585	06-30-17
Rhode Island	State Program	1	LAO00268	12-30-17
South Carolina	State Program	4	84009 (001)	02-28-18
South Carolina (Do Not Use - DW)	State Program	4	84009 (002)	12-16-17
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-17
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-17
Virginia	NELAP	3	460152	06-14-17
Washington	State Program	10	C789	07-19-17

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc. TestAmerica Job ID: 600-146941-1
Project/Site: San Juan Site Characterization

Laboratory: TestAmerica Nashville (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
West Virginia DEP	State Program	3	219	02-28-18
Wisconsin	State Program	5	998020430	08-31-17
Wyoming (UST)	A2LA	8	453.07	12-31-17

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

600-146941 Chain of Custody

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Katherine Mouzakis	Lab PM: Upton, Cathy L	COC No: 600-52002-15345.10
Client Contact: Jeffrey Minchak	Phone: 9043566573	E-Mail: cathy.upton@testamericainc.com	Page: Page 10 of 10
Company: CH2M Hill, Inc.			Job #:
Address: 3721 Rutledge Rd. NE Suite B-1	Due Date Requested:		
City: Albuquerque	TAT Requested (days):		
State, Zip: NM, 87109			
Phone: 281-721-8546(Tel)	PO #: Purchase Order Requested		
Email: Jeffrey.Minchak@ch2m.com	WO #: WD225383		
Project Name: Kinder Morgan Bloomfield, NM San Juan	Project #: 60005961-Analysis group BTEX/GRO/DRO/Metals		
Site: San Juan Site Characterization	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wasteoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO - Diesel and Oil Range Organics	8015C_GRO - GRO Range (C6-C10)	6010B, 7471A - NMWQCC List Metals	8260B - 5035 BTEX	Moisture	Waters	6010B, 7470A - NMWQCC List Metals	8260B_LL - BTEX Only	8015C_GRO - GRO Range (C6-C10)	8015C_DRO - Diesel and Oil Range Organics	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N		D	A	A	N		
SJRP-SB01-1-2-04192017	4/19/17	900	G	Solid	N	N											9	Lel Bottles
SJRP-SB01-1-2-04192017-2	4/19/17	900	G	Solid	N	N											7	2 coolers
SJRP-MW15-1-2-04192017	4/19/17	1205	G	Solid	N	N											7	COC in Cooler 1
SJRP-MW15-1-2-04192017-MS	4/19/17	1205	G	Solid	N	Y											7	
SJRP-MW15-1-2-04192017-MSD	4/19/17	1205	G	Solid	N	Y											7	MS/MSD on MW15
SJRP-SB02-1-2-04192017-	4/19/17	1250	G	Solid	N	N											7	
SJRP-SB02-1-2-04192017-2	4/19/17	1250	G	Solid	N	N											7	
~~SJRP~~			G	Solid														1 cooler
			G	Solid														
SJRP-TB-04192017	4/19/17	1200	G	~~Water~~ Solid	N	N											3	
SJRP-EB-04192017	4/19/17	1340	G	Water	N	N											9	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
/CH2M	4/19/2017/1400			4/20/17 9:36	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Katherine Mozaki'S	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-52002-15345.10
Client Contact: Jeffrey Minchak	Phone: 9043886573	E-Mail: cathy.upton@testamericainc.com		Page: Page 10 of 10
Company: CH2M Hill, Inc.				Job #:

Address: 3721 Rutledge Rd. NE Suite B-1	Due Date Requested:	
City: Albuquerque	TAT Requested (days):	
State, Zip: NM, 87109		
Phone: 281-721-8546(Tel)	PO #: Purchase Order Requested	
Email: Jeffrey.Minchak@ch2m.com	WO #: WD225383	
Project Name: Kinder Morgan Bloomfield, NM San Juan	Project #: 60005961-Analysis group BTEX/GRO/DRO/Metals	
Site: San Juan Site Characterization	SSOW#:	

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO - Diesel and Oil Range Organics	8015C_GRO - GRO Range (C6-C10)	6010B, 7471A - NMWQCC List Metals	8260B - 5035 BTEX	Moisture			Waters	6010B, 7470A - NMWQCC List Metals	8260B_LL - BTEX Only	8015C_GRO - GRO Range (C6-C10)	8015C_DRO - Diesel and Oil Range Organics		Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	N	N	N	N				D	A	A	N		X	
			G	Solid																	
			G	Solid																	Cooler 2
COC IN			G	Solid																	
			G	Solid																	Samples from 04/18/2017
Cooler 1			G	Solid																	
			G	Solid																	
			G	Solid																	
			G	Solid																	
			G	Solid																	
			G	Solid																	
			G	Water																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☑ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	[signature]	4/19/2017/1200		[signature]	4-20-17 980	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:


FedEx
TRK# 0221 7246 6874 7740
THU – 20 APR 3
STANDARD OVERNI
XH LKSA
77C
TX-US IA


FedEx
TRK# 0221 7246 6874 7761
THU – 20 APR 3:00P
STANDARD OVERNIGHT
XH LKSA
77040
TX-US IAH

Loc: 600
146941

TestAmerica Houston

Sample Rece... Checklist

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Date/Time Received: '17APR20 9:56

JOB NUMBER: _____ CLIENT: CHZM

UNPACKED BY: _____ CARRIER/DRIVER: FE

Custody Seal Present: ☒ YES ☐ NO Number of Coolers Received: 2

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Them CF	Corrected Temp (°C)
WH	Y / N	Y / N	1.0	lots	.2	0.8
GW	Y / N	Y / N	0.9	1	1	0.7
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☒ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☒ YES ☐ NO

pH paper Lot #_____

VOA headspace acceptable (5-6mm): ☒ YES ☐ NO ☐ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	☒	☐

COMMENTS:

42077

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

600-146941 Chain of Custody

Cooler Received/Opened On 04-21-2017 @ 09:35

Time Samples Removed From Cooler 14:47 Time Samples Placed In Storage _____ (2 Hour Window)

1. Tracking # 1527 (last 4 digits, FedEx) Courier: _FedEx_

IR Gun ID 97310166 pH Strip Lot _____ Chlorine Strip Lot _____

2. Temperature of rep. sample or temp blank when opened: 4.9 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..NA

4. Were custody seals on outside of cooler? YES..NO...NA

If yes, how many and where: 1 FRONT

5. Were the seals intact, signed, and dated correctly? YES..NO...NA

6. Were custody papers inside cooler? YES..NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) _____

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES..NO..NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (initial) _____

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES..NO...NA

16. Was residual chlorine present? YES...NO..NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) HKG

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) HKG

I certify that I attached a label with the unique LIMS number to each container (initial) HKG

21. Were there Non-Conformance issues at login? YES..NO Was a NCM generated? YES..NO..#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 12/15/15

12/7/2020 (Rev. 1)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

Loc: 600
146941

COOLER RECEIPT FORM

Cooler Received/Opened On 4/21/2017 @ 0935

Time Samples Removed From Cooler 15:19 Time Samples Placed In Storage_____ (2 Hour Window)

1. Tracking #_____1078_____(last 4 digits, FedEx) Courier: _FedEx_

IR Gun ID_160406069_ pH Strip Lot_____NA_____ Chlorine Strip Lot_____NA_____

2. Temperature of rep. sample or temp blank when opened: 3.3 *Degrees Celsius*

3. If Item #2 temperatures is 0°C or less, was the representative sample or temp blank frozen? YES NO (NA)

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where:_____NA_____

5. Were the seals intact, signed, and dated correctly? YES...NO...(NA)

6. Were custody papers inside cooler? YES...(NO)...NA

I certify that I opened the cooler and answered questions 1-6 (initial) _____

7. Were custody seals on containers: YES (NO) and Intact YES...NO...(NA)

Were these signed and dated correctly? YES...NO...(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)...NO...NA

12. Did all container labels and tags agree with custody papers? (YES)...NO...NA

13a. Were VOA vials received? YES...(NO)...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...(NA)

14. Was there a Trip Blank in this cooler? YES...NO...(NA) If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (initial) HG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..(NA)

b. Did the bottle labels indicate that the correct preservatives were used (YES)...NO...NA

16. was residual chlorine present? YES...NO...(NA)

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) HG

17. Were custody papers properly filled out (ink, signed, etc)? (YES)...NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)...NO...NA

19. Were correct containers used for the analysis requested? (YES)...NO...NA

20. Was sufficient amount of sample sent in each container? (YES)...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) HG

I certify that I attached a label with the unique LIMS number to each container (initial) HG

21. Were there Non-Conformance issues at login? YES...(NO) Was a NCM generated? YES...(NO)...#_____

BIS = Broken in shipment

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

Loc: 600
146941
#1
B

COOLER RECEIPT FORM

Cooler Received/Opened On 4/21/2017 @ 0935

Time Samples Removed From Cooler 15:05 Time Samples Placed In Storage _____ (2 Hour Window)

1. Tracking # 1089 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 160656843 pH Strip Lot _____ Chlorine Strip Lot _____

2. Temperature of rep. sample or temp blank when opened: 4.6 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES NO NA

6. Were custody papers inside cooler? YES NO NA

I certify that I opened the cooler and answered questions 1-6 (intial) HG

7. Were custody seals on containers: YES NO and Intact YES NO NA

Were these signed and dated correctly? YES NO NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES NO NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES NO NA

12. Did all container labels and tags agree with custody papers? YES NO NA

13a. Were VOA vials received? YES NO NA

b. Was there any observable headspace present in any VOA vial? YES NO NA

14. Was there a Trip Blank in this cooler? YES NO NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (intial) _____

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES NO NA

b. Did the bottle labels indicate that the correct preservatives were used YES NO NA

16. Was residual chlorine present? YES NO NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) HG

17. Were custody papers properly filled out (ink, signed, etc)? YES NO NA

18. Did you sign the custody papers in the appropriate place? YES NO NA

19. Were correct containers used for the analysis requested? YES NO NA

20. Was sufficient amount of sample sent in each container? YES NO NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) HG

I certify that I attached a label with the unique LIMS number to each container (intial) HG

21. Were there Non-Conformance issues at login? YES NO Was a NCM generated? YES NO #_____

BIS = Broken in shipment
Cooler Receipt Form.doc

Page 747 of 1581

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Loc: 600
146941

tAmerica
LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Upton, Cathy L	26.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: cathy.upton@testamericainc.com	State: New Mexico — Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):	Job #: 600-146941-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 5/2/2017		
City: Nashville	TAT Requested (days):		
State, Zip: TN, 37204			
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:		
Email:	WO #:		
Project Name: San Juan Site Characterization	Project #: 60005961		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO/3550C DRO/ORO	8015C_GRO/5030B_H Standard GRO Range (C6-C10)	8015C_GRO/5030B GRO Range (C6-C10)	8015C_DRO/3510C_LVI DRO/ORO	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
SJRP-SB01-1-2-04192017 (600-146941-1)	4/19/17	09:00 Central		Solid			X	X			2	
SJRP-SB01-1-2-04192017-2 (600-146941-2)	4/19/17	09:00 Central		Solid			X	X			2	
SJRP-MW15-1-2-04192017 (600-146941-3)	4/19/17	12:05 Central		Solid			X	X			2	
SJRP-MW15-1-2-04192017 (600-146941-3MS)	4/19/17	12:05 Central	MS	Solid			X	X			2	
SJRP-MW15-1-2-04192017 (600-146941-3MSD)	4/19/17	12:05 Central	MSD	Solid			X	X			2	
SJRP-SB02-1-2-04192017 (600-146941-4)	4/19/17	12:50 Central		Solid			X	X			2	
SJRP-SB02-1-2-04192017-2 (600-146941-5)	4/19/17	12:50 Central		Solid			X	X			2	
SJRP-EB-04192017-2 (600-146941-7)	4/19/17	13:40 Central		Water					X	X	5	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	*Special Instructions/QC Requirements:*

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 4-20-17 1700	Company	Received by: 4/13-3/4/20	Date/Time: 4/21/17 0935	Company TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Received by OCD: 11/13/2025 11:14:36 AM

Released to Imaging: 11/14/2025 9:30:04 AM

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc. Job Number: 600-146941-1

Login Number: 146941 **List Source: TestAmerica Houston**
List Number: 1
Creator: Crafton, Tommie S

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.8 0.7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-146941-1

Login Number: 146941
List Number: 2
Creator: Gundi, Hozar K

List Source: TestAmerica Nashville
List Creation: 04/21/17 05:48 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-146941-1

Login Number: 146941
List Number: 3
Creator: Gundi, Hozar K

List Source: TestAmerica Nashville
List Creation: 04/21/17 05:50 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-147045-1
Client Project/Site: San Juan Site Characterization
Revision: 1

For:
CH2M Hill Constructors, Inc.
14701 St. Mary's Lane
Suite 300
Houston, Texas 77079-2923

Attn: Mr. John Ynfante

Steve A Stepanski

Authorized for release by:
12/7/2020 4:46:07 PM
Steve Stepanski, Project Mgmt. Assistant
(713)690-4444
steve.stepanski@Eurofinset.com

Designee for

Cathy Upton, Project Manager I
(713)690-4444
cathy.upton@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

Job ID: 600-147045-1

Job ID: 600-147045-1

Laboratory: TestAmerica Houston

Narrative

CASE NARRATIVE

Client: CH2M Hill Constructors, Inc.

Project: San Juan Site Characterization

Report Number: 600-147045-1

COMMENTS

This report was revised to a Level 2 deliverable per client's request.

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

Note: All samples that require thermal preservation are considered acceptable if the arrival temperature is within 2°C of the required temperature or method specified range. For samples with a specified temperature of 4°C, samples with a temperature ranging from just above freezing temperature of water to 6°C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

The samples were received on 04/21/2017; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.2º C, 0.4º C, 0.7º C and 1.6º C.

Receipt Exceptions

1 of the coolers the client shipped for arrival of 4-20-17 was misplaced by FedEx. Only the 3- 4oz jars for each sample were received.
These are samples 1-7. The EB and TB are listed on this COC
The client resampled the terracores and shipped for arrival of 4-21-17. These are samples 8-14.
The missing cooler also arrived on 4-21-17. These containers were not used as they were out of hold

VOLATILE ORGANIC COMPOUNDS (GC-MS)-Soil

Samples SJRP-SB16-1-2-04202017 (600-147045-8), SJRP-SB16-1-2-04202017-2 (600-147045-9), SJRP-SB18-1-2-04202017 (600-147045-10), SJRP-SB18-1-2-04202017-2 (600-147045-11), SJRP-SB12-1-2-04202017 (600-147045-12), SJRP-SB12-1-2-04202017-2 (600-147045-13) and SJRP-SB07-1-2-04202017 (600-147045-14) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were prepared on 04/21/2017 and analyzed on 04/25/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GC-MS)-Water

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-147045-1
Project/Site: San Juan Site Characterization

Job ID: 600-147045-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

Samples SJRP-TB-04182017 (600-147045-15) and SJRP-EB-04182017 (600-147045-16) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/29/2017.

The following volatile sample was analyzed with significant headspace in the sample vial(s): SJRP-TB-04182017 (600-147045-15). Significant headspace is defined as a bubble greater than 6 mm in diameter.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GASOLINE RANGE ORGANICS (GRO)-Soil

Samples SJRP-SB12-1-2-04182017 (600-147045-1), SJRP-SB12-1-2-04182017-2 (600-147045-2), SJRP-SB07-1-2-04182017 (600-147045-3), SJRP-SB18-1-2-04182017 (600-147045-4), SJRP-SB18-1-2-04182017-2 (600-147045-5), SJRP-SB16-1-2-04182017 (600-147045-6) and SJRP-SB16-1-2-04182017-2 (600-147045-7) were analyzed for gasoline range organics (GRO) in accordance with EPA SW-846 Method 8015C - GRO. The samples were analyzed on 04/28/2017 and 05/02/2017.

Gasoline Range Organics (GRO)-C6-C10 exceeded the RPD limit for the MSD of sample SJRP-SB07-1-2-04182017MSD (600-147045-3) in batch 490-425527.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GASOLINE RANGE ORGANICS (GRO)-Water

Sample SJRP-EB-04182017 (600-147045-16) was analyzed for gasoline range organics (GRO) in accordance with 8015C GRO. The samples were analyzed on 04/28/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DIESEL RANGE ORGANICS (DRO)-Soil

Samples SJRP-SB12-1-2-04182017 (600-147045-1), SJRP-SB12-1-2-04182017-2 (600-147045-2), SJRP-SB07-1-2-04182017 (600-147045-3), SJRP-SB18-1-2-04182017 (600-147045-4), SJRP-SB18-1-2-04182017-2 (600-147045-5), SJRP-SB16-1-2-04182017 (600-147045-6) and SJRP-SB16-1-2-04182017-2 (600-147045-7) were analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 04/26/2017 and analyzed on 04/27/2017.

ORO C24-C40 was detected in method blank MB 490-425250/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DIESEL RANGE ORGANICS (DRO)-Water

Sample SJRP-EB-04182017 (600-147045-16) was analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 04/27/2017 and analyzed on 04/28/2017.

The following sample was received outside of holding time: SJRP-EB-04182017 (600-147045-16).

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)-Soil

Samples SJRP-SB12-1-2-04182017 (600-147045-1), SJRP-SB12-1-2-04182017-2 (600-147045-2), SJRP-SB07-1-2-04182017 (600-147045-3), SJRP-SB18-1-2-04182017 (600-147045-4), SJRP-SB18-1-2-04182017-2 (600-147045-5), SJRP-SB16-1-2-04182017 (600-147045-6) and SJRP-SB16-1-2-04182017-2 (600-147045-7) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 05/02/2017 and analyzed on 05/03/2017.

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-147045-1
Project/Site: San Juan Site Characterization

Job ID: 600-147045-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

Aluminum and Molybdenum were detected in method blank MB 600-212036/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

Due to the high concentration of target analytes, samples SJRP-SB07-1-2-04182017 (600-147045-3) MS/MSD in batch 600-212162 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

Samples SJRP-SB12-1-2-04182017 (600-147045-1)[5X], SJRP-SB12-1-2-04182017-2 (600-147045-2)[5X], SJRP-SB07-1-2-04182017 (600-147045-3)[5X], SJRP-SB18-1-2-04182017 (600-147045-4)[10X], SJRP-SB18-1-2-04182017-2 (600-147045-5)[10X], SJRP-SB16-1-2-04182017 (600-147045-6)[10X] and SJRP-SB16-1-2-04182017-2 (600-147045-7)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)-Water

Sample SJRP-EB-04182017 (600-147045-16) was analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 04/28/2017 and analyzed on 05/01/2017 and 05/02/2017.

Several analytes were detected in method blank MB 600-211785/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY-Soil

Samples SJRP-SB12-1-2-04182017 (600-147045-1), SJRP-SB12-1-2-04182017-2 (600-147045-2), SJRP-SB07-1-2-04182017 (600-147045-3), SJRP-SB18-1-2-04182017 (600-147045-4), SJRP-SB18-1-2-04182017-2 (600-147045-5), SJRP-SB16-1-2-04182017 (600-147045-6) and SJRP-SB16-1-2-04182017-2 (600-147045-7) were analyzed for total mercury in accordance with EPA SW-846 Method 7471A. The samples were prepared on 04/24/2017 and analyzed on 04/25/2017.

Mercury exceeded the RPD limit for the duplicate of sample SJRP-SB12-1-2-04182017DU (600-147045-1).

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY-Water

Sample SJRP-EB-04182017 (600-147045-16) was analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 04/24/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PERCENT SOLIDS

Samples SJRP-SB12-1-2-04182017 (600-147045-1), SJRP-SB12-1-2-04182017-2 (600-147045-2), SJRP-SB07-1-2-04182017 (600-147045-3), SJRP-SB18-1-2-04182017 (600-147045-4), SJRP-SB18-1-2-04182017-2 (600-147045-5), SJRP-SB16-1-2-04182017 (600-147045-6), SJRP-SB16-1-2-04182017-2 (600-147045-7), SJRP-SB16-1-2-04202017 (600-147045-8), SJRP-SB16-1-2-04202017-2

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-147045-1
Project/Site: San Juan Site Characterization

Job ID: 600-147045-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

(600-147045-9), SJRP-SB18-1-2-04202017 (600-147045-10), SJRP-SB18-1-2-04202017-2 (600-147045-11), SJRP-SB12-1-2-04202017 (600-147045-12), SJRP-SB12-1-2-04202017-2 (600-147045-13) and SJRP-SB07-1-2-04202017 (600-147045-14) were analyzed for percent solids in accordance with EPA SW846 Method 3550C. The samples were analyzed on 04/24/2017 and 04/25/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL NSH
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL NSH
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU

Protocol References:

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-147045-1	SJRP-SB12-1-2-04182017	Solid	04/18/17 15:25	04/21/17 10:09
600-147045-2	SJRP-SB12-1-2-04182017-2	Solid	04/18/17 15:25	04/21/17 10:09
600-147045-3	SJRP-SB07-1-2-04182017	Solid	04/18/17 16:35	04/21/17 10:09
600-147045-4	SJRP-SB18-1-2-04182017	Solid	04/18/17 17:20	04/21/17 10:09
600-147045-5	SJRP-SB18-1-2-04182017-2	Solid	04/18/17 17:20	04/21/17 10:09
600-147045-6	SJRP-SB16-1-2-04182017	Solid	04/18/17 17:45	04/21/17 10:09
600-147045-7	SJRP-SB16-1-2-04182017-2	Solid	04/18/17 17:45	04/21/17 10:09
600-147045-8	SJRP-SB16-1-2-04202017	Solid	04/20/17 14:00	04/21/17 10:09
600-147045-9	SJRP-SB16-1-2-04202017-2	Solid	04/20/17 14:00	04/21/17 10:09
600-147045-10	SJRP-SB18-1-2-04202017	Solid	04/20/17 14:15	04/21/17 10:09
600-147045-11	SJRP-SB18-1-2-04202017-2	Solid	04/20/17 14:15	04/21/17 10:09
600-147045-12	SJRP-SB12-1-2-04202017	Solid	04/20/17 14:30	04/21/17 10:09
600-147045-13	SJRP-SB12-1-2-04202017-2	Solid	04/20/17 14:30	04/21/17 10:09
600-147045-14	SJRP-SB07-1-2-04202017	Solid	04/20/17 14:50	04/21/17 10:09
600-147045-15	SJRP-TB-04182017	Water	04/18/17 14:00	04/21/17 10:09
600-147045-16	SJRP-EB-04182017	Water	04/18/17 16:00	04/21/17 10:09

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Client Sample ID: SJRP-SB12-1-2-04182017

Lab Sample ID: 600-147045-1
Date Collected: 04/18/17 15:25
Matrix: Solid
Date Received: 04/21/17 10:09
Percent Solids: 82.3

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.52	U	7.05	3.52	mg/Kg	☼	04/26/17 12:58	04/28/17 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*57*		*50 - 150*	*04/26/17 12:58*	*04/28/17 16:48*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.98	U	5.95	2.98	mg/Kg	☼	04/26/17 13:02	04/27/17 12:09	1
ORO C24-C40	**3.16**	**J B**	5.95	2.98	mg/Kg	☼	04/26/17 13:02	04/27/17 12:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*69*		*50 - 150*	*04/26/17 13:02*	*04/27/17 12:09*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**13800**	**B**	25.7	0.309	mg/Kg	☼	05/02/17 14:44	05/03/17 16:17	1
Arsenic	**4.04**		1.03	0.224	mg/Kg	☼	05/02/17 14:44	05/03/17 16:17	1
Barium	**81.1**		1.03	0.0309	mg/Kg	☼	05/02/17 14:44	05/03/17 16:17	1
Boron	**2.17**	**J**	20.6	0.397	mg/Kg	☼	05/02/17 14:44	05/03/17 16:17	1
Cadmium	**0.293**		0.257	0.0263	mg/Kg	☼	05/02/17 14:44	05/03/17 16:17	1
Calcium	**970**		103	0.889	mg/Kg	☼	05/02/17 14:44	05/03/17 16:17	1
Chromium	**6.18**		0.515	0.0521	mg/Kg	☼	05/02/17 14:44	05/03/17 16:17	1
Cobalt	**7.74**		0.515	0.0696	mg/Kg	☼	05/02/17 14:44	05/03/17 16:17	1
Iron	**16800**		20.6	2.60	mg/Kg	☼	05/02/17 14:44	05/03/17 16:17	1
Lead	**20.5**		2.57	0.540	mg/Kg	☼	05/02/17 14:44	05/03/17 18:16	5
Magnesium	**4170**		103	1.98	mg/Kg	☼	05/02/17 14:44	05/03/17 16:17	1
Manganese	**298**		1.54	0.0392	mg/Kg	☼	05/02/17 14:44	05/03/17 16:17	1
Molybdenum	**0.520**	**B**	0.515	0.140	mg/Kg	☼	05/02/17 14:44	05/03/17 16:17	1
Nickel	**11.2**		1.03	0.120	mg/Kg	☼	05/02/17 14:44	05/03/17 16:17	1
Potassium	**1480**		103	11.3	mg/Kg	☼	05/02/17 14:44	05/03/17 16:17	1
Selenium	**0.376**	**J**	2.06	0.267	mg/Kg	☼	05/02/17 14:44	05/03/17 16:17	1
Sodium	**14900**	**B**	515	4.56	mg/Kg	☼	05/02/17 14:44	05/03/17 18:16	5

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0416**		0.0200	0.00421	mg/Kg	☼	04/24/17 15:01	04/25/17 11:52	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**17.7**		1.0	1.0	%			04/24/17 17:05	1
Percent Solids	**82.3**		1.0	1.0	%			04/24/17 17:05	1

Client Sample ID: SJRP-SB12-1-2-04182017-2

Lab Sample ID: 600-147045-2
Date Collected: 04/18/17 15:25
Matrix: Solid
Date Received: 04/21/17 10:09
Percent Solids: 82.7

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.32	U	6.64	3.32	mg/Kg	☼	04/26/17 12:58	04/28/17 17:19	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Client Sample ID: SJRP-SB12-1-2-04182017-2

Lab Sample ID: 600-147045-2
Date Collected: 04/18/17 15:25
Matrix: Solid
Date Received: 04/21/17 10:09
Percent Solids: 82.7

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	53		50 - 150	04/26/17 12:58	04/28/17 17:19	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3.00	U	6.00	3.00	mg/Kg	☼	04/26/17 13:02	04/27/17 12:26	1
ORO C24-C40	**4.32**	**J B**	6.00	3.00	mg/Kg	☼	04/26/17 13:02	04/27/17 12:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	102		50 - 150	04/26/17 13:02	04/27/17 12:26	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**14500**	**B**	27.2	0.327	mg/Kg	☼	05/02/17 14:44	05/03/17 16:19	1
Arsenic	**4.68**		1.09	0.237	mg/Kg	☼	05/02/17 14:44	05/03/17 16:19	1
Barium	**111**		1.09	0.0327	mg/Kg	☼	05/02/17 14:44	05/03/17 16:19	1
Boron	**2.62**	**J**	21.8	0.420	mg/Kg	☼	05/02/17 14:44	05/03/17 16:19	1
Cadmium	**0.234**	**J**	0.272	0.0279	mg/Kg	☼	05/02/17 14:44	05/03/17 16:19	1
Calcium	**3690**		109	0.941	mg/Kg	☼	05/02/17 14:44	05/03/17 16:19	1
Chromium	**6.68**		0.544	0.0551	mg/Kg	☼	05/02/17 14:44	05/03/17 16:19	1
Cobalt	**7.24**		0.544	0.0736	mg/Kg	☼	05/02/17 14:44	05/03/17 16:19	1
Iron	**17400**		21.8	2.75	mg/Kg	☼	05/02/17 14:44	05/03/17 16:19	1
Lead	**23.9**		2.72	0.572	mg/Kg	☼	05/02/17 14:44	05/03/17 18:18	5
Magnesium	**4540**		109	2.09	mg/Kg	☼	05/02/17 14:44	05/03/17 16:19	1
Manganese	**228**		1.63	0.0415	mg/Kg	☼	05/02/17 14:44	05/03/17 16:19	1
Molybdenum	**0.621**	**B**	0.544	0.148	mg/Kg	☼	05/02/17 14:44	05/03/17 16:19	1
Nickel	**10.2**		1.09	0.127	mg/Kg	☼	05/02/17 14:44	05/03/17 16:19	1
Potassium	**1650**		109	12.0	mg/Kg	☼	05/02/17 14:44	05/03/17 16:19	1
Selenium	**0.354**	**J**	2.18	0.282	mg/Kg	☼	05/02/17 14:44	05/03/17 16:19	1
Sodium	**14400**	**B**	544	4.82	mg/Kg	☼	05/02/17 14:44	05/03/17 18:18	5

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0435**		0.0199	0.00419	mg/Kg	☼	04/24/17 15:01	04/25/17 11:57	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**17.3**		1.0	1.0	%			04/24/17 17:05	1
Percent Solids	**82.7**		1.0	1.0	%			04/24/17 17:05	1

Client Sample ID: SJRP-SB07-1-2-04182017

Lab Sample ID: 600-147045-3
Date Collected: 04/18/17 16:35
Matrix: Solid
Date Received: 04/21/17 10:09
Percent Solids: 85.4

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.31	U	6.62	3.31	mg/Kg	☼	04/26/17 12:58	04/28/17 17:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	54		50 - 150	04/26/17 12:58	04/28/17 17:49	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Client Sample ID: SJRP-SB07-1-2-04182017

Lab Sample ID: 600-147045-3
Date Collected: 04/18/17 16:35
Matrix: Solid
Date Received: 04/21/17 10:09
Percent Solids: 85.4

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.88	U	5.77	2.88	mg/Kg	☼	04/26/17 13:02	04/27/17 12:42	1
ORO C24-C40	3.43	J B	5.77	2.88	mg/Kg	☼	04/26/17 13:02	04/27/17 12:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*81*		*50 - 150*	*04/26/17 13:02*	*04/27/17 12:42*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11400	B	29.0	0.348	mg/Kg	☼	05/02/17 14:44	05/03/17 16:28	1
Arsenic	3.33		1.16	0.253	mg/Kg	☼	05/02/17 14:44	05/03/17 16:28	1
Barium	187	F1	5.80	0.174	mg/Kg	☼	05/02/17 14:44	05/03/17 18:20	5
Boron	5.80	J F1	23.2	0.448	mg/Kg	☼	05/02/17 14:44	05/03/17 16:28	1
Cadmium	0.145	J	0.290	0.0297	mg/Kg	☼	05/02/17 14:44	05/03/17 16:28	1
Calcium	14900	F2	116	1.00	mg/Kg	☼	05/02/17 14:44	05/03/17 16:28	1
Chromium	14.8		0.580	0.0587	mg/Kg	☼	05/02/17 14:44	05/03/17 16:28	1
Cobalt	6.81		0.580	0.0784	mg/Kg	☼	05/02/17 14:44	05/03/17 16:28	1
Iron	14700		23.2	2.93	mg/Kg	☼	05/02/17 14:44	05/03/17 16:28	1
Lead	13.3		0.580	0.122	mg/Kg	☼	05/02/17 14:44	05/03/17 16:28	1
Magnesium	3980		116	2.23	mg/Kg	☼	05/02/17 14:44	05/03/17 16:28	1
Manganese	538	F2	1.74	0.0442	mg/Kg	☼	05/02/17 14:44	05/03/17 16:28	1
Molybdenum	0.499	J B	0.580	0.158	mg/Kg	☼	05/02/17 14:44	05/03/17 16:28	1
Nickel	8.05		1.16	0.136	mg/Kg	☼	05/02/17 14:44	05/03/17 16:28	1
Potassium	1530		116	12.8	mg/Kg	☼	05/02/17 14:44	05/03/17 16:28	1
Selenium	0.300	U	2.32	0.300	mg/Kg	☼	05/02/17 14:44	05/03/17 16:28	1
Sodium	5580		116	1.03	mg/Kg	☼	05/02/17 14:44	05/03/17 16:28	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00419	U	0.0199	0.00419	mg/Kg	☼	04/24/17 15:01	04/25/17 11:59	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14.6		1.0	1.0	%			04/24/17 17:05	1
Percent Solids	85.4		1.0	1.0	%			04/24/17 17:05	1

Client Sample ID: SJRP-SB18-1-2-04182017

Lab Sample ID: 600-147045-4
Date Collected: 04/18/17 17:20
Matrix: Solid
Date Received: 04/21/17 10:09
Percent Solids: 85.0

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.31	U	6.63	3.31	mg/Kg	☼	04/26/17 12:58	04/28/17 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*51*		*50 - 150*	*04/26/17 12:58*	*04/28/17 18:19*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.89	U	5.79	2.89	mg/Kg	☼	04/26/17 13:02	04/27/17 13:31	1
ORO C24-C40	3.17	J B	5.79	2.89	mg/Kg	☼	04/26/17 13:02	04/27/17 13:31	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Client Sample ID: SJRP-SB18-1-2-04182017

Lab Sample ID: 600-147045-4
Date Collected: 04/18/17 17:20
Matrix: Solid
Date Received: 04/21/17 10:09
Percent Solids: 85.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	63		50 - 150	04/26/17 13:02	04/27/17 13:31	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11500	B	26.3	0.315	mg/Kg	☼	05/02/17 14:44	05/03/17 16:34	1
Arsenic	4.00		1.05	0.229	mg/Kg	☼	05/02/17 14:44	05/03/17 16:34	1
Barium	29.6		1.05	0.0315	mg/Kg	☼	05/02/17 14:44	05/03/17 16:34	1
Boron	2.74	J	21.0	0.405	mg/Kg	☼	05/02/17 14:44	05/03/17 16:34	1
Cadmium	0.131	J	0.263	0.0269	mg/Kg	☼	05/02/17 14:44	05/03/17 16:34	1
Calcium	31500		105	0.908	mg/Kg	☼	05/02/17 14:44	05/03/17 16:34	1
Chromium	7.99		0.525	0.0532	mg/Kg	☼	05/02/17 14:44	05/03/17 16:34	1
Cobalt	8.46		0.525	0.0710	mg/Kg	☼	05/02/17 14:44	05/03/17 16:34	1
Iron	21200		21.0	2.66	mg/Kg	☼	05/02/17 14:44	05/03/17 16:34	1
Lead	8.68		0.525	0.110	mg/Kg	☼	05/02/17 14:44	05/03/17 16:34	1
Magnesium	4040		105	2.02	mg/Kg	☼	05/02/17 14:44	05/03/17 16:34	1
Manganese	1330		15.8	0.400	mg/Kg	☼	05/02/17 14:44	05/03/17 18:32	10
Molybdenum	4.00	B	0.525	0.143	mg/Kg	☼	05/02/17 14:44	05/03/17 16:34	1
Nickel	9.62		1.05	0.123	mg/Kg	☼	05/02/17 14:44	05/03/17 16:34	1
Potassium	919		105	11.6	mg/Kg	☼	05/02/17 14:44	05/03/17 16:34	1
Selenium	0.777	J	2.10	0.272	mg/Kg	☼	05/02/17 14:44	05/03/17 16:34	1
Sodium	8550		105	0.931	mg/Kg	☼	05/02/17 14:44	05/03/17 16:34	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00842	J	0.0190	0.00401	mg/Kg	☼	04/24/17 15:01	04/25/17 12:11	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.0		1.0	1.0	%			04/24/17 17:05	1
Percent Solids	85.0		1.0	1.0	%			04/24/17 17:05	1

Client Sample ID: SJRP-SB18-1-2-04182017-2

Lab Sample ID: 600-147045-5
Date Collected: 04/18/17 17:20
Matrix: Solid
Date Received: 04/21/17 10:09
Percent Solids: 85.7

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.13	U	6.26	3.13	mg/Kg	☼	04/26/17 12:58	04/28/17 18:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	50		50 - 150	04/26/17 12:58	04/28/17 18:49	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.85	U	5.70	2.85	mg/Kg	☼	04/26/17 13:02	04/27/17 13:48	1
ORO C24-C40	2.85	U	5.70	2.85	mg/Kg	☼	04/26/17 13:02	04/27/17 13:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	57		50 - 150	04/26/17 13:02	04/27/17 13:48	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Client Sample ID: SJRP-SB18-1-2-04182017-2

Lab Sample ID: 600-147045-5
Date Collected: 04/18/17 17:20
Matrix: Solid
Date Received: 04/21/17 10:09
Percent Solids: 85.7

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	13300		25.4	0.304	mg/Kg	☼	05/02/17 14:44	05/03/17 18:38	1
Arsenic	4.34		1.01	0.221	mg/Kg	☼	05/02/17 14:44	05/03/17 18:38	1
Barium	34.3		1.01	0.0304	mg/Kg	☼	05/02/17 14:44	05/03/17 18:38	1
Boron	3.40	J	20.3	0.392	mg/Kg	☼	05/02/17 14:44	05/03/17 18:38	1
Cadmium	0.127	J	0.254	0.0260	mg/Kg	☼	05/02/17 14:44	05/03/17 18:38	1
Calcium	24900		101	0.877	mg/Kg	☼	05/02/17 14:44	05/03/17 18:38	1
Chromium	8.46		0.507	0.0513	mg/Kg	☼	05/02/17 14:44	05/03/17 18:38	1
Cobalt	9.98		0.507	0.0686	mg/Kg	☼	05/02/17 14:44	05/03/17 18:38	1
Iron	24200		20.3	2.57	mg/Kg	☼	05/02/17 14:44	05/03/17 18:38	1
Lead	9.47		0.507	0.107	mg/Kg	☼	05/02/17 14:44	05/03/17 18:38	1
Magnesium	4710		101	1.95	mg/Kg	☼	05/02/17 14:44	05/03/17 18:38	1
Manganese	962		15.2	0.387	mg/Kg	☼	05/02/17 14:44	05/03/17 18:41	10
Molybdenum	3.89		0.507	0.138	mg/Kg	☼	05/02/17 14:44	05/03/17 18:38	1
Nickel	11.2		1.01	0.119	mg/Kg	☼	05/02/17 14:44	05/03/17 18:38	1
Potassium	1040		101	11.2	mg/Kg	☼	05/02/17 14:44	05/03/17 18:38	1
Selenium	0.467	J	2.03	0.263	mg/Kg	☼	05/02/17 14:44	05/03/17 18:38	1
Sodium	9340	B	101	0.899	mg/Kg	☼	05/02/17 14:44	05/03/17 18:38	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0179	J	0.0189	0.00398	mg/Kg	☼	04/24/17 15:01	04/25/17 12:13	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14.3		1.0	1.0	%			04/24/17 17:05	1
Percent Solids	85.7		1.0	1.0	%			04/24/17 17:05	1

Client Sample ID: SJRP-SB16-1-2-04182017

Lab Sample ID: 600-147045-6
Date Collected: 04/18/17 17:45
Matrix: Solid
Date Received: 04/21/17 10:09
Percent Solids: 85.4

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.31	U	6.62	3.31	mg/Kg	☼	04/26/17 12:58	04/28/17 19:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*51*		*50 - 150*	*04/26/17 12:58*	*04/28/17 19:19*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.84	U	5.68	2.84	mg/Kg	☼	04/26/17 13:02	04/27/17 14:04	1
ORO C24-C40	4.07	J B	5.68	2.84	mg/Kg	☼	04/26/17 13:02	04/27/17 14:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*66*		*50 - 150*	*04/26/17 13:02*	*04/27/17 14:04*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	12900	B	29.0	0.348	mg/Kg	☼	05/02/17 14:44	05/03/17 16:36	1
Arsenic	3.56		1.16	0.253	mg/Kg	☼	05/02/17 14:44	05/03/17 16:36	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Client Sample ID: SJRP-SB16-1-2-04182017

Lab Sample ID: 600-147045-6
Date Collected: 04/18/17 17:45
Matrix: Solid
Date Received: 04/21/17 10:09
Percent Solids: 85.4

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	85.5		1.16	0.0348	mg/Kg	☼	05/02/17 14:44	05/03/17 16:36	1
Boron	5.54	J	23.2	0.447	mg/Kg	☼	05/02/17 14:44	05/03/17 16:36	1
Cadmium	0.162	J	0.290	0.0297	mg/Kg	☼	05/02/17 14:44	05/03/17 16:36	1
Calcium	78900		116	1.00	mg/Kg	☼	05/02/17 14:44	05/03/17 16:36	1
Chromium	7.18		0.579	0.0586	mg/Kg	☼	05/02/17 14:44	05/03/17 16:36	1
Cobalt	6.91		0.579	0.0783	mg/Kg	☼	05/02/17 14:44	05/03/17 16:36	1
Iron	14400		23.2	2.93	mg/Kg	☼	05/02/17 14:44	05/03/17 16:36	1
Lead	10.9		0.579	0.122	mg/Kg	☼	05/02/17 14:44	05/03/17 16:36	1
Magnesium	4890		116	2.22	mg/Kg	☼	05/02/17 14:44	05/03/17 16:36	1
Manganese	813		17.4	0.441	mg/Kg	☼	05/02/17 14:44	05/03/17 18:34	10
Molybdenum	1.41	B	0.579	0.158	mg/Kg	☼	05/02/17 14:44	05/03/17 16:36	1
Nickel	7.93		1.16	0.136	mg/Kg	☼	05/02/17 14:44	05/03/17 16:36	1
Potassium	1230		116	12.7	mg/Kg	☼	05/02/17 14:44	05/03/17 16:36	1
Selenium	0.608	J	2.32	0.300	mg/Kg	☼	05/02/17 14:44	05/03/17 16:36	1
Sodium	11200		116	1.03	mg/Kg	☼	05/02/17 14:44	05/03/17 16:36	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00529	J	0.0189	0.00399	mg/Kg	☼	04/24/17 15:01	04/25/17 12:15	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14.6		1.0	1.0	%			04/24/17 17:05	1
Percent Solids	85.4		1.0	1.0	%			04/24/17 17:05	1

Client Sample ID: SJRP-SB16-1-2-04182017-2

Lab Sample ID: 600-147045-7
Date Collected: 04/18/17 17:45
Matrix: Solid
Date Received: 04/21/17 10:09
Percent Solids: 85.6

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.28	U	6.56	3.28	mg/Kg	☼	04/26/17 12:58	05/02/17 19:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*113*		*50 - 150*	*04/26/17 12:58*	*05/02/17 19:29*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.90	J	5.66	2.83	mg/Kg	☼	04/26/17 13:02	04/27/17 14:20	1
ORO C24-C40	5.03	J B	5.66	2.83	mg/Kg	☼	04/26/17 13:02	04/27/17 14:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*74*		*50 - 150*	*04/26/17 13:02*	*04/27/17 14:20*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	12100	B	27.0	0.324	mg/Kg	☼	05/02/17 14:44	05/03/17 16:39	1
Arsenic	3.16		1.08	0.236	mg/Kg	☼	05/02/17 14:44	05/03/17 16:39	1
Barium	46.8		1.08	0.0324	mg/Kg	☼	05/02/17 14:44	05/03/17 16:39	1
Boron	5.19	J	21.6	0.417	mg/Kg	☼	05/02/17 14:44	05/03/17 16:39	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Client Sample ID: SJRP-SB16-1-2-04182017-2

Lab Sample ID: 600-147045-7
Date Collected: 04/18/17 17:45
Matrix: Solid
Date Received: 04/21/17 10:09
Percent Solids: 85.6

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.162	J	0.270	0.0277	mg/Kg	☼	05/02/17 14:44	05/03/17 16:39	1
Calcium	60400		108	0.934	mg/Kg	☼	05/02/17 14:44	05/03/17 16:39	1
Chromium	6.03		0.541	0.0547	mg/Kg	☼	05/02/17 14:44	05/03/17 16:39	1
Cobalt	5.95		0.541	0.0731	mg/Kg	☼	05/02/17 14:44	05/03/17 16:39	1
Iron	13100		21.6	2.74	mg/Kg	☼	05/02/17 14:44	05/03/17 16:39	1
Lead	10.6		0.541	0.114	mg/Kg	☼	05/02/17 14:44	05/03/17 16:39	1
Magnesium	4740		108	2.08	mg/Kg	☼	05/02/17 14:44	05/03/17 16:39	1
Manganese	1460		16.2	0.412	mg/Kg	☼	05/02/17 14:44	05/03/17 18:36	10
Molybdenum	1.39	B	0.541	0.147	mg/Kg	☼	05/02/17 14:44	05/03/17 16:39	1
Nickel	7.09		1.08	0.127	mg/Kg	☼	05/02/17 14:44	05/03/17 16:39	1
Potassium	1140		108	11.9	mg/Kg	☼	05/02/17 14:44	05/03/17 16:39	1
Selenium	0.687	J	2.16	0.280	mg/Kg	☼	05/02/17 14:44	05/03/17 16:39	1
Sodium	10300		108	0.958	mg/Kg	☼	05/02/17 14:44	05/03/17 16:39	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00814	J	0.0186	0.00392	mg/Kg	☼	04/24/17 15:01	04/25/17 12:17	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14.4		1.0	1.0	%			04/24/17 17:05	1
Percent Solids	85.6		1.0	1.0	%			04/24/17 17:05	1

Client Sample ID: SJRP-SB16-1-2-04202017

Lab Sample ID: 600-147045-8
Date Collected: 04/20/17 14:00
Matrix: Solid
Date Received: 04/21/17 10:09
Percent Solids: 83.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000909	U	0.00721	0.000909	mg/Kg	☼	04/21/17 14:30	04/25/17 12:11	1
Ethylbenzene	0.00147	U	0.00721	0.00147	mg/Kg	☼	04/21/17 14:30	04/25/17 12:11	1
Toluene	0.00199	U	0.00721	0.00199	mg/Kg	☼	04/21/17 14:30	04/25/17 12:11	1
Xylenes, Total	0.00163	U	0.00721	0.00163	mg/Kg	☼	04/21/17 14:30	04/25/17 12:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*61 - 130*	*04/21/17 14:30*	*04/25/17 12:11*	*1*
Dibromofluoromethane	*74*		*68 - 140*	*04/21/17 14:30*	*04/25/17 12:11*	*1*
Toluene-d8 (Surr)	*79*		*50 - 130*	*04/21/17 14:30*	*04/25/17 12:11*	*1*
4-Bromofluorobenzene	*110*		*57 - 140*	*04/21/17 14:30*	*04/25/17 12:11*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.5		1.0	1.0	%			04/24/17 17:05	1
Percent Solids	83.5		1.0	1.0	%			04/24/17 17:05	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Client Sample ID: SJRP-SB16-1-2-04202017-2

Lab Sample ID: 600-147045-9
Date Collected: 04/20/17 14:00
Matrix: Solid
Date Received: 04/21/17 10:09
Percent Solids: 82.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000757	U	0.00600	0.000757	mg/Kg	☼	04/21/17 14:30	04/25/17 12:35	1
Ethylbenzene	0.00122	U	0.00600	0.00122	mg/Kg	☼	04/21/17 14:30	04/25/17 12:35	1
Toluene	0.00166	U	0.00600	0.00166	mg/Kg	☼	04/21/17 14:30	04/25/17 12:35	1
Xylenes, Total	0.00136	U	0.00600	0.00136	mg/Kg	☼	04/21/17 14:30	04/25/17 12:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*61 - 130*	*04/21/17 14:30*	*04/25/17 12:35*	*1*
Dibromofluoromethane	*73*		*68 - 140*	*04/21/17 14:30*	*04/25/17 12:35*	*1*
Toluene-d8 (Surr)	*76*		*50 - 130*	*04/21/17 14:30*	*04/25/17 12:35*	*1*
4-Bromofluorobenzene	*106*		*57 - 140*	*04/21/17 14:30*	*04/25/17 12:35*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17.5		1.0	1.0	%			04/24/17 17:05	1
Percent Solids	82.5		1.0	1.0	%			04/24/17 17:05	1

Client Sample ID: SJRP-SB18-1-2-04202017

Lab Sample ID: 600-147045-10
Date Collected: 04/20/17 14:15
Matrix: Solid
Date Received: 04/21/17 10:09
Percent Solids: 85.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000760	U	0.00603	0.000760	mg/Kg	☼	04/21/17 14:30	04/25/17 13:00	1
Ethylbenzene	0.00123	U	0.00603	0.00123	mg/Kg	☼	04/21/17 14:30	04/25/17 13:00	1
Toluene	0.00166	U	0.00603	0.00166	mg/Kg	☼	04/21/17 14:30	04/25/17 13:00	1
Xylenes, Total	0.00136	U	0.00603	0.00136	mg/Kg	☼	04/21/17 14:30	04/25/17 13:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*61 - 130*	*04/21/17 14:30*	*04/25/17 13:00*	*1*
Dibromofluoromethane	*71*		*68 - 140*	*04/21/17 14:30*	*04/25/17 13:00*	*1*
Toluene-d8 (Surr)	*76*		*50 - 130*	*04/21/17 14:30*	*04/25/17 13:00*	*1*
4-Bromofluorobenzene	*107*		*57 - 140*	*04/21/17 14:30*	*04/25/17 13:00*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14.7		1.0	1.0	%			04/24/17 17:05	1
Percent Solids	85.3		1.0	1.0	%			04/24/17 17:05	1

Client Sample ID: SJRP-SB18-1-2-04202017-2

Lab Sample ID: 600-147045-11
Date Collected: 04/20/17 14:15
Matrix: Solid
Date Received: 04/21/17 10:09
Percent Solids: 86.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000857	U	0.00680	0.000857	mg/Kg	☼	04/21/17 14:30	04/25/17 13:24	1
Ethylbenzene	0.00139	U	0.00680	0.00139	mg/Kg	☼	04/21/17 14:30	04/25/17 13:24	1
Toluene	0.00188	U	0.00680	0.00188	mg/Kg	☼	04/21/17 14:30	04/25/17 13:24	1
Xylenes, Total	0.00154	U	0.00680	0.00154	mg/Kg	☼	04/21/17 14:30	04/25/17 13:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*61 - 130*	*04/21/17 14:30*	*04/25/17 13:24*	*1*

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Client Sample ID: SJRP-SB18-1-2-04202017-2

Lab Sample ID: 600-147045-11
Date Collected: 04/20/17 14:15
Matrix: Solid
Date Received: 04/21/17 10:09
Percent Solids: 86.1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane	*70*		*68 - 140*	*04/21/17 14:30*	*04/25/17 13:24*	*1*
Toluene-d8 (Surr)	*76*		*50 - 130*	*04/21/17 14:30*	*04/25/17 13:24*	*1*
4-Bromofluorobenzene	*107*		*57 - 140*	*04/21/17 14:30*	*04/25/17 13:24*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**13.9**		1.0	1.0	%			04/24/17 17:05	1
Percent Solids	**86.1**		1.0	1.0	%			04/24/17 17:05	1

Client Sample ID: SJRP-SB12-1-2-04202017

Lab Sample ID: 600-147045-12
Date Collected: 04/20/17 14:30
Matrix: Solid
Date Received: 04/21/17 10:09
Percent Solids: 82.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000739	U	0.00587	0.000739	mg/Kg	☼	04/21/17 14:30	04/25/17 13:48	1
Ethylbenzene	0.00120	U	0.00587	0.00120	mg/Kg	☼	04/21/17 14:30	04/25/17 13:48	1
Toluene	0.00162	U	0.00587	0.00162	mg/Kg	☼	04/21/17 14:30	04/25/17 13:48	1
Xylenes, Total	0.00133	U	0.00587	0.00133	mg/Kg	☼	04/21/17 14:30	04/25/17 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*61 - 130*	*04/21/17 14:30*	*04/25/17 13:48*	*1*
Dibromofluoromethane	*70*		*68 - 140*	*04/21/17 14:30*	*04/25/17 13:48*	*1*
Toluene-d8 (Surr)	*77*		*50 - 130*	*04/21/17 14:30*	*04/25/17 13:48*	*1*
4-Bromofluorobenzene	*107*		*57 - 140*	*04/21/17 14:30*	*04/25/17 13:48*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**17.6**		1.0	1.0	%			04/24/17 17:05	1
Percent Solids	**82.4**		1.0	1.0	%			04/24/17 17:05	1

Client Sample ID: SJRP-SB12-1-2-04202017-2

Lab Sample ID: 600-147045-13
Date Collected: 04/20/17 14:30
Matrix: Solid
Date Received: 04/21/17 10:09
Percent Solids: 81.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000719	U	0.00571	0.000719	mg/Kg	☼	04/21/17 14:30	04/25/17 14:13	1
Ethylbenzene	0.00116	U	0.00571	0.00116	mg/Kg	☼	04/21/17 14:30	04/25/17 14:13	1
Toluene	0.00157	U	0.00571	0.00157	mg/Kg	☼	04/21/17 14:30	04/25/17 14:13	1
Xylenes, Total	0.00129	U	0.00571	0.00129	mg/Kg	☼	04/21/17 14:30	04/25/17 14:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*61 - 130*	*04/21/17 14:30*	*04/25/17 14:13*	*1*
Dibromofluoromethane	*73*		*68 - 140*	*04/21/17 14:30*	*04/25/17 14:13*	*1*
Toluene-d8 (Surr)	*75*		*50 - 130*	*04/21/17 14:30*	*04/25/17 14:13*	*1*
4-Bromofluorobenzene	*107*		*57 - 140*	*04/21/17 14:30*	*04/25/17 14:13*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**18.2**		1.0	1.0	%			04/24/17 17:05	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Client Sample ID: SJRP-SB12-1-2-04202017-2

Lab Sample ID: 600-147045-13
Date Collected: 04/20/17 14:30
Matrix: Solid
Date Received: 04/21/17 10:09
Percent Solids: 81.8

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	81.8		1.0	1.0	%			04/24/17 17:05	1

Client Sample ID: SJRP-SB07-1-2-04202017

Lab Sample ID: 600-147045-14
Date Collected: 04/20/17 14:50
Matrix: Solid
Date Received: 04/21/17 10:09
Percent Solids: 90.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000699	U	0.00555	0.000699	mg/Kg	☼	04/21/17 14:30	04/25/17 11:22	1
Ethylbenzene	0.00113	U	0.00555	0.00113	mg/Kg	☼	04/21/17 14:30	04/25/17 11:22	1
Toluene	0.00153	U	0.00555	0.00153	mg/Kg	☼	04/21/17 14:30	04/25/17 11:22	1
Xylenes, Total	0.00125	U	0.00555	0.00125	mg/Kg	☼	04/21/17 14:30	04/25/17 11:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*61 - 130*	*04/21/17 14:30*	*04/25/17 11:22*	*1*
Dibromofluoromethane	*71*		*68 - 140*	*04/21/17 14:30*	*04/25/17 11:22*	*1*
Toluene-d8 (Surr)	*77*		*50 - 130*	*04/21/17 14:30*	*04/25/17 11:22*	*1*
4-Bromofluorobenzene	*107*		*57 - 140*	*04/21/17 14:30*	*04/25/17 11:22*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.6		1.0	1.0	%			04/25/17 20:38	1
Percent Solids	90.4		1.0	1.0	%			04/25/17 20:38	1

Client Sample ID: SJRP-TB-04182017

Lab Sample ID: 600-147045-15
Date Collected: 04/18/17 14:00
Matrix: Water
Date Received: 04/21/17 10:09

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/29/17 14:48	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/29/17 14:48	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/29/17 14:48	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/29/17 14:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*70*		*50 - 134*		*04/29/17 14:48*	*1*
Dibromofluoromethane	*87*		*62 - 130*		*04/29/17 14:48*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*04/29/17 14:48*	*1*
4-Bromofluorobenzene	*101*		*67 - 139*		*04/29/17 14:48*	*1*

Client Sample ID: SJRP-EB-04182017

Lab Sample ID: 600-147045-16
Date Collected: 04/18/17 16:00
Matrix: Water
Date Received: 04/21/17 10:09

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/29/17 15:48	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/29/17 15:48	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/29/17 15:48	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/29/17 15:48	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Client Sample ID: SJRP-EB-04182017
Date Collected: 04/18/17 16:00
Date Received: 04/21/17 10:09

Lab Sample ID: 600-147045-16
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	77		50 - 134		04/29/17 15:48	1
Dibromofluoromethane	96		62 - 130		04/29/17 15:48	1
Toluene-d8 (Surr)	103		70 - 130		04/29/17 15:48	1
4-Bromofluorobenzene	93		67 - 139		04/29/17 15:48	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			04/28/17 22:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	115		50 - 150		04/28/17 22:24	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0910	U H	0.100	0.0910	mg/L		04/27/17 21:03	04/28/17 12:32	1
ORO C24-C40	0.0910	U H	0.100	0.0910	mg/L		04/27/17 21:03	04/28/17 12:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	82		50 - 150	04/27/17 21:03	04/28/17 12:32	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		04/28/17 11:47	05/01/17 17:02	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		04/28/17 11:47	05/01/17 17:02	1
Barium	0.000530	U	0.0200	0.000530	mg/L		04/28/17 11:47	05/01/17 17:02	1
Boron	**0.0597**	**J**	0.200	0.0116	mg/L		04/28/17 11:47	05/01/17 17:02	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		04/28/17 11:47	05/01/17 17:02	1
Calcium	**0.0266**	**J B**	1.00	0.0240	mg/L		04/28/17 11:47	05/01/17 17:02	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/28/17 11:47	05/01/17 17:02	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		04/28/17 11:47	05/01/17 17:02	1
Iron	0.0270	U	0.400	0.0270	mg/L		04/28/17 11:47	05/01/17 17:02	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/28/17 11:47	05/01/17 17:02	1
Magnesium	0.0555	U	1.00	0.0555	mg/L		04/28/17 11:47	05/01/17 17:02	1
Manganese	0.000360	U	0.0100	0.000360	mg/L		04/28/17 11:47	05/01/17 17:02	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		04/28/17 11:47	05/02/17 15:11	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		04/28/17 11:47	05/01/17 17:02	1
Potassium	**0.0680**	**J B**	1.00	0.0374	mg/L		04/28/17 11:47	05/01/17 17:02	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/28/17 11:47	05/01/17 17:02	1
Sodium	**0.337**	**J B**	1.00	0.0214	mg/L		04/28/17 11:47	05/01/17 17:02	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000820	U	0.000200	0.0000820	mg/L		04/24/17 08:31	04/24/17 12:36	1

Definitions/Glossary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F2	MS/MSD RPD exceeds control limits

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
H	Sample was prepped or analyzed beyond the specified holding time

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(61-130)	(68-140)	(50-130)	(57-140)
600-147045-8	SJRP-SB16-1-2-04202017	90	74	79	110
600-147045-9	SJRP-SB16-1-2-04202017-2	87	73	76	106
600-147045-10	SJRP-SB18-1-2-04202017	93	71	76	107
600-147045-11	SJRP-SB18-1-2-04202017-2	93	70	76	107
600-147045-12	SJRP-SB12-1-2-04202017	97	70	77	107
600-147045-13	SJRP-SB12-1-2-04202017-2	99	73	75	107
600-147045-14	SJRP-SB07-1-2-04202017	85	71	77	107
600-147045-14 MS	SJRP-SB07-1-2-04202017	113	78	84	114
600-147045-14 MSD	SJRP-SB07-1-2-04202017	112	81	80	114
LCS 600-211470/3	Lab Control Sample	86	80	90	116
LCSD 600-211470/4	Lab Control Sample Dup	98	82	86	113
MB 600-211470/6	Method Blank	85	70	77	108

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(50-134)	(62-130)	(70-130)	(67-139)
600-147045-15	SJRP-TB-04182017	70	87	102	101
600-147045-16	SJRP-EB-04182017	77	96	103	93
LCS 600-211844/4	Lab Control Sample	80	98	104	108
LCSD 600-211844/5	Lab Control Sample Dup	78	85	90	100
MB 600-211844/7	Method Blank	89	111	112	115

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(50-150)
600-147045-1	SJRP-SB12-1-2-04182017	57
600-147045-2	SJRP-SB12-1-2-04182017-2	53
600-147045-3	SJRP-SB07-1-2-04182017	54
600-147045-3 MS	SJRP-SB07-1-2-04182017	59
600-147045-3 MSD	SJRP-SB07-1-2-04182017	68
600-147045-4	SJRP-SB18-1-2-04182017	51
600-147045-5	SJRP-SB18-1-2-04182017-2	50

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TFT2 (50-150)							
600-147045-6	SJRP-SB16-1-2-04182017	51							
600-147045-7	SJRP-SB16-1-2-04182017-2	113							
LCS 490-424627/2-A	Lab Control Sample	77							
LCS 490-425109/2-A	Lab Control Sample	82							
LCS 490-426662/34	Lab Control Sample	110							
LCSD 490-424627/3-A	Lab Control Sample Dup	74							
LCSD 490-425109/3-A	Lab Control Sample Dup	78							
LCSD 490-426662/35	Lab Control Sample Dup	113							
MB 490-424627/1-A	Method Blank	55							
MB 490-425109/1-A	Method Blank	52							
MB 490-425109/1-A	Method Blank	53							
MB 490-426662/10	Method Blank	114							

Surrogate Legend
TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TFT2 (50-150)							
600-147045-16	SJRP-EB-04182017	115							
LCS 490-425762/14	Lab Control Sample	111							
LCSD 490-425762/15	Lab Control Sample Dup	113							
MB 490-425762/18	Method Blank	112							

Surrogate Legend
TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	OTPH1 (50-150)							
600-147045-1	SJRP-SB12-1-2-04182017	69							
600-147045-2	SJRP-SB12-1-2-04182017-2	102							
600-147045-3	SJRP-SB07-1-2-04182017	81							
600-147045-3 MS	SJRP-SB07-1-2-04182017	74							
600-147045-3 MSD	SJRP-SB07-1-2-04182017	75							
600-147045-4	SJRP-SB18-1-2-04182017	63							
600-147045-5	SJRP-SB18-1-2-04182017-2	57							
600-147045-6	SJRP-SB16-1-2-04182017	66							
600-147045-7	SJRP-SB16-1-2-04182017-2	74							
LCS 490-425250/2-A	Lab Control Sample	77							
MB 490-425250/1-A	Method Blank	80							

Surrogate Legend

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

OTPH = o-Terphenyl (Surr)

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	OTPH1 (50-150)								
600-147045-16	SJRP-EB-04182017	82								
LCS 490-425403/2-A	Lab Control Sample	85								
LCSD 490-425403/3-A	Lab Control Sample Dup	81								
MB 490-425403/1-A	Method Blank	50								

Surrogate Legend

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: 600-147045-14 MS
Matrix: Solid
Analysis Batch: 211470

Client Sample ID: SJRP-SB07-1-2-04202017
Prep Type: Total/NA
Prep Batch: 211402

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	113		61 - 130
Dibromofluoromethane	78		68 - 140
Toluene-d8 (Surr)	84		50 - 130
4-Bromofluorobenzene	114		57 - 140

Lab Sample ID: 600-147045-14 MSD
Matrix: Solid
Analysis Batch: 211470

Client Sample ID: SJRP-SB07-1-2-04202017
Prep Type: Total/NA
Prep Batch: 211402

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.000699	U	0.0592	0.05037		mg/Kg	☼	85	70 - 131	26	30
Ethylbenzene	0.00113	U	0.0592	0.04488		mg/Kg	☼	76	66 - 130	23	30
Toluene	0.00153	U	0.0592	0.04503		mg/Kg	☼	76	67 - 130	21	30
Xylenes, Total	0.00125	U	0.118	0.08763		mg/Kg	☼	74	63 - 130	22	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	112		61 - 130
Dibromofluoromethane	81		68 - 140
Toluene-d8 (Surr)	80		50 - 130
4-Bromofluorobenzene	114		57 - 140

Lab Sample ID: MB 600-211470/6
Matrix: Solid
Analysis Batch: 211470

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			04/25/17 10:58	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			04/25/17 10:58	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			04/25/17 10:58	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			04/25/17 10:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		61 - 130		04/25/17 10:58	1
Dibromofluoromethane	70		68 - 140		04/25/17 10:58	1
Toluene-d8 (Surr)	77		50 - 130		04/25/17 10:58	1
4-Bromofluorobenzene	108		57 - 140		04/25/17 10:58	1

Lab Sample ID: LCS 600-211470/3
Matrix: Solid
Analysis Batch: 211470

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.05184		mg/Kg		104	70 - 131
Ethylbenzene	0.0500	0.04942		mg/Kg		99	66 - 130
Toluene	0.0500	0.04950		mg/Kg		99	67 - 130
Xylenes, Total	0.100	0.09749		mg/Kg		97	63 - 130

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-211470/3
Matrix: Solid
Analysis Batch: 211470

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	86		61 - 130
Dibromofluoromethane	80		68 - 140
Toluene-d8 (Surr)	90		50 - 130
4-Bromofluorobenzene	116		57 - 140

Lab Sample ID: LCSD 600-211470/4
Matrix: Solid
Analysis Batch: 211470

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.05229		mg/Kg		105	70 - 131	1	30
Ethylbenzene			0.0500	0.04551		mg/Kg		91	66 - 130	8	30
Toluene			0.0500	0.04805		mg/Kg		96	67 - 130	3	30
Xylenes, Total			0.100	0.09059		mg/Kg		91	63 - 130	7	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		61 - 130
Dibromofluoromethane	82		68 - 140
Toluene-d8 (Surr)	86		50 - 130
4-Bromofluorobenzene	113		57 - 140

Lab Sample ID: MB 600-211844/7
Matrix: Water
Analysis Batch: 211844

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/29/17 14:18	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/29/17 14:18	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/29/17 14:18	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/29/17 14:18	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		50 - 134		04/29/17 14:18	1
Dibromofluoromethane	111		62 - 130		04/29/17 14:18	1
Toluene-d8 (Surr)	112		70 - 130		04/29/17 14:18	1
4-Bromofluorobenzene	115		67 - 139		04/29/17 14:18	1

Lab Sample ID: LCS 600-211844/4
Matrix: Water
Analysis Batch: 211844

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene			0.0100	0.008645		mg/L		86	70 - 130
Ethylbenzene			0.0100	0.009701		mg/L		97	70 - 130
Toluene			0.0100	0.009465		mg/L		95	70 - 130
Xylenes, Total			0.0200	0.01867		mg/L		93	70 - 130

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-211844/4
Matrix: Water
Analysis Batch: 211844

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*80*		*50 - 134*
Dibromofluoromethane	*98*		*62 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*
4-Bromofluorobenzene	*108*		*67 - 139*

Lab Sample ID: LCSD 600-211844/5
Matrix: Water
Analysis Batch: 211844

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0100	0.009226		mg/L		92	70 - 130	7	20
Ethylbenzene			0.0100	0.009526		mg/L		95	70 - 130	2	20
Toluene			0.0100	0.008836		mg/L		88	70 - 130	7	20
Xylenes, Total			0.0200	0.01850		mg/L		93	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*78*		*50 - 134*
Dibromofluoromethane	*85*		*62 - 130*
Toluene-d8 (Surr)	*90*		*70 - 130*
4-Bromofluorobenzene	*100*		*67 - 139*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 490-424627/1-A
Matrix: Solid
Analysis Batch: 425527

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 424627

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		04/24/17 13:21	04/27/17 14:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	*55*		*50 - 150*	*04/24/17 13:21*	*04/27/17 14:34*	*1*

Lab Sample ID: LCS 490-424627/2-A
Matrix: Solid
Analysis Batch: 425527

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 424627

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C6-C10			500	502.6		mg/Kg		101	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	*77*		*50 - 150*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: LCSD 490-424627/3-A
Matrix: Solid
Analysis Batch: 425527

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 424627

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10			500	493.7		mg/Kg		99	70 - 130	2	21

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*74*		*50 - 150*

Lab Sample ID: MB 490-425109/1-A
Matrix: Solid
Analysis Batch: 425527

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 425109

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		04/26/17 09:36	04/27/17 15:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*53*		*50 - 150*	*04/26/17 09:36*	*04/27/17 15:04*	*1*

Lab Sample ID: MB 490-425109/1-A
Matrix: Solid
Analysis Batch: 425527

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 425109

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		04/26/17 09:36	04/28/17 12:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*52*		*50 - 150*	*04/26/17 09:36*	*04/28/17 12:48*	*1*

Lab Sample ID: LCS 490-425109/2-A
Matrix: Solid
Analysis Batch: 425527

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 425109

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10			500	579.5		mg/Kg		116	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*82*		*50 - 150*

Lab Sample ID: LCSD 490-425109/3-A
Matrix: Solid
Analysis Batch: 425527

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 425109

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10			500	548.7		mg/Kg		110	70 - 130	5	21

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: LCSD 490-425109/3-A
Matrix: Solid
Analysis Batch: 425527

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 425109

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	78		50 - 150

Lab Sample ID: 600-147045-3 MS
Matrix: Solid
Analysis Batch: 425527

Client Sample ID: SJRP-SB07-1-2-04182017
Prep Type: Total/NA
Prep Batch: 425109

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	3.31	U	662	400.1		mg/Kg	☼	60	56 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene	59		50 - 150

Lab Sample ID: 600-147045-3 MSD
Matrix: Solid
Analysis Batch: 425527

Client Sample ID: SJRP-SB07-1-2-04182017
Prep Type: Total/NA
Prep Batch: 425109

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	3.31	U	662	566.6	F2	mg/Kg	☼	86	56 - 130	34	21

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene	68		50 - 150

Lab Sample ID: MB 490-425762/18
Matrix: Water
Analysis Batch: 425762

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			04/28/17 17:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	112		50 - 150		04/28/17 17:42	1

Lab Sample ID: LCS 490-425762/14
Matrix: Water
Analysis Batch: 425762

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	1.00	0.9497		mg/L		95	66 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	111		50 - 150

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: LCSD 490-425762/15
Matrix: Water
Analysis Batch: 425762

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10			1.00	0.9290		mg/L		93	66 - 140	2	42

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*113*		*50 - 150*

Lab Sample ID: MB 490-426662/10
Matrix: Solid
Analysis Batch: 426662

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg			05/02/17 14:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*114*		*50 - 150*		*05/02/17 14:31*	*1*

Lab Sample ID: LCS 490-426662/34
Matrix: Solid
Analysis Batch: 426662

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C6-C10			50.0	49.00		mg/Kg		98	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*110*		*50 - 150*

Lab Sample ID: LCSD 490-426662/35
Matrix: Solid
Analysis Batch: 426662

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10			50.0	47.49		mg/Kg		95	70 - 130	3	21

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*113*		*50 - 150*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Lab Sample ID: MB 490-425250/1-A
Matrix: Solid
Analysis Batch: 425451

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 425250

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.50	U	5.00	2.50	mg/Kg		04/26/17 13:02	04/27/17 11:37	1
ORO C24-C40	2.656	J	5.00	2.50	mg/Kg		04/26/17 13:02	04/27/17 11:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*80*		*50 - 150*	*04/26/17 13:02*	*04/27/17 11:37*	*1*

Lab Sample ID: LCS 490-425250/2-A
Matrix: Solid
Analysis Batch: 425451

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 425250

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	40.0	30.01		mg/Kg		75	54 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*77*		*50 - 150*

Lab Sample ID: 600-147045-3 MS
Matrix: Solid
Analysis Batch: 425451

Client Sample ID: SJRP-SB07-1-2-04182017
Prep Type: Total/NA
Prep Batch: 425250

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	2.88	U	46.7	36.96		mg/Kg	☼	79	10 - 142

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
o-Terphenyl (Surr)	*74*		*50 - 150*

Lab Sample ID: 600-147045-3 MSD
Matrix: Solid
Analysis Batch: 425451

Client Sample ID: SJRP-SB07-1-2-04182017
Prep Type: Total/NA
Prep Batch: 425250

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	2.88	U	46.6	34.12		mg/Kg	☼	73	10 - 142	8	47

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
o-Terphenyl (Surr)	*75*		*50 - 150*

Lab Sample ID: MB 490-425403/1-A
Matrix: Water
Analysis Batch: 425453

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 425403

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0910	U	0.100	0.0910	mg/L		04/27/17 07:19	04/27/17 15:10	1
ORO C24-C40	0.0910	U	0.100	0.0910	mg/L		04/27/17 07:19	04/27/17 15:10	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Lab Sample ID: MB 490-425403/1-A
Matrix: Water
Analysis Batch: 425453

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 425403

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	50		50 - 150	04/27/17 07:19	04/27/17 15:10	1

Lab Sample ID: LCS 490-425403/2-A
Matrix: Water
Analysis Batch: 425453

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 425403

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	0.800	0.7581		mg/L		95	46 - 132

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	85		50 - 150

Lab Sample ID: LCSD 490-425403/3-A
Matrix: Water
Analysis Batch: 425453

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 425403

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	0.800	0.7276		mg/L		91	46 - 132	4	31

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o-Terphenyl (Surr)	81		50 - 150

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-211785/1-A
Matrix: Water
Analysis Batch: 211942

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 211785

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		04/28/17 11:47	05/01/17 16:56	1
Arsenic	0.004900	J	0.0100	0.00285	mg/L		04/28/17 11:47	05/01/17 16:56	1
Barium	0.000530	U	0.0200	0.000530	mg/L		04/28/17 11:47	05/01/17 16:56	1
Boron	0.0116	U	0.200	0.0116	mg/L		04/28/17 11:47	05/01/17 16:56	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		04/28/17 11:47	05/01/17 16:56	1
Calcium	0.02450	J	1.00	0.0240	mg/L		04/28/17 11:47	05/01/17 16:56	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/28/17 11:47	05/01/17 16:56	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		04/28/17 11:47	05/01/17 16:56	1
Iron	0.0270	U	0.400	0.0270	mg/L		04/28/17 11:47	05/01/17 16:56	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/28/17 11:47	05/01/17 16:56	1
Magnesium	0.1138	J	1.00	0.0555	mg/L		04/28/17 11:47	05/01/17 16:56	1
Manganese	0.000360	U	0.0100	0.000360	mg/L		04/28/17 11:47	05/01/17 16:56	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		04/28/17 11:47	05/01/17 16:56	1
Potassium	0.1349	J	1.00	0.0374	mg/L		04/28/17 11:47	05/01/17 16:56	1
Selenium	0.004700	J	0.0400	0.00287	mg/L		04/28/17 11:47	05/01/17 16:56	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: MB 600-211785/1-A
Matrix: Water
Analysis Batch: 211942

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 211785

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	0.9327	J	1.00	0.0214	mg/L		04/28/17 11:47	05/01/17 16:56	1

Lab Sample ID: MB 600-211785/1-A
Matrix: Water
Analysis Batch: 212025

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 211785

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		04/28/17 11:47	05/02/17 14:12	1

Lab Sample ID: LCS 600-211785/2-A
Matrix: Water
Analysis Batch: 211942

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211785

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	10.41		mg/L		104	80 - 120
Arsenic	1.00	1.047		mg/L		105	80 - 120
Barium	1.00	1.040		mg/L		104	80 - 120
Boron	1.00	1.005		mg/L		101	80 - 120
Cadmium	0.500	0.5210		mg/L		104	80 - 120
Calcium	10.0	10.41		mg/L		104	80 - 120
Chromium	1.00	1.035		mg/L		104	80 - 120
Cobalt	1.00	1.036		mg/L		104	80 - 120
Iron	10.0	10.48		mg/L		105	80 - 120
Lead	1.00	1.033		mg/L		103	80 - 120
Magnesium	10.0	10.20		mg/L		102	80 - 120
Manganese	1.00	1.031		mg/L		103	80 - 120
Nickel	1.00	1.039		mg/L		104	80 - 120
Potassium	10.0	10.40		mg/L		104	80 - 120
Selenium	1.00	1.037		mg/L		104	80 - 120
Sodium	10.0	10.82		mg/L		108	80 - 120

Lab Sample ID: LCS 600-211785/2-A
Matrix: Water
Analysis Batch: 212025

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211785

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Molybdenum	1.00	1.026		mg/L		103	80 - 120

Lab Sample ID: 600-147045-16 MS
Matrix: Water
Analysis Batch: 211942

Client Sample ID: SJRP-EB-04182017
Prep Type: Total/NA
Prep Batch: 211785

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.0926	U	10.0	10.21		mg/L		102	75 - 125
Arsenic	0.00285	U	1.00	1.057		mg/L		106	75 - 125
Barium	0.000530	U	1.00	1.046		mg/L		105	75 - 125
Boron	0.0597	J	1.00	1.061		mg/L		100	75 - 125
Cadmium	0.000280	U	0.500	0.5233		mg/L		105	75 - 125
Calcium	0.0266	J B	10.0	10.32		mg/L		103	75 - 125

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-147045-16 MS — **Client Sample ID: SJRP-EB-04182017**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 211942 — **Prep Batch: 211785**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	0.00159	U	1.00	1.039		mg/L		104	75 - 125
Cobalt	0.000310	U	1.00	1.043		mg/L		104	75 - 125
Iron	0.0270	U	10.0	10.38		mg/L		104	75 - 125
Lead	0.00219	U	1.00	1.041		mg/L		104	75 - 125
Magnesium	0.0555	U	10.0	10.29		mg/L		103	75 - 125
Manganese	0.000360	U	1.00	1.034		mg/L		103	75 - 125
Nickel	0.000800	U	1.00	1.045		mg/L		105	75 - 125
Potassium	0.0680	J B	10.0	10.42		mg/L		104	75 - 125
Selenium	0.00287	U	1.00	1.043		mg/L		104	75 - 125
Sodium	0.337	J B	10.0	10.62		mg/L		103	75 - 125

Lab Sample ID: 600-147045-16 MS — **Client Sample ID: SJRP-EB-04182017**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 212025 — **Prep Batch: 211785**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Molybdenum	0.000540	U	1.00	1.036		mg/L		104	75 - 125

Lab Sample ID: 600-147045-16 MSD — **Client Sample ID: SJRP-EB-04182017**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 211942 — **Prep Batch: 211785**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.0926	U	10.0	10.26		mg/L		103	75 - 125	0	20
Arsenic	0.00285	U	1.00	1.045		mg/L		105	75 - 125	1	20
Barium	0.000530	U	1.00	1.039		mg/L		104	75 - 125	1	20
Boron	0.0597	J	1.00	1.057		mg/L		100	75 - 125	0	20
Cadmium	0.000280	U	0.500	0.5180		mg/L		104	75 - 125	1	20
Calcium	0.0266	J B	10.0	10.25		mg/L		102	75 - 125	1	20
Chromium	0.00159	U	1.00	1.028		mg/L		103	75 - 125	1	20
Cobalt	0.000310	U	1.00	1.033		mg/L		103	75 - 125	1	20
Iron	0.0270	U	10.0	10.32		mg/L		103	75 - 125	1	20
Lead	0.00219	U	1.00	1.032		mg/L		103	75 - 125	1	20
Magnesium	0.0555	U	10.0	10.17		mg/L		102	75 - 125	1	20
Manganese	0.000360	U	1.00	1.025		mg/L		103	75 - 125	1	20
Nickel	0.000800	U	1.00	1.034		mg/L		103	75 - 125	1	20
Potassium	0.0680	J B	10.0	10.31		mg/L		102	75 - 125	1	20
Selenium	0.00287	U	1.00	1.033		mg/L		103	75 - 125	1	20
Sodium	0.337	J B	10.0	10.48		mg/L		101	75 - 125	1	20

Lab Sample ID: 600-147045-16 MSD — **Client Sample ID: SJRP-EB-04182017**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 212025 — **Prep Batch: 211785**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Molybdenum	0.000540	U	1.00	1.030		mg/L		103	75 - 125	1	20

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-147045-16 DU — **Client Sample ID: SJRP-EB-04182017**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 211942 — **Prep Batch: 211785**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	0.0926	U	0.0926	U	mg/L		NC	20
Arsenic	0.00285	U	0.00285	U	mg/L		NC	20
Barium	0.000530	U	0.0008000	J	mg/L		NC	20
Boron	0.0597	J	0.05600	J	mg/L		6	20
Cadmium	0.000280	U	0.000280	U	mg/L		NC	20
Calcium	0.0266	J B	0.0240	U	mg/L		NC	20
Chromium	0.00159	U	0.00159	U	mg/L		NC	20
Cobalt	0.000310	U	0.000310	U	mg/L		NC	20
Iron	0.0270	U	0.0270	U	mg/L		NC	20
Lead	0.00219	U	0.00219	U	mg/L		NC	20
Magnesium	0.0555	U	0.0555	U	mg/L		NC	20
Manganese	0.000360	U	0.000360	U	mg/L		NC	20
Nickel	0.000800	U	0.001400	J	mg/L		NC	20
Potassium	0.0680	J B	0.0374	U	mg/L		NC	20
Selenium	0.00287	U	0.003800	J	mg/L		NC	20
Sodium	0.337	J B	0.3236	J	mg/L		4	20

Lab Sample ID: 600-147045-16 DU — **Client Sample ID: SJRP-EB-04182017**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 212025 — **Prep Batch: 211785**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Molybdenum	0.000540	U	0.000540	U	mg/L		NC	20

Lab Sample ID: MB 600-212036/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 212162 — **Prep Batch: 212036**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.7050	J	25.0	0.300	mg/Kg		05/02/17 14:44	05/03/17 15:33	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		05/02/17 14:44	05/03/17 15:33	1
Barium	0.0300	U	1.00	0.0300	mg/Kg		05/02/17 14:44	05/03/17 15:33	1
Boron	0.386	U	20.0	0.386	mg/Kg		05/02/17 14:44	05/03/17 15:33	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		05/02/17 14:44	05/03/17 15:33	1
Calcium	0.864	U	100	0.864	mg/Kg		05/02/17 14:44	05/03/17 15:33	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		05/02/17 14:44	05/03/17 15:33	1
Cobalt	0.0676	U	0.500	0.0676	mg/Kg		05/02/17 14:44	05/03/17 15:33	1
Iron	2.53	U	20.0	2.53	mg/Kg		05/02/17 14:44	05/03/17 15:33	1
Magnesium	1.92	U	100	1.92	mg/Kg		05/02/17 14:44	05/03/17 15:33	1
Manganese	0.0381	U	1.50	0.0381	mg/Kg		05/02/17 14:44	05/03/17 15:33	1
Molybdenum	0.2200	J	0.500	0.136	mg/Kg		05/02/17 14:44	05/03/17 15:33	1
Nickel	0.117	U	1.00	0.117	mg/Kg		05/02/17 14:44	05/03/17 15:33	1
Potassium	11.0	U	100	11.0	mg/Kg		05/02/17 14:44	05/03/17 15:33	1
Selenium	0.259	U	2.00	0.259	mg/Kg		05/02/17 14:44	05/03/17 15:33	1
Sodium	0.886	U	100	0.886	mg/Kg		05/02/17 14:44	05/03/17 15:33	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: MB 600-212036/1-A
Matrix: Solid
Analysis Batch: 212162

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 212036

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.105	U	0.500	0.105	mg/Kg		05/02/17 14:44	05/03/17 17:36	1

Lab Sample ID: LCSSRM 600-212036/2-A
Matrix: Solid
Analysis Batch: 212162

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 212036

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	7590	6472		mg/Kg		85.3	34.9 - 151.5
Arsenic	97.5	95.55		mg/Kg		98.0	69.2 - 145.6
Barium	306	289.6		mg/Kg		94.6	82.7 - 117.0
Boron	116	114.8		mg/Kg		99.0	73.0 - 127.6
Cadmium	76.6	73.12		mg/Kg		95.5	73.2 - 126.8
Calcium	5880	5959		mg/Kg		101.3	81.8 - 118.4
Chromium	103	96.05		mg/Kg		93.3	79.7 - 121.4
Cobalt	103	102.7		mg/Kg		99.7	83.3 - 116.5
Iron	14500	12770		mg/Kg		88.1	45.0 - 155.9
Magnesium	2680	2505		mg/Kg		93.5	75.4 - 124.6
Manganese	400	364.6		mg/Kg		91.2	81.0 - 119.0
Molybdenum	94.9	91.18		mg/Kg		96.1	78.5 - 121.2
Nickel	153	150.0		mg/Kg		98.0	73.2 - 126.8
Potassium	2230	2051		mg/Kg		92.0	69.5 - 130.5
Selenium	161	160.1		mg/Kg		99.4	77.6 - 123.0
Sodium	370	345.4		mg/Kg		93.4	70.5 - 129.7

Lab Sample ID: LCSSRM 600-212036/2-A
Matrix: Solid
Analysis Batch: 212162

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 212036

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	96.7	90.26		mg/Kg		93.3	81.7 - 117.9

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-147045-3 MS
Matrix: Solid
Analysis Batch: 212162

Client Sample ID: SJRP-SB07-1-2-04182017
Prep Type: Total/NA
Prep Batch: 212036

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	11400	B	585	14330	4	mg/Kg	☼	500	75 - 125
Arsenic	3.33		58.5	61.48		mg/Kg	☼	99	75 - 125
Boron	5.80	J F1	58.5	45.89	F1	mg/Kg	☼	68	75 - 125
Cadmium	0.145	J	29.3	28.67		mg/Kg	☼	97	75 - 125
Calcium	14900	F2	585	19120	4	mg/Kg	☼	719	75 - 125
Chromium	14.8		58.5	58.90		mg/Kg	☼	75	75 - 125
Cobalt	6.81		58.5	65.05		mg/Kg	☼	99	75 - 125
Iron	14700		585	16540	4	mg/Kg	☼	315	75 - 125
Lead	13.3		58.5	69.56		mg/Kg	☼	96	75 - 125
Magnesium	3980		585	4639	4	mg/Kg	☼	113	75 - 125
Molybdenum	0.499	J B	58.5	49.10		mg/Kg	☼	83	75 - 125
Nickel	8.05		58.5	65.75		mg/Kg	☼	99	75 - 125
Potassium	1530		585	2086		mg/Kg	☼	95	75 - 125
Selenium	0.300	U	58.5	56.77		mg/Kg	☼	97	75 - 125
Sodium	5580		585	10270	4	mg/Kg	☼	802	75 - 125

Lab Sample ID: 600-147045-3 MS
Matrix: Solid
Analysis Batch: 212162

Client Sample ID: SJRP-SB07-1-2-04182017
Prep Type: Total/NA
Prep Batch: 212036

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	187	F1	58.5	218.6	F1	mg/Kg	☼	53	75 - 125
Manganese	672	F2	58.5	744.7	4	mg/Kg	☼	123	75 - 125

Lab Sample ID: 600-147045-3 MSD
Matrix: Solid
Analysis Batch: 212162

Client Sample ID: SJRP-SB07-1-2-04182017
Prep Type: Total/NA
Prep Batch: 212036

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	11400	B	527	12910	4	mg/Kg	☼	285	75 - 125	10	20
Arsenic	3.33		52.7	53.38		mg/Kg	☼	95	75 - 125	14	20
Boron	5.80	J F1	52.7	42.13	F1	mg/Kg	☼	69	75 - 125	9	20
Cadmium	0.145	J	26.4	25.26		mg/Kg	☼	95	75 - 125	13	20
Calcium	14900	F2	527	24520	4 F2	mg/Kg	☼	1822	75 - 125	25	20
Chromium	14.8		52.7	56.12		mg/Kg	☼	78	75 - 125	5	20
Cobalt	6.81		52.7	58.02		mg/Kg	☼	97	75 - 125	11	20
Iron	14700		527	15410	4	mg/Kg	☼	136	75 - 125	7	20
Lead	13.3		52.7	59.97		mg/Kg	☼	88	75 - 125	15	20
Magnesium	3980		527	4376	4	mg/Kg	☼	75	75 - 125	6	20
Molybdenum	0.499	J B	52.7	43.09		mg/Kg	☼	81	75 - 125	13	20
Nickel	8.05		52.7	58.50		mg/Kg	☼	96	75 - 125	12	20
Potassium	1530		527	1938		mg/Kg	☼	78	75 - 125	7	20
Selenium	0.300	U	52.7	49.75		mg/Kg	☼	94	75 - 125	13	20
Sodium	5580		527	8614	4	mg/Kg	☼	576	75 - 125	18	20

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-147045-3 MSD — **Client Sample ID: SJRP-SB07-1-2-04182017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 212162 — **Prep Batch: 212036**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Barium	187	F1	52.7	241.7		mg/Kg	☼	103	75 - 125	10	20
Manganese	672	F2	52.7	955.8	4 F2	mg/Kg	☼	537	75 - 125	25	20

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Lab Sample ID: LB 600-211189/1-F — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 211404 — **Prep Batch: 211371**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000820	U	0.000200	0.0000820	mg/L		04/24/17 08:31	04/24/17 12:29	1

Lab Sample ID: MB 600-211371/7-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 211404 — **Prep Batch: 211371**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000820	U	0.000200	0.0000820	mg/L		04/24/17 08:31	04/24/17 11:56	1

Lab Sample ID: LCS 600-211371/8-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 211404 — **Prep Batch: 211371**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00300	0.002507		mg/L		84	70 - 130

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-211425/7-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211513 — **Prep Batch: 211425**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00325	U	0.0155	0.00325	mg/Kg		04/24/17 15:01	04/25/17 11:46	1

Lab Sample ID: LCSSRM 600-211425/8-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211513 — **Prep Batch: 211425**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	20.2	25.30		mg/Kg		125.3	70.8 - 129.2

Lab Sample ID: 600-147045-1 MS — **Client Sample ID: SJRP-SB12-1-2-04182017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211513 — **Prep Batch: 211425**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0416		0.276	0.3507		mg/Kg	☼	112	75 - 125

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Lab Sample ID: 600-147045-3 MS — **Client Sample ID: SJRP-SB07-1-2-04182017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211513 — **Prep Batch: 211425**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00419	U	0.283	0.3205		mg/Kg	☼	113	75 - 125

Lab Sample ID: 600-147045-3 MSD — **Client Sample ID: SJRP-SB07-1-2-04182017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211513 — **Prep Batch: 211425**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00419	U	0.293	0.3390		mg/Kg	☼	116	75 - 125	6	20

Lab Sample ID: 600-147045-1 DU — **Client Sample ID: SJRP-SB12-1-2-04182017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211513 — **Prep Batch: 211425**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.0416		0.03101	F5	mg/Kg	☼	29	20

Lab Sample ID: 600-147045-3 DU — **Client Sample ID: SJRP-SB07-1-2-04182017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211513 — **Prep Batch: 211425**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.00419	U	0.004860	J	mg/Kg	☼	NC	20

Method: 2540B - Percent Moisture

Lab Sample ID: 600-147045-8 DU — **Client Sample ID: SJRP-SB16-1-2-04202017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211434

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	16.5		16.0		%		3	20
Percent Solids	83.5		84.0		%		0.6	20

Lab Sample ID: 600-147045-14 DU — **Client Sample ID: SJRP-SB07-1-2-04202017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211542

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	9.6		9.3		%		3	20
Percent Solids	90.4		90.7		%		0.3	20

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

GC/MS VOA

Prep Batch: 211402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147045-8	SJRP-SB16-1-2-04202017	Total/NA	Solid	5035	
600-147045-9	SJRP-SB16-1-2-04202017-2	Total/NA	Solid	5035	
600-147045-10	SJRP-SB18-1-2-04202017	Total/NA	Solid	5035	
600-147045-11	SJRP-SB18-1-2-04202017-2	Total/NA	Solid	5035	
600-147045-12	SJRP-SB12-1-2-04202017	Total/NA	Solid	5035	
600-147045-13	SJRP-SB12-1-2-04202017-2	Total/NA	Solid	5035	
600-147045-14	SJRP-SB07-1-2-04202017	Total/NA	Solid	5035	
600-147045-14 MS	SJRP-SB07-1-2-04202017	Total/NA	Solid	5035	
600-147045-14 MSD	SJRP-SB07-1-2-04202017	Total/NA	Solid	5035	

Analysis Batch: 211470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147045-8	SJRP-SB16-1-2-04202017	Total/NA	Solid	8260B	211402
600-147045-9	SJRP-SB16-1-2-04202017-2	Total/NA	Solid	8260B	211402
600-147045-10	SJRP-SB18-1-2-04202017	Total/NA	Solid	8260B	211402
600-147045-11	SJRP-SB18-1-2-04202017-2	Total/NA	Solid	8260B	211402
600-147045-12	SJRP-SB12-1-2-04202017	Total/NA	Solid	8260B	211402
600-147045-13	SJRP-SB12-1-2-04202017-2	Total/NA	Solid	8260B	211402
600-147045-14	SJRP-SB07-1-2-04202017	Total/NA	Solid	8260B	211402
MB 600-211470/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-211470/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-211470/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
600-147045-14 MS	SJRP-SB07-1-2-04202017	Total/NA	Solid	8260B	211402
600-147045-14 MSD	SJRP-SB07-1-2-04202017	Total/NA	Solid	8260B	211402

Analysis Batch: 211844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147045-15	SJRP-TB-04182017	Total/NA	Water	8260B	
600-147045-16	SJRP-EB-04182017	Total/NA	Water	8260B	
MB 600-211844/7	Method Blank	Total/NA	Water	8260B	
LCS 600-211844/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-211844/5	Lab Control Sample Dup	Total/NA	Water	8260B	

GC VOA

Prep Batch: 424627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-424627/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 490-424627/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 490-424627/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Prep Batch: 425109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147045-1	SJRP-SB12-1-2-04182017	Total/NA	Solid	5030B	
600-147045-2	SJRP-SB12-1-2-04182017-2	Total/NA	Solid	5030B	
600-147045-3	SJRP-SB07-1-2-04182017	Total/NA	Solid	5030B	
600-147045-4	SJRP-SB18-1-2-04182017	Total/NA	Solid	5030B	
600-147045-5	SJRP-SB18-1-2-04182017-2	Total/NA	Solid	5030B	
600-147045-6	SJRP-SB16-1-2-04182017	Total/NA	Solid	5030B	
600-147045-7	SJRP-SB16-1-2-04182017-2	Total/NA	Solid	5030B	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

GC VOA (Continued)

Prep Batch: 425109 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-425109/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 490-425109/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 490-425109/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
600-147045-3 MS	SJRP-SB07-1-2-04182017	Total/NA	Solid	5030B	
600-147045-3 MSD	SJRP-SB07-1-2-04182017	Total/NA	Solid	5030B	

Analysis Batch: 425527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147045-1	SJRP-SB12-1-2-04182017	Total/NA	Solid	8015C	425109
600-147045-2	SJRP-SB12-1-2-04182017-2	Total/NA	Solid	8015C	425109
600-147045-3	SJRP-SB07-1-2-04182017	Total/NA	Solid	8015C	425109
600-147045-4	SJRP-SB18-1-2-04182017	Total/NA	Solid	8015C	425109
600-147045-5	SJRP-SB18-1-2-04182017-2	Total/NA	Solid	8015C	425109
600-147045-6	SJRP-SB16-1-2-04182017	Total/NA	Solid	8015C	425109
MB 490-424627/1-A	Method Blank	Total/NA	Solid	8015C	424627
MB 490-425109/1-A	Method Blank	Total/NA	Solid	8015C	425109
MB 490-425109/1-A	Method Blank	Total/NA	Solid	8015C	425109
LCS 490-424627/2-A	Lab Control Sample	Total/NA	Solid	8015C	424627
LCS 490-425109/2-A	Lab Control Sample	Total/NA	Solid	8015C	425109
LCSD 490-424627/3-A	Lab Control Sample Dup	Total/NA	Solid	8015C	424627
LCSD 490-425109/3-A	Lab Control Sample Dup	Total/NA	Solid	8015C	425109
600-147045-3 MS	SJRP-SB07-1-2-04182017	Total/NA	Solid	8015C	425109
600-147045-3 MSD	SJRP-SB07-1-2-04182017	Total/NA	Solid	8015C	425109

Analysis Batch: 425762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147045-16	SJRP-EB-04182017	Total/NA	Water	8015C	
MB 490-425762/18	Method Blank	Total/NA	Water	8015C	
LCS 490-425762/14	Lab Control Sample	Total/NA	Water	8015C	
LCSD 490-425762/15	Lab Control Sample Dup	Total/NA	Water	8015C	

Analysis Batch: 426662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147045-7	SJRP-SB16-1-2-04182017-2	Total/NA	Solid	8015C	425109
MB 490-426662/10	Method Blank	Total/NA	Solid	8015C	
LCS 490-426662/34	Lab Control Sample	Total/NA	Solid	8015C	
LCSD 490-426662/35	Lab Control Sample Dup	Total/NA	Solid	8015C	

GC Semi VOA

Prep Batch: 425250

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147045-1	SJRP-SB12-1-2-04182017	Total/NA	Solid	3550C	
600-147045-2	SJRP-SB12-1-2-04182017-2	Total/NA	Solid	3550C	
600-147045-3	SJRP-SB07-1-2-04182017	Total/NA	Solid	3550C	
600-147045-4	SJRP-SB18-1-2-04182017	Total/NA	Solid	3550C	
600-147045-5	SJRP-SB18-1-2-04182017-2	Total/NA	Solid	3550C	
600-147045-6	SJRP-SB16-1-2-04182017	Total/NA	Solid	3550C	
600-147045-7	SJRP-SB16-1-2-04182017-2	Total/NA	Solid	3550C	
MB 490-425250/1-A	Method Blank	Total/NA	Solid	3550C	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

GC Semi VOA (Continued)

Prep Batch: 425250 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 490-425250/2-A	Lab Control Sample	Total/NA	Solid	3550C	
600-147045-3 MS	SJRP-SB07-1-2-04182017	Total/NA	Solid	3550C	
600-147045-3 MSD	SJRP-SB07-1-2-04182017	Total/NA	Solid	3550C	

Prep Batch: 425403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147045-16	SJRP-EB-04182017	Total/NA	Water	3510C	
MB 490-425403/1-A	Method Blank	Total/NA	Water	3510C	
LCS 490-425403/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 490-425403/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 425451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147045-1	SJRP-SB12-1-2-04182017	Total/NA	Solid	8015C	425250
600-147045-2	SJRP-SB12-1-2-04182017-2	Total/NA	Solid	8015C	425250
600-147045-3	SJRP-SB07-1-2-04182017	Total/NA	Solid	8015C	425250
600-147045-4	SJRP-SB18-1-2-04182017	Total/NA	Solid	8015C	425250
600-147045-5	SJRP-SB18-1-2-04182017-2	Total/NA	Solid	8015C	425250
600-147045-6	SJRP-SB16-1-2-04182017	Total/NA	Solid	8015C	425250
600-147045-7	SJRP-SB16-1-2-04182017-2	Total/NA	Solid	8015C	425250
MB 490-425250/1-A	Method Blank	Total/NA	Solid	8015C	425250
LCS 490-425250/2-A	Lab Control Sample	Total/NA	Solid	8015C	425250
600-147045-3 MS	SJRP-SB07-1-2-04182017	Total/NA	Solid	8015C	425250
600-147045-3 MSD	SJRP-SB07-1-2-04182017	Total/NA	Solid	8015C	425250

Analysis Batch: 425453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-425403/1-A	Method Blank	Total/NA	Water	8015C	425403
LCS 490-425403/2-A	Lab Control Sample	Total/NA	Water	8015C	425403
LCSD 490-425403/3-A	Lab Control Sample Dup	Total/NA	Water	8015C	425403

Analysis Batch: 425822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147045-16	SJRP-EB-04182017	Total/NA	Water	8015C	425403

Metals

Leach Batch: 211189

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 600-211189/1-F	Method Blank	Total/NA	Water	1311	

Prep Batch: 211371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147045-16	SJRP-EB-04182017	Total/NA	Water	7470A	
LB 600-211189/1-F	Method Blank	Total/NA	Water	7470A	211189
MB 600-211371/7-A	Method Blank	Total/NA	Water	7470A	
LCS 600-211371/8-A	Lab Control Sample	Total/NA	Water	7470A	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Metals (Continued)

Analysis Batch: 211404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147045-16	SJRP-EB-04182017	Total/NA	Water	7470A	211371
LB 600-211189/1-F	Method Blank	Total/NA	Water	7470A	211371
MB 600-211371/7-A	Method Blank	Total/NA	Water	7470A	211371
LCS 600-211371/8-A	Lab Control Sample	Total/NA	Water	7470A	211371

Prep Batch: 211425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147045-1	SJRP-SB12-1-2-04182017	Total/NA	Solid	7471A	
600-147045-2	SJRP-SB12-1-2-04182017-2	Total/NA	Solid	7471A	
600-147045-3	SJRP-SB07-1-2-04182017	Total/NA	Solid	7471A	
600-147045-4	SJRP-SB18-1-2-04182017	Total/NA	Solid	7471A	
600-147045-5	SJRP-SB18-1-2-04182017-2	Total/NA	Solid	7471A	
600-147045-6	SJRP-SB16-1-2-04182017	Total/NA	Solid	7471A	
600-147045-7	SJRP-SB16-1-2-04182017-2	Total/NA	Solid	7471A	
MB 600-211425/7-A	Method Blank	Total/NA	Solid	7471A	
LCSSRM 600-211425/8-A	Lab Control Sample	Total/NA	Solid	7471A	
600-147045-1 MS	SJRP-SB12-1-2-04182017	Total/NA	Solid	7471A	
600-147045-3 MS	SJRP-SB07-1-2-04182017	Total/NA	Solid	7471A	
600-147045-3 MSD	SJRP-SB07-1-2-04182017	Total/NA	Solid	7471A	
600-147045-1 DU	SJRP-SB12-1-2-04182017	Total/NA	Solid	7471A	
600-147045-3 DU	SJRP-SB07-1-2-04182017	Total/NA	Solid	7471A	

Analysis Batch: 211513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147045-1	SJRP-SB12-1-2-04182017	Total/NA	Solid	7471A	211425
600-147045-2	SJRP-SB12-1-2-04182017-2	Total/NA	Solid	7471A	211425
600-147045-3	SJRP-SB07-1-2-04182017	Total/NA	Solid	7471A	211425
600-147045-4	SJRP-SB18-1-2-04182017	Total/NA	Solid	7471A	211425
600-147045-5	SJRP-SB18-1-2-04182017-2	Total/NA	Solid	7471A	211425
600-147045-6	SJRP-SB16-1-2-04182017	Total/NA	Solid	7471A	211425
600-147045-7	SJRP-SB16-1-2-04182017-2	Total/NA	Solid	7471A	211425
MB 600-211425/7-A	Method Blank	Total/NA	Solid	7471A	211425
LCSSRM 600-211425/8-A	Lab Control Sample	Total/NA	Solid	7471A	211425
600-147045-1 MS	SJRP-SB12-1-2-04182017	Total/NA	Solid	7471A	211425
600-147045-3 MS	SJRP-SB07-1-2-04182017	Total/NA	Solid	7471A	211425
600-147045-3 MSD	SJRP-SB07-1-2-04182017	Total/NA	Solid	7471A	211425
600-147045-1 DU	SJRP-SB12-1-2-04182017	Total/NA	Solid	7471A	211425
600-147045-3 DU	SJRP-SB07-1-2-04182017	Total/NA	Solid	7471A	211425

Prep Batch: 211785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147045-16	SJRP-EB-04182017	Total/NA	Water	3010A	
MB 600-211785/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-211785/2-A	Lab Control Sample	Total/NA	Water	3010A	
600-147045-16 MS	SJRP-EB-04182017	Total/NA	Water	3010A	
600-147045-16 MSD	SJRP-EB-04182017	Total/NA	Water	3010A	
600-147045-16 DU	SJRP-EB-04182017	Total/NA	Water	3010A	

Analysis Batch: 211942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147045-16	SJRP-EB-04182017	Total/NA	Water	6010B	211785

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Metals (Continued)

Analysis Batch: 211942 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-211785/1-A	Method Blank	Total/NA	Water	6010B	211785
LCS 600-211785/2-A	Lab Control Sample	Total/NA	Water	6010B	211785
600-147045-16 MS	SJRP-EB-04182017	Total/NA	Water	6010B	211785
600-147045-16 MSD	SJRP-EB-04182017	Total/NA	Water	6010B	211785
600-147045-16 DU	SJRP-EB-04182017	Total/NA	Water	6010B	211785

Analysis Batch: 212025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147045-16	SJRP-EB-04182017	Total/NA	Water	6010B	211785
MB 600-211785/1-A	Method Blank	Total/NA	Water	6010B	211785
LCS 600-211785/2-A	Lab Control Sample	Total/NA	Water	6010B	211785
600-147045-16 MS	SJRP-EB-04182017	Total/NA	Water	6010B	211785
600-147045-16 MSD	SJRP-EB-04182017	Total/NA	Water	6010B	211785
600-147045-16 DU	SJRP-EB-04182017	Total/NA	Water	6010B	211785

Prep Batch: 212036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147045-1	SJRP-SB12-1-2-04182017	Total/NA	Solid	3050B	
600-147045-2	SJRP-SB12-1-2-04182017-2	Total/NA	Solid	3050B	
600-147045-3	SJRP-SB07-1-2-04182017	Total/NA	Solid	3050B	
600-147045-4	SJRP-SB18-1-2-04182017	Total/NA	Solid	3050B	
600-147045-5	SJRP-SB18-1-2-04182017-2	Total/NA	Solid	3050B	
600-147045-6	SJRP-SB16-1-2-04182017	Total/NA	Solid	3050B	
600-147045-7	SJRP-SB16-1-2-04182017-2	Total/NA	Solid	3050B	
MB 600-212036/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-212036/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-147045-3 MS	SJRP-SB07-1-2-04182017	Total/NA	Solid	3050B	
600-147045-3 MSD	SJRP-SB07-1-2-04182017	Total/NA	Solid	3050B	

Analysis Batch: 212162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147045-1	SJRP-SB12-1-2-04182017	Total/NA	Solid	6010B	212036
600-147045-1	SJRP-SB12-1-2-04182017	Total/NA	Solid	6010B	212036
600-147045-2	SJRP-SB12-1-2-04182017-2	Total/NA	Solid	6010B	212036
600-147045-2	SJRP-SB12-1-2-04182017-2	Total/NA	Solid	6010B	212036
600-147045-3	SJRP-SB07-1-2-04182017	Total/NA	Solid	6010B	212036
600-147045-3	SJRP-SB07-1-2-04182017	Total/NA	Solid	6010B	212036
600-147045-4	SJRP-SB18-1-2-04182017	Total/NA	Solid	6010B	212036
600-147045-4	SJRP-SB18-1-2-04182017	Total/NA	Solid	6010B	212036
600-147045-5	SJRP-SB18-1-2-04182017-2	Total/NA	Solid	6010B	212036
600-147045-5	SJRP-SB18-1-2-04182017-2	Total/NA	Solid	6010B	212036
600-147045-6	SJRP-SB16-1-2-04182017	Total/NA	Solid	6010B	212036
600-147045-6	SJRP-SB16-1-2-04182017	Total/NA	Solid	6010B	212036
600-147045-7	SJRP-SB16-1-2-04182017-2	Total/NA	Solid	6010B	212036
600-147045-7	SJRP-SB16-1-2-04182017-2	Total/NA	Solid	6010B	212036
MB 600-212036/1-A	Method Blank	Total/NA	Solid	6010B	212036
MB 600-212036/1-A	Method Blank	Total/NA	Solid	6010B	212036
LCSSRM 600-212036/2-A	Lab Control Sample	Total/NA	Solid	6010B	212036
LCSSRM 600-212036/2-A	Lab Control Sample	Total/NA	Solid	6010B	212036
600-147045-3 MS	SJRP-SB07-1-2-04182017	Total/NA	Solid	6010B	212036
600-147045-3 MS	SJRP-SB07-1-2-04182017	Total/NA	Solid	6010B	212036

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Metals (Continued)

Analysis Batch: 212162 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147045-3 MSD	SJRP-SB07-1-2-04182017	Total/NA	Solid	6010B	212036
600-147045-3 MSD	SJRP-SB07-1-2-04182017	Total/NA	Solid	6010B	212036

General Chemistry

Analysis Batch: 211434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147045-1	SJRP-SB12-1-2-04182017	Total/NA	Solid	2540B	
600-147045-2	SJRP-SB12-1-2-04182017-2	Total/NA	Solid	2540B	
600-147045-3	SJRP-SB07-1-2-04182017	Total/NA	Solid	2540B	
600-147045-4	SJRP-SB18-1-2-04182017	Total/NA	Solid	2540B	
600-147045-5	SJRP-SB18-1-2-04182017-2	Total/NA	Solid	2540B	
600-147045-6	SJRP-SB16-1-2-04182017	Total/NA	Solid	2540B	
600-147045-7	SJRP-SB16-1-2-04182017-2	Total/NA	Solid	2540B	
600-147045-8	SJRP-SB16-1-2-04202017	Total/NA	Solid	2540B	
600-147045-9	SJRP-SB16-1-2-04202017-2	Total/NA	Solid	2540B	
600-147045-10	SJRP-SB18-1-2-04202017	Total/NA	Solid	2540B	
600-147045-11	SJRP-SB18-1-2-04202017-2	Total/NA	Solid	2540B	
600-147045-12	SJRP-SB12-1-2-04202017	Total/NA	Solid	2540B	
600-147045-13	SJRP-SB12-1-2-04202017-2	Total/NA	Solid	2540B	
600-147045-3 MS	SJRP-SB07-1-2-04182017	Total/NA	Solid	2540B	
600-147045-3 MSD	SJRP-SB07-1-2-04182017	Total/NA	Solid	2540B	
600-147045-8 DU	SJRP-SB16-1-2-04202017	Total/NA	Solid	2540B	

Analysis Batch: 211542

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147045-14	SJRP-SB07-1-2-04202017	Total/NA	Solid	2540B	
600-147045-14 MS	SJRP-SB07-1-2-04202017	Total/NA	Solid	2540B	
600-147045-14 MSD	SJRP-SB07-1-2-04202017	Total/NA	Solid	2540B	
600-147045-14 DU	SJRP-SB07-1-2-04202017	Total/NA	Solid	2540B	

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Client Sample ID: SJRP-SB12-1-2-04182017 **Lab Sample ID: 600-147045-1**
Date Collected: 04/18/17 15:25 **Matrix: Solid**
Date Received: 04/21/17 10:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			211434	04/24/17 17:05	B1K	TAL HOU

Client Sample ID: SJRP-SB12-1-2-04182017 **Lab Sample ID: 600-147045-1**
Date Collected: 04/18/17 15:25 **Matrix: Solid**
Date Received: 04/21/17 10:09 **Percent Solids: 82.3**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.08 g	5.0 mL	425109	04/26/17 12:58	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	425527	04/28/17 16:48	A1B	TAL NSH
Total/NA	Prep	3550C			25.50 g	1.00 mL	425250	04/26/17 13:02	MNM	TAL NSH
Total/NA	Analysis	8015C		1			425451	04/27/17 12:09	AK1	TAL NSH
Total/NA	Prep	3050B			1.18 g	50 mL	212036	05/02/17 14:44	JAH	TAL HOU
Total/NA	Analysis	6010B		1			212162	05/03/17 16:17	DCL	TAL HOU
Total/NA	Prep	3050B			1.18 g	50 mL	212036	05/02/17 14:44	JAH	TAL HOU
Total/NA	Analysis	6010B		5			212162	05/03/17 18:16	DCL	TAL HOU
Total/NA	Prep	7471A			.62 g	50 mL	211425	04/24/17 15:01	DDE	TAL HOU
Total/NA	Analysis	7471A		1			211513	04/25/17 11:52	DDE	TAL HOU

Client Sample ID: SJRP-SB12-1-2-04182017-2 **Lab Sample ID: 600-147045-2**
Date Collected: 04/18/17 15:25 **Matrix: Solid**
Date Received: 04/21/17 10:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			211434	04/24/17 17:05	B1K	TAL HOU

Client Sample ID: SJRP-SB12-1-2-04182017-2 **Lab Sample ID: 600-147045-2**
Date Collected: 04/18/17 15:25 **Matrix: Solid**
Date Received: 04/21/17 10:09 **Percent Solids: 82.7**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.40 g	5.0 mL	425109	04/26/17 12:58	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	425527	04/28/17 17:19	A1B	TAL NSH
Total/NA	Prep	3550C			25.19 g	1.00 mL	425250	04/26/17 13:02	MNM	TAL NSH
Total/NA	Analysis	8015C		1			425451	04/27/17 12:26	AK1	TAL NSH
Total/NA	Prep	3050B			1.11 g	50 mL	212036	05/02/17 14:44	JAH	TAL HOU
Total/NA	Analysis	6010B		1			212162	05/03/17 16:19	DCL	TAL HOU
Total/NA	Prep	3050B			1.11 g	50 mL	212036	05/02/17 14:44	JAH	TAL HOU
Total/NA	Analysis	6010B		5			212162	05/03/17 18:18	DCL	TAL HOU
Total/NA	Prep	7471A			.62 g	50 mL	211425	04/24/17 15:01	DDE	TAL HOU
Total/NA	Analysis	7471A		1			211513	04/25/17 11:57	DDE	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Client Sample ID: SJRP-SB07-1-2-04182017 — **Lab Sample ID: 600-147045-3**
Date Collected: 04/18/17 16:35 — **Matrix: Solid**
Date Received: 04/21/17 10:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			211434	04/24/17 17:05	B1K	TAL HOU

Client Sample ID: SJRP-SB07-1-2-04182017 — **Lab Sample ID: 600-147045-3**
Date Collected: 04/18/17 16:35 — **Matrix: Solid**
Date Received: 04/21/17 10:09 — **Percent Solids: 85.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.08 g	5.0 mL	425109	04/26/17 12:58	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	425527	04/28/17 17:49	A1B	TAL NSH
Total/NA	Prep	3550C			25.37 g	1.00 mL	425250	04/26/17 13:02	MNM	TAL NSH
Total/NA	Analysis	8015C		1			425451	04/27/17 12:42	AK1	TAL NSH
Total/NA	Prep	3050B			1.01 g	50 mL	212036	05/02/17 14:44	JAH	TAL HOU
Total/NA	Analysis	6010B		1			212162	05/03/17 16:28	DCL	TAL HOU
Total/NA	Prep	3050B			1.01 g	50 mL	212036	05/02/17 14:44	JAH	TAL HOU
Total/NA	Analysis	6010B		5			212162	05/03/17 18:20	DCL	TAL HOU
Total/NA	Prep	7471A			.60 g	50 mL	211425	04/24/17 15:01	DDE	TAL HOU
Total/NA	Analysis	7471A		1			211513	04/25/17 11:59	DDE	TAL HOU

Client Sample ID: SJRP-SB18-1-2-04182017 — **Lab Sample ID: 600-147045-4**
Date Collected: 04/18/17 17:20 — **Matrix: Solid**
Date Received: 04/21/17 10:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			211434	04/24/17 17:05	B1K	TAL HOU

Client Sample ID: SJRP-SB18-1-2-04182017 — **Lab Sample ID: 600-147045-4**
Date Collected: 04/18/17 17:20 — **Matrix: Solid**
Date Received: 04/21/17 10:09 — **Percent Solids: 85.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.12 g	5.0 mL	425109	04/26/17 12:58	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	425527	04/28/17 18:19	A1B	TAL NSH
Total/NA	Prep	3550C			25.42 g	1.00 mL	425250	04/26/17 13:02	MNM	TAL NSH
Total/NA	Analysis	8015C		1			425451	04/27/17 13:31	AK1	TAL NSH
Total/NA	Prep	3050B			1.12 g	50 mL	212036	05/02/17 14:44	JAH	TAL HOU
Total/NA	Analysis	6010B		1			212162	05/03/17 16:34	DCL	TAL HOU
Total/NA	Prep	3050B			1.12 g	50 mL	212036	05/02/17 14:44	JAH	TAL HOU
Total/NA	Analysis	6010B		10			212162	05/03/17 18:32	DCL	TAL HOU
Total/NA	Prep	7471A			.63 g	50 mL	211425	04/24/17 15:01	DDE	TAL HOU
Total/NA	Analysis	7471A		1			211513	04/25/17 12:11	DDE	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Client Sample ID: SJRP-SB18-1-2-04182017-2 — Lab Sample ID: 600-147045-5

Date Collected: 04/18/17 17:20
Date Received: 04/21/17 10:09
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			211434	04/24/17 17:05	B1K	TAL HOU

Client Sample ID: SJRP-SB18-1-2-04182017-2 — Lab Sample ID: 600-147045-5

Date Collected: 04/18/17 17:20
Date Received: 04/21/17 10:09
Matrix: Solid
Percent Solids: 85.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.38 g	5.0 mL	425109	04/26/17 12:58	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	425527	04/28/17 18:49	A1B	TAL NSH
Total/NA	Prep	3550C			25.61 g	1.00 mL	425250	04/26/17 13:02	MNM	TAL NSH
Total/NA	Analysis	8015C		1			425451	04/27/17 13:48	AK1	TAL NSH
Total/NA	Prep	3050B			1.15 g	50 mL	212036	05/02/17 14:44	JAH	TAL HOU
Total/NA	Analysis	6010B		1			212162	05/03/17 18:38	DCL	TAL HOU
Total/NA	Prep	3050B			1.15 g	50 mL	212036	05/02/17 14:44	JAH	TAL HOU
Total/NA	Analysis	6010B		10			212162	05/03/17 18:41	DCL	TAL HOU
Total/NA	Prep	7471A			.63 g	50 mL	211425	04/24/17 15:01	DDE	TAL HOU
Total/NA	Analysis	7471A		1			211513	04/25/17 12:13	DDE	TAL HOU

Client Sample ID: SJRP-SB16-1-2-04182017 — Lab Sample ID: 600-147045-6

Date Collected: 04/18/17 17:45
Date Received: 04/21/17 10:09
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			211434	04/24/17 17:05	B1K	TAL HOU

Client Sample ID: SJRP-SB16-1-2-04182017 — Lab Sample ID: 600-147045-6

Date Collected: 04/18/17 17:45
Date Received: 04/21/17 10:09
Matrix: Solid
Percent Solids: 85.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.07 g	5.0 mL	425109	04/26/17 12:58	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	425527	04/28/17 19:19	A1B	TAL NSH
Total/NA	Prep	3550C			25.77 g	1.00 mL	425250	04/26/17 13:02	MNM	TAL NSH
Total/NA	Analysis	8015C		1			425451	04/27/17 14:04	AK1	TAL NSH
Total/NA	Prep	3050B			1.01 g	50 mL	212036	05/02/17 14:44	JAH	TAL HOU
Total/NA	Analysis	6010B		1			212162	05/03/17 16:36	DCL	TAL HOU
Total/NA	Prep	3050B			1.01 g	50 mL	212036	05/02/17 14:44	JAH	TAL HOU
Total/NA	Analysis	6010B		10			212162	05/03/17 18:34	DCL	TAL HOU
Total/NA	Prep	7471A			.63 g	50 mL	211425	04/24/17 15:01	DDE	TAL HOU
Total/NA	Analysis	7471A		1			211513	04/25/17 12:15	DDE	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Client Sample ID: SJRP-SB16-1-2-04182017-2 — **Lab Sample ID: 600-147045-7**
Date Collected: 04/18/17 17:45 — **Matrix: Solid**
Date Received: 04/21/17 10:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			211434	04/24/17 17:05	B1K	TAL HOU

Client Sample ID: SJRP-SB16-1-2-04182017-2 — **Lab Sample ID: 600-147045-7**
Date Collected: 04/18/17 17:45 — **Matrix: Solid**
Date Received: 04/21/17 10:09 — **Percent Solids: 85.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.10 g	5.0 mL	425109	04/26/17 12:58	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	426662	05/02/17 19:29	AK1	TAL NSH
Total/NA	Prep	3550C			25.80 g	1.00 mL	425250	04/26/17 13:02	MNM	TAL NSH
Total/NA	Analysis	8015C		1			425451	04/27/17 14:20	AK1	TAL NSH
Total/NA	Prep	3050B			1.08 g	50 mL	212036	05/02/17 14:44	JAH	TAL HOU
Total/NA	Analysis	6010B		1			212162	05/03/17 16:39	DCL	TAL HOU
Total/NA	Prep	3050B			1.08 g	50 mL	212036	05/02/17 14:44	JAH	TAL HOU
Total/NA	Analysis	6010B		10			212162	05/03/17 18:36	DCL	TAL HOU
Total/NA	Prep	7471A			.64 g	50 mL	211425	04/24/17 15:01	DDE	TAL HOU
Total/NA	Analysis	7471A		1			211513	04/25/17 12:17	DDE	TAL HOU

Client Sample ID: SJRP-SB16-1-2-04202017 — **Lab Sample ID: 600-147045-8**
Date Collected: 04/20/17 14:00 — **Matrix: Solid**
Date Received: 04/21/17 10:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			211434	04/24/17 17:05	B1K	TAL HOU

Client Sample ID: SJRP-SB16-1-2-04202017 — **Lab Sample ID: 600-147045-8**
Date Collected: 04/20/17 14:00 — **Matrix: Solid**
Date Received: 04/21/17 10:09 — **Percent Solids: 83.5**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.148 g	5 mL	211402	04/21/17 14:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	211470	04/25/17 12:11	WS1	TAL HOU

Client Sample ID: SJRP-SB16-1-2-04202017-2 — **Lab Sample ID: 600-147045-9**
Date Collected: 04/20/17 14:00 — **Matrix: Solid**
Date Received: 04/21/17 10:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			211434	04/24/17 17:05	B1K	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Client Sample ID: SJRP-SB16-1-2-04202017-2 — **Lab Sample ID: 600-147045-9**
Date Collected: 04/20/17 14:00 — **Matrix: Solid**
Date Received: 04/21/17 10:09 — **Percent Solids: 82.5**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	211402	04/21/17 14:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	211470	04/25/17 12:35	WS1	TAL HOU

Client Sample ID: SJRP-SB18-1-2-04202017 — **Lab Sample ID: 600-147045-10**
Date Collected: 04/20/17 14:15 — **Matrix: Solid**
Date Received: 04/21/17 10:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			211434	04/24/17 17:05	B1K	TAL HOU

Client Sample ID: SJRP-SB18-1-2-04202017 — **Lab Sample ID: 600-147045-10**
Date Collected: 04/20/17 14:15 — **Matrix: Solid**
Date Received: 04/21/17 10:09 — **Percent Solids: 85.3**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.864 g	5 mL	211402	04/21/17 14:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	211470	04/25/17 13:00	WS1	TAL HOU

Client Sample ID: SJRP-SB18-1-2-04202017-2 — **Lab Sample ID: 600-147045-11**
Date Collected: 04/20/17 14:15 — **Matrix: Solid**
Date Received: 04/21/17 10:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			211434	04/24/17 17:05	B1K	TAL HOU

Client Sample ID: SJRP-SB18-1-2-04202017-2 — **Lab Sample ID: 600-147045-11**
Date Collected: 04/20/17 14:15 — **Matrix: Solid**
Date Received: 04/21/17 10:09 — **Percent Solids: 86.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.267 g	5 mL	211402	04/21/17 14:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	211470	04/25/17 13:24	WS1	TAL HOU

Client Sample ID: SJRP-SB12-1-2-04202017 — **Lab Sample ID: 600-147045-12**
Date Collected: 04/20/17 14:30 — **Matrix: Solid**
Date Received: 04/21/17 10:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			211434	04/24/17 17:05	B1K	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Client Sample ID: SJRP-SB12-1-2-04202017 — **Lab Sample ID: 600-147045-12**
Date Collected: 04/20/17 14:30 — **Matrix: Solid**
Date Received: 04/21/17 10:09 — **Percent Solids: 82.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.173 g	5 mL	211402	04/21/17 14:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	211470	04/25/17 13:48	WS1	TAL HOU

Client Sample ID: SJRP-SB12-1-2-04202017-2 — **Lab Sample ID: 600-147045-13**
Date Collected: 04/20/17 14:30 — **Matrix: Solid**
Date Received: 04/21/17 10:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			211434	04/24/17 17:05	B1K	TAL HOU

Client Sample ID: SJRP-SB12-1-2-04202017-2 — **Lab Sample ID: 600-147045-13**
Date Collected: 04/20/17 14:30 — **Matrix: Solid**
Date Received: 04/21/17 10:09 — **Percent Solids: 81.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.355 g	5 mL	211402	04/21/17 14:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	211470	04/25/17 14:13	WS1	TAL HOU

Client Sample ID: SJRP-SB07-1-2-04202017 — **Lab Sample ID: 600-147045-14**
Date Collected: 04/20/17 14:50 — **Matrix: Solid**
Date Received: 04/21/17 10:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			211542	04/25/17 20:38	KRD	TAL HOU

Client Sample ID: SJRP-SB07-1-2-04202017 — **Lab Sample ID: 600-147045-14**
Date Collected: 04/20/17 14:50 — **Matrix: Solid**
Date Received: 04/21/17 10:09 — **Percent Solids: 90.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.983 g	5 mL	211402	04/21/17 14:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	211470	04/25/17 11:22	WS1	TAL HOU

Client Sample ID: SJRP-TB-04182017 — **Lab Sample ID: 600-147045-15**
Date Collected: 04/18/17 14:00 — **Matrix: Water**
Date Received: 04/21/17 10:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	211844	04/29/17 14:48	KLV	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Client Sample ID: SJRP-EB-04182017 **Lab Sample ID: 600-147045-16**
Date Collected: 04/18/17 16:00 **Matrix: Water**
Date Received: 04/21/17 10:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	211844	04/29/17 15:48	KLV	TAL HOU
Total/NA	Analysis	8015C		1	5 mL	5 mL	425762	04/28/17 22:24	FKG	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	425403	04/27/17 21:03	KB	TAL NSH
Total/NA	Analysis	8015C		1			425822	04/28/17 12:32	LOJ	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	211785	04/28/17 11:47	JAH	TAL HOU
Total/NA	Analysis	6010B		1			212025	05/02/17 15:11	DCL	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	211785	04/28/17 11:47	JAH	TAL HOU
Total/NA	Analysis	6010B		1			211942	05/01/17 17:02	DCL	TAL HOU
Total/NA	Prep	7470A			40 mL	40 mL	211371	04/24/17 08:31	DDE	TAL HOU
Total/NA	Analysis	7470A		1			211404	04/24/17 12:36	DDE	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147045-1

Laboratory: TestAmerica Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	16-046-0	08-04-17
Louisiana	NELAP	6	01967	06-30-17
Oklahoma	State Program	6	2015-050	08-31-17
Texas	NELAP	6	T104704223-17-21	10-31-17
USDA	Federal		P330-14-00192	06-06-17

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	A2LA		NA: NELAP & A2LA	12-31-17
A2LA	ISO/IEC 17025		0453.07	12-31-17
Alaska (UST)	State Program	10	UST-087	09-01-17
Arizona	State Program	9	AZ0473	05-05-17 *
Arkansas DEQ	State Program	6	88-0737	04-25-18
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-17
Florida	NELAP	4	E87358	06-30-17
Georgia	State Program	4	N/A	12-31-17
Illinois	NELAP	5	200010	12-09-17
Iowa	State Program	7	131	04-01-18
Kansas	NELAP	7	E-10229	10-31-17
Kentucky (UST)	State Program	4	19	06-30-17
Kentucky (WW)	State Program	4	90038	12-31-17
Louisiana	NELAP	6	30613	06-30-17
Maine	State Program	1	TN00032	11-03-17
Maryland	State Program	3	316	03-31-18
Massachusetts	State Program	1	M-TN032	06-30-17
Minnesota	NELAP	5	047-999-345	12-31-17
Mississippi	State Program	4	N/A	06-30-17
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-17
New Hampshire	NELAP	1	2963	10-09-17
New Jersey	NELAP	2	TN965	06-30-17
New York	NELAP	2	11342	03-31-18
North Carolina (WW/SW)	State Program	4	387	12-31-17
North Dakota	State Program	8	R-146	06-30-17
Ohio VAP	State Program	5	CL0033	07-10-17
Oklahoma	State Program	6	9412	08-31-17
Oregon	NELAP	10	TN200001	04-27-17 *
Pennsylvania	NELAP	3	68-00585	06-30-17
Rhode Island	State Program	1	LAO00268	12-30-17
South Carolina	State Program	4	84009 (001)	02-28-18
South Carolina (Do Not Use - DW)	State Program	4	84009 (002)	12-16-17
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-17
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-17
Virginia	NELAP	3	460152	06-14-17
Washington	State Program	10	C789	07-19-17

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc. TestAmerica Job ID: 600-147045-1
Project/Site: San Juan Site Characterization

Laboratory: TestAmerica Nashville (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
West Virginia DEP	State Program	3	219	02-28-18
Wisconsin	State Program	5	998020430	08-31-17
Wyoming (UST)	A2LA	8	453.07	12-31-17

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Katherine Mouzakis	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-52002-15345.10
Client Contact: Jeffrey Minchak	Phone: 9043866573	E-Mail: cathy.upton@testamericainc.com		Page: Page 10 of 10
Company: CH2M Hill, Inc.				Job #:

Address: 3721 Rutledge Rd. NE Suite B-1	Due Date Requested:		
City: Albuquerque	TAT Requested (days):		
State, Zip: NM, 87109			
Phone: 281-721-8546(Tel)	PO #: Purchase Order Requested		
Email: Jeffrey Minchak@ch2m.com	WO #: WD225383		
Project Name: Kinder Morgan Bloomfield, NM San Juan	Project #: 60005961-Analysis group BTEX/GRO/DRO/Metals		
Site: San Juan Site Characterization	SSOW#:		

Preservation Codes: A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; Other:

600-147045 Chain of Custody

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO - Diesel and Oil Range Organics	8015C_GRO - GRO Range (C6-C10)	6010B, 7471A - NMWQCC List Metals	8260B - 5035 BTEX	Moisture	Waters	6010B, 7470A - NMWQCC List Metals	8260B_LL - BTEX Only	8015C_GRO - GRO Range (C6-C10)	8015C_DRO - Diesel and Oil Range Organics	Total Number of containers	Special In:
			Preservation Code:				N	N	N	N	N		D	A	A	N		
SJRP-SB12-1-2-04182017	4/18/17	1525	G	Solid	N	N												
SJRP-SB12-1-2-0418-2017-2	4/18/17	1525	G	Solid	N	N												COC in Cooler 1
SJRP-SB07-1-2-04182017	4/18/17	1635	G	Solid	N	Y												
SJRP-SB07-1-2-04182017 MS	4/18/17	1635	G	Solid	N	Y												
SJRP-SB07-1-2-04182017 MSD	4/18/17	1635	G	Solid	N	Y												2 coolers
SJRP-SB18-1-2-04182017	4/18/17	1720	G	Solid	N	N												Samples
SJRP-SB18-1-2-04182017-2	4/18/17	1720	G	Solid	N	N												from
SJRP-SB16-1-2-04182017	4/18/17	1745	G	Solid	N	N												04/18/2017
SJRP-SB16-1-2-04182017-2	4/18/17	1745	G	Solid	N	N												
SJRP-TB-04182017	4/18/2017	1400	G	~~Water~~ Solid	N	N												
SJRP-FB-04182017	4/18/2017	1600	G	Water	N	N												

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☑ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: CH2M	Date/Time: 4/19/2017/1200	Company:	Received by: Shary Justus
Relinquished by:	Date/Time:	Company:	Received by:
Relinquished by:	Date/Time:	Company:	Received by:

Date/Time: 4/21/17 1009	Company: TAL	Date/Time:	Company:	Date/Time:	Company:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Katherine Mouzakis	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-52002-15345.10
Client Contact: Jeffrey Minchak	Phone: 4043886573	E-Mail: cathy.upton@testamericainc.com		Page: Page 10 of 10
Company: CH2M Hill, Inc.				Job #:
Address: 3721 Rutledge Rd. NE Suite B-1	Due Date Requested:			
City: Albuquerque	TAT Requested (days):			
State, Zip: NM, 87109				
Phone: 281-721-8546(Tel)	PO #: Purchase Order Requested			
Email: Jeffrey.Minchak@ch2m.com	WO #: WD225383			
Project Name: Kinder Morgan Bloomfield, NM San Juan	Project #: 60005961-Analysis group BTEX/GRO/DRO/Metals			
Site: San Juan Site Characterization	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO - Diesel and Oil Range Organics	8015C_GRO - GRO Range (C6-C10)	6010B, 7471A - NMWQCC List Metals	8260B - 5035 BTEX	Moisture	Waters	6010B, 7470A - NMWQCC List Metals	8260B_LL - BTEX Only	8015C_GRO - GRO Range (C6-C10)	8015C_DRO - Diesel and Oil Range Organics	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N		D	A	A	N		
SJRP-SB16-1-2-04202017	4/20/17	1400	G	Solid	N	N												
SJRP-SB16-1-2-04202017-2	4/20/17	1400	G	Solid	N	N												
SJRP-SB18-1-2-04202017	4/20/17	1425	G	Solid	N	N												Resample of Missing Cooler
SJRP-SB18-1-2-04202017-2	4/20/17	1415	G	Solid	N	N												
SJRP-SB12-1-2-04202017	4/20/17	1430	G	Solid	N	N												
SJRP-SB12-1-2-04202017-2	4/20/17	1430	G	Solid	N	N												
SJRP-SB07-1-2-04202017	4/20/17	1450	G	Solid	N	Y												
SJRP-SB07-1-2-04202017MS	4/20/17	1450	G	Solid	N	Y												
SJRP-SB07-1-2-04202017MSD	4/20/17	1452	G	Solid	N	Y												
			G	Solid														
			G	Water														

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☑ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
CH2M	4/20/2017/1630		Sherry Justus	4/21/17 1009	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Loc: 600
~~146941~~

TestAmerica Houston

Sample Rece[illegible] Checklist

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Date/Time Received: '17APR20 9:56

JOB NUMBER: _____ CLIENT: CHZM

UNPACKED BY: _____ CARRIER/DRIVER: FE

Custody Seal Present: ☒ YES ☐ NO Number of Coolers Received: 2

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Them CF	Corrected Temp (°C)
DH	Y / N	Y / N	1.0	605	.2	0.8
GW	Y / N	Y / N	0.9	1	1	0.7
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N	42017			
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☒ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☒ YES ☐ NO

pH paper Lot #_____

VOA headspace acceptable (5-6mm): ☒ YES ☐ NO ☐ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	☒	☐

COMMENTS: GW cooler had (6) 3-4oz jars Breach Sample

42017

SC 42217

TestAmerica Houston

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Receipt Checklist

Date/Time Received: '17 APR 21 10:09

JOB NUMBER: _____ CLIENT: CH2M

UNPACKED BY: _____ CARRIER/DRIVER: Fed Ex

Custody Seal Present: ☑ YES ☐ NO Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Them CF	Corrected Temp (°C)
B/W	Y / N	Y / N	1.8	625	-0.2	1.6
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N	SJ	4/21/17		
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☑ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☐ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☐ YES ☐ NO

pH paper Lot #_____

VOA headspace acceptable (5-6mm): ☐ YES ☐ NO ☐ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?		

COMMENTS: The last cooler - out of hold Client resampled

FedEx
TRK# 0221 7246 6874 7750
XH LKSA

4/22/17

HS-SA-WI-013 Rev. 3; 07/01/2014

Loc: 600
147045

TestAmerica Houston

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Receip

Date/Time Received: '17 APR 21 10:09

JOB NUMBER: _____

CLIENT: CH2M

UNPACKED BY: _____

CARRIER/DRIVER: Fed Ex

Custody Seal Present: ☑ YES ☐ NO

Number of Coolers Received: 2

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
G/W	Y / N	Y / N	0.4	675	-0.2	0.2
G/W	Y / N	Y / N	0.6	675	-0.2	0.4
~~Y / N~~	~~Y / N~~					
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	~~Y / N~~				
	~~Y / N~~	Y / N	SJ	4/21/17		
	~~Y / N~~	~~Y / N~~				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☑ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☐ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☐ YES ☐ NO

pH paper Lot #_____

VOA headspace acceptable (5-6mm): ☐ YES ☐ NO ☐ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?		

COMMENTS: Frozen 4-21-17 @ 1430

FedEx TRK# 0221 7304 4481 5923

-Resampled containers

4/22/17

HS-SA-WI-013

Rev. 3; 07/01/2014

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

600-146988 Chain of Custody

Cooler Received/Opened On 4-26-17 @ 0920

Time Samples Removed From Cooler 1200 Time Samples Placed In Storage 1230 (2 Hour Window)

1. Tracking # 1326 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID_160406069 pH Strip Lot NA Chlorine Strip Lot NA

2. Temperature of rep. sample or temp blank when opened: 3.8 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..NA

4. Were custody seals on outside of cooler? YES..NO..NA

If yes, how many and where: 6

5. Were the seals intact, signed, and dated correctly? YES...NO..NA

6. Were custody papers inside cooler? YES..NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES NO and Intact YES...NO..NA

Were these signed and dated correctly? YES...NO..NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES..NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES..NO...NA

b. Was there any observable headspace present in any VOA vial? YES..NO..NA

14. Was there a Trip Blank in this cooler? YES..NO..NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) _____

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES..NO...NA

16. Was residual chlorine present? YES...NO..NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) _____

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES..NO...NA

19. Were correct containers used for the analysis requested? YES..NO...NA

20. Was sufficient amount of sample sent in each container? YES..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) _____

I certify that I attached a label with the unique LIMS number to each container (intial) _____

21. Were there Non-Conformance issues at login? YES..NO Was a NCM generated? YES..NO..#_____

BIS = Broken in shipment

Page 810 of 1581

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record 600-146988

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Upton, Cathy L		COC No: 600-26582.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: cathy.upton@testamericainc.com	State of Origin: New Mexico	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):		Job #: 600-147045-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 5/3/2017			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: San Juan Site Characterization	Project #: 60005961			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO/3550C DRO/ORO	8015C_GRO/5030B_H Standard GRO Range (C6-C10)	8015C_GRO/5030B GRO Range (C6-C10)	8015C_DRO/3510C_LVI DRO/ORO	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
SJRP-SB12-1-2-04182017 (600-147045-1)	4/18/17	15:25 Mountain		Solid			X	X			2	
SJRP-SB12-1-2-04182017-2 (600-147045-2)	4/18/17	15:25 Mountain		Solid			X	X			2	
SJRP-SB07-1-2-04182017 (600-147045-3)	4/18/17	16:35 Mountain		Solid			X	X			2	
SJRP-SB07-1-2-04182017 (600-147045-3MS)	4/18/17	16:35 Mountain	MS	Solid			X	X			2	
SJRP-SB07-1-2-04182017 (600-147045-3MSD)	4/18/17	16:35 Mountain	MSD	Solid			X	X			2	
SJRP-SB18-1-2-04182017 (600-147045-4)	4/18/17	17:20 Mountain		Solid			X	X			2	
SJRP-SB18-1-2-04182017-2 (600-147045-5)	4/18/17	17:20 Mountain		Solid			X	X			2	
SJRP-SB16-1-2-04182017 (600-147045-6)	4/18/17	17:45 Mountain		Solid			X	X			2	
SJRP-SB16-1-2-04182017-2 (600-147045-7)	4/18/17	17:45 Mountain		Solid			X	X			2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 4/25/17 1200	Company	Received by:	Date/Time: 4/26/17 0920	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.8

Received by OCD: 11/13/2025 11:14:36 AM

Released to Imaging: 11/14/2025 9:30:04 AM

Page 811 of 1581

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-26582.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: cathy.upton@testamericainc.com	State of Origin: New Mexico	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):		Job #: 600-147045-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 5/3/2017			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: San Juan Site Characterization	Project #: 60005961			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO/3550C DRO/ORO	8015C_GRO/5030B_H Standard GRO Range (C6-C10)	8015C_GRO/5030B GRO Range (C6-C10)	8015C_DRO/3510C_LVI DRO/ORO	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
SJRP-EB-04182017 (600-147045-16)	4/18/17	16:00 Mountain		Water					X	X	5	

Loc: 600
146988

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. I

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	4/20/17 1700	TAL		4/20/17 0920	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.8

Received by OCD: 11/13/2025 11:14:36 AM

Released to Imaging: 11/14/2025 9:30:04 AM

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc. Job Number: 600-147045-1

Login Number: 147045 **List Source: TestAmerica Houston**
List Number: 1
Creator: Crafton, Tommie S

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.2 0.4 1.6 0.7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-147045-1

Login Number: 147045
List Number: 2
Creator: Vest, Laura E

List Source: TestAmerica Nashville
List Creation: 04/26/17 12:18 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-147045-1

Login Number: 147045
List Number: 3
Creator: Vest, Laura E

List Source: TestAmerica Nashville
List Creation: 04/26/17 12:21 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-147046-1
Client Project/Site: San Juan Site Characterization
Revision: 1

For:
CH2M Hill Constructors, Inc.
14701 St. Mary's Lane
Suite 300
Houston, Texas 77079-2923

Attn: Mr. John Ynfante

Bethany McDaniel

Authorized for release by:
12/9/2020 8:27:43 PM
Bethany McDaniel, Senior Project Manager
(713)358-2005
Bethany.McDaniel@Eurofinset.com

Designee for

Cathy Upton, Project Manager I
(713)690-4444
cathy.upton@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

Laboratory Job ID: 600-147046-1

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Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-147046-1
Project/Site: San Juan Site Characterization

Job ID: 600-147046-1

Laboratory: TestAmerica Houston

Narrative

CASE NARRATIVE

Client: CH2M Hill Constructors, Inc.

Project: San Juan Site Characterization

Report Number: 600-147046-1

COMMENTS

This report was revised to a Level 2 deliverable per client's request.

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

Note: All samples that require thermal preservation are considered acceptable if the arrival temperature is within 2°C of the required temperature or method specified range. For samples with a specified temperature of 4°C, samples with a temperature ranging from just above freezing temperature of water to 6°C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

The samples were received on 04/21/2017; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.2º C and 0.4º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)-Soil

Samples SJRP-MW14-1-2-04192017 (600-147046-1), SJRP-SB03-1-2-04202017 (600-147046-2), SJRP-SB03-1-2-04202017 (600-147046-3), SJRP-SB11-1-2-04202017 (600-147046-4) and SJRP-SB17-1-2-04202017 (600-147046-5) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were prepared on 04/21/2017 and analyzed on 04/24/2017 and 04/25/2017.

Benzene, Ethylbenzene, Toluene and Xylenes, Total failed the recovery criteria low for the MS of sample SJRP-SB11-1-2-04202017MS (600-147046-4) in batch 600-211370. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) met acceptance criteria.

Refer to the QC report for details.

Benzene, Ethylbenzene, Toluene and Xylenes, Total exceeded the RPD limit for the MSD of sample SJRP-SB11-1-2-04202017MSD (600-147046-4) in batch 600-211370.

Refer to the QC report for details.

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-147046-1
Project/Site: San Juan Site Characterization

Job ID: 600-147046-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GC-MS)-Water
Samples SJRP-TB-04192017 (600-147046-6) and SJRP-EB-04202017 (600-147046-7) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/29/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GASOLINE RANGE ORGANICS (GRO)-Soil
Samples SJRP-MW14-1-2-04192017 (600-147046-1), SJRP-SB03-1-2-04202017 (600-147046-2), SJRP-SB03-1-2-04202017 (600-147046-3), SJRP-SB11-1-2-04202017 (600-147046-4) and SJRP-SB17-1-2-04202017 (600-147046-5) were analyzed for gasoline range organics (GRO) in accordance with EPA SW-846 Method 8015C - GRO. The samples were analyzed on 04/27/2017.

Gasoline Range Organics (GRO)-C6-C10 exceeded the RPD limit for LCSD 490-425109/3-A.

Refer to the QC report for details.

Gasoline Range Organics (GRO)-C6-C10 exceeded the RPD limit for the MSD of sample SJRP-SB11-1-2-04202017MSD (600-147046-4) in batch 490-425527.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GASOLINE RANGE ORGANICS (GRO)-Water
Sample SJRP-EB-04202017 (600-147046-7) was analyzed for gasoline range organics (GRO) in accordance with 8015C GRO. The samples were analyzed on 04/28/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DIESEL RANGE ORGANICS (DRO)-Soil
Samples SJRP-MW14-1-2-04192017 (600-147046-1), SJRP-SB03-1-2-04202017 (600-147046-2), SJRP-SB03-1-2-04202017 (600-147046-3), SJRP-SB11-1-2-04202017 (600-147046-4) and SJRP-SB17-1-2-04202017 (600-147046-5) were analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 04/26/2017 and analyzed on 04/27/2017 and 04/28/2017.

ORO C24-C40 was detected in method blank MB 490-425163/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DIESEL RANGE ORGANICS (DRO)-Water
Sample SJRP-EB-04202017 (600-147046-7) was analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared and analyzed on 04/27/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)-Soil
Samples SJRP-MW14-1-2-04192017 (600-147046-1), SJRP-SB03-1-2-04202017 (600-147046-2), SJRP-SB03-1-2-04202017 (600-147046-3), SJRP-SB11-1-2-04202017 (600-147046-4) and SJRP-SB17-1-2-04202017 (600-147046-5) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 05/03/2017 and analyzed on 05/04/2017.

Case Narrative

Client: CH2M Hill Constructors, Inc. Job ID: 600-147046-1
Project/Site: San Juan Site Characterization

Job ID: 600-147046-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

Several analytes were detected in method blank MB 600-212161/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

Due to the high concentration of target analytes, samples SJRP-SB11-1-2-04202017 (600-147046-4) MS/MSD in batch 600-212257 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Refer to the QC report for details.

Samples SJRP-SB03-1-2-04202017 (600-147046-2)[5X], SJRP-SB03-1-2-04202017 (600-147046-3)[5X] and SJRP-SB17-1-2-04202017 (600-147046-5)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)-Water

Sample SJRP-EB-04202017 (600-147046-7) was analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 05/01/2017 and analyzed on 05/02/2017 and 05/03/2017.

Manganese, Selenium and Molybdenum were detected in method blank MB 600-211954/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY-Soil

Samples SJRP-MW14-1-2-04192017 (600-147046-1), SJRP-SB03-1-2-04202017 (600-147046-2), SJRP-SB03-1-2-04202017 (600-147046-3), SJRP-SB11-1-2-04202017 (600-147046-4) and SJRP-SB17-1-2-04202017 (600-147046-5) were analyzed for total mercury in accordance with EPA SW-846 Method 7471A. The samples were prepared on 04/24/2017 and analyzed on 04/25/2017.

Mercury exceeded the RPD limit for the duplicate of sample SJRP-SB11-1-2-04202017DU (600-147046-4).

Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY-Water

Sample SJRP-EB-04202017 (600-147046-7) was analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 04/24/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PERCENT SOLIDS

Samples SJRP-MW14-1-2-04192017 (600-147046-1), SJRP-SB03-1-2-04202017 (600-147046-2), SJRP-SB03-1-2-04202017 (600-147046-3), SJRP-SB11-1-2-04202017 (600-147046-4) and SJRP-SB17-1-2-04202017 (600-147046-5) were analyzed for percent solids in accordance with EPA SW846 Method 3550C. The samples were analyzed on 04/24/2017 and 04/25/2017.

Percent Moisture exceeded the RPD limit for the duplicate of sample SJRP-SB17-1-2-04202017DU (600-147046-5). Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL NSH
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL NSH
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU

Protocol References:

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-147046-1	SJRP-MW14-1-2-04192017	Solid	04/19/17 15:00	04/21/17 10:09
600-147046-2	SJRP-SB03-1-2-04202017	Solid	04/20/17 09:15	04/21/17 10:09
600-147046-3	SJRP-SB03-1-2-04202017	Solid	04/20/17 09:15	04/21/17 10:09
600-147046-4	SJRP-SB11-1-2-04202017	Solid	04/20/17 11:30	04/21/17 10:09
600-147046-5	SJRP-SB17-1-2-04202017	Solid	04/20/17 12:50	04/21/17 10:09
600-147046-6	SJRP-TB-04192017	Water	04/19/17 16:00	04/21/17 10:09
600-147046-7	SJRP-EB-04202017	Water	04/20/17 12:30	04/21/17 10:09

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Client Sample ID: SJRP-MW14-1-2-04192017
Date Collected: 04/19/17 15:00
Date Received: 04/21/17 10:09

Lab Sample ID: 600-147046-1
Matrix: Solid
Percent Solids: 72.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00103	U	0.00818	0.00103	mg/Kg	☼	04/21/17 14:30	04/24/17 15:11	1
Ethylbenzene	0.00167	U	0.00818	0.00167	mg/Kg	☼	04/21/17 14:30	04/24/17 15:11	1
Toluene	0.00226	U	0.00818	0.00226	mg/Kg	☼	04/21/17 14:30	04/24/17 15:11	1
Xylenes, Total	0.00185	U	0.00818	0.00185	mg/Kg	☼	04/21/17 14:30	04/24/17 15:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*63*		*61 - 130*	*04/21/17 14:30*	*04/24/17 15:11*	*1*
Dibromofluoromethane	*68*		*68 - 140*	*04/21/17 14:30*	*04/24/17 15:11*	*1*
Toluene-d8 (Surr)	*81*		*50 - 130*	*04/21/17 14:30*	*04/24/17 15:11*	*1*
4-Bromofluorobenzene	*106*		*57 - 140*	*04/21/17 14:30*	*04/24/17 15:11*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	4.12	U	8.25	4.12	mg/Kg	☼	04/26/17 09:37	04/27/17 21:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*53*		*50 - 150*	*04/26/17 09:37*	*04/27/17 21:04*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**4.07**	**J**	6.89	3.45	mg/Kg	☼	04/26/17 09:43	04/28/17 16:20	1
ORO C24-C40	**7.08**		6.89	3.45	mg/Kg	☼	04/26/17 09:43	04/28/17 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*123*		*50 - 150*	*04/26/17 09:43*	*04/28/17 16:20*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**12400**	**B**	30.3	0.363	mg/Kg	☼	05/03/17 14:09	05/04/17 13:44	1
Arsenic	**5.39**		1.21	0.264	mg/Kg	☼	05/03/17 14:09	05/04/17 13:44	1
Barium	**132**	**B**	1.21	0.0363	mg/Kg	☼	05/03/17 14:09	05/04/17 13:44	1
Boron	**4.45**	**J**	24.2	0.467	mg/Kg	☼	05/03/17 14:09	05/04/17 13:44	1
Cadmium	**0.200**	**J**	0.303	0.0310	mg/Kg	☼	05/03/17 14:09	05/04/17 13:44	1
Calcium	**13000**	**B**	121	1.05	mg/Kg	☼	05/03/17 14:09	05/04/17 13:44	1
Chromium	**8.20**		0.605	0.0613	mg/Kg	☼	05/03/17 14:09	05/04/17 13:44	1
Cobalt	**6.53**		0.605	0.0819	mg/Kg	☼	05/03/17 14:09	05/04/17 13:44	1
Iron	**18800**	**B**	24.2	3.06	mg/Kg	☼	05/03/17 14:09	05/04/17 13:44	1
Lead	**13.4**	**B**	0.605	0.127	mg/Kg	☼	05/03/17 14:09	05/04/17 13:44	1
Magnesium	**3970**		121	2.32	mg/Kg	☼	05/03/17 14:09	05/04/17 13:44	1
Manganese	**282**	**B**	1.82	0.0461	mg/Kg	☼	05/03/17 14:09	05/04/17 13:44	1
Molybdenum	**0.751**		0.605	0.165	mg/Kg	☼	05/03/17 14:09	05/04/17 13:44	1
Nickel	**9.34**		1.21	0.142	mg/Kg	☼	05/03/17 14:09	05/04/17 13:44	1
Potassium	**1660**		121	13.3	mg/Kg	☼	05/03/17 14:09	05/04/17 13:44	1
Selenium	**0.993**	**J**	2.42	0.314	mg/Kg	☼	05/03/17 14:09	05/04/17 13:44	1
Sodium	**8320**	**B**	121	1.07	mg/Kg	☼	05/03/17 14:09	05/04/17 13:44	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0286**		0.0217	0.00456	mg/Kg	☼	04/24/17 15:01	04/25/17 12:18	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Client Sample ID: SJRP-MW14-1-2-04192017

Lab Sample ID: 600-147046-1
Date Collected: 04/19/17 15:00
Matrix: Solid
Date Received: 04/21/17 10:09
Percent Solids: 72.4

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**27.6**		1.0	1.0	%			04/25/17 20:38	1
Percent Solids	**72.4**		1.0	1.0	%			04/25/17 20:38	1

Client Sample ID: SJRP-SB03-1-2-04202017

Lab Sample ID: 600-147046-2
Date Collected: 04/20/17 09:15
Matrix: Solid
Date Received: 04/21/17 10:09
Percent Solids: 90.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000592	U	0.00470	0.000592	mg/Kg	☼	04/21/17 14:30	04/24/17 13:33	1
Ethylbenzene	0.000959	U	0.00470	0.000959	mg/Kg	☼	04/21/17 14:30	04/24/17 13:33	1
Toluene	0.00130	U	0.00470	0.00130	mg/Kg	☼	04/21/17 14:30	04/24/17 13:33	1
Xylenes, Total	0.00106	U	0.00470	0.00106	mg/Kg	☼	04/21/17 14:30	04/24/17 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*64*		*61 - 130*	*04/21/17 14:30*	*04/24/17 13:33*	*1*
Dibromofluoromethane	*73*		*68 - 140*	*04/21/17 14:30*	*04/24/17 13:33*	*1*
Toluene-d8 (Surr)	*87*		*50 - 130*	*04/21/17 14:30*	*04/24/17 13:33*	*1*
4-Bromofluorobenzene	*105*		*57 - 140*	*04/21/17 14:30*	*04/24/17 13:33*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.02	U	6.03	3.02	mg/Kg	☼	04/26/17 09:37	04/27/17 21:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*50*		*50 - 150*	*04/26/17 09:37*	*04/27/17 21:34*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.77	U	5.53	2.77	mg/Kg	☼	04/26/17 10:25	04/27/17 02:39	1
ORO C24-C40	**3.37**	**J B**	5.53	2.77	mg/Kg	☼	04/26/17 10:25	04/27/17 14:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*89*		*50 - 150*	*04/26/17 10:25*	*04/27/17 02:39*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**10100**	**B**	25.7	0.309	mg/Kg	☼	05/03/17 14:09	05/04/17 13:46	1
Arsenic	**3.59**		1.03	0.224	mg/Kg	☼	05/03/17 14:09	05/04/17 13:46	1
Barium	**72.2**	**B**	1.03	0.0309	mg/Kg	☼	05/03/17 14:09	05/04/17 13:46	1
Boron	**1.74**	**J**	20.6	0.397	mg/Kg	☼	05/03/17 14:09	05/04/17 13:46	1
Cadmium	**0.144**	**J**	0.257	0.0263	mg/Kg	☼	05/03/17 14:09	05/04/17 13:46	1
Calcium	**6510**	**B**	103	0.889	mg/Kg	☼	05/03/17 14:09	05/04/17 13:46	1
Chromium	**5.75**		0.514	0.0521	mg/Kg	☼	05/03/17 14:09	05/04/17 13:46	1
Cobalt	**6.43**		0.514	0.0695	mg/Kg	☼	05/03/17 14:09	05/04/17 13:46	1
Iron	**14000**	**B**	20.6	2.60	mg/Kg	☼	05/03/17 14:09	05/04/17 13:46	1
Lead	**9.85**	**B**	0.514	0.108	mg/Kg	☼	05/03/17 14:09	05/04/17 13:46	1
Magnesium	**3580**		103	1.98	mg/Kg	☼	05/03/17 14:09	05/04/17 13:46	1
Manganese	**110**	**B**	1.54	0.0392	mg/Kg	☼	05/03/17 14:09	05/04/17 13:46	1
Molybdenum	**0.556**		0.514	0.140	mg/Kg	☼	05/03/17 14:09	05/04/17 13:46	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Client Sample ID: SJRP-SB03-1-2-04202017

Lab Sample ID: 600-147046-2
Date Collected: 04/20/17 09:15
Matrix: Solid
Date Received: 04/21/17 10:09
Percent Solids: 90.0

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	7.07		1.03	0.120	mg/Kg	☼	05/03/17 14:09	05/04/17 13:46	1
Potassium	1210		103	11.3	mg/Kg	☼	05/03/17 14:09	05/04/17 13:46	1
Selenium	0.266	U	2.06	0.266	mg/Kg	☼	05/03/17 14:09	05/04/17 13:46	1
Sodium	13800	B	514	4.56	mg/Kg	☼	05/03/17 14:09	05/04/17 17:11	5

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0148	J	0.0177	0.00373	mg/Kg	☼	04/24/17 15:01	04/25/17 12:20	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.0		1.0	1.0	%			04/24/17 17:05	1
Percent Solids	90.0		1.0	1.0	%			04/24/17 17:05	1

Client Sample ID: SJRP-SB03-1-2-04202017

Lab Sample ID: 600-147046-3
Date Collected: 04/20/17 09:15
Matrix: Solid
Date Received: 04/21/17 10:09
Percent Solids: 90.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000654	U	0.00519	0.000654	mg/Kg	☼	04/21/17 14:30	04/25/17 11:46	1
Ethylbenzene	0.00106	U	0.00519	0.00106	mg/Kg	☼	04/21/17 14:30	04/25/17 11:46	1
Toluene	0.00143	U	0.00519	0.00143	mg/Kg	☼	04/21/17 14:30	04/25/17 11:46	1
Xylenes, Total	0.00117	U	0.00519	0.00117	mg/Kg	☼	04/21/17 14:30	04/25/17 11:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*61 - 130*	*04/21/17 14:30*	*04/25/17 11:46*	*1*
Dibromofluoromethane	*74*		*68 - 140*	*04/21/17 14:30*	*04/25/17 11:46*	*1*
Toluene-d8 (Surr)	*76*		*50 - 130*	*04/21/17 14:30*	*04/25/17 11:46*	*1*
4-Bromofluorobenzene	*108*		*57 - 140*	*04/21/17 14:30*	*04/25/17 11:46*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.85	U	5.70	2.85	mg/Kg	☼	04/26/17 09:37	04/27/17 22:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*51*		*50 - 150*	*04/26/17 09:37*	*04/27/17 22:04*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.68	U	5.36	2.68	mg/Kg	☼	04/26/17 10:25	04/27/17 02:55	1
ORO C24-C40	3.28	J B	5.36	2.68	mg/Kg	☼	04/26/17 10:25	04/27/17 14:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*98*		*50 - 150*	*04/26/17 10:25*	*04/27/17 02:55*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11400	B	24.2	0.290	mg/Kg	☼	05/03/17 14:09	05/04/17 13:48	1
Arsenic	3.10		0.967	0.211	mg/Kg	☼	05/03/17 14:09	05/04/17 13:48	1
Barium	69.5	B	0.967	0.0290	mg/Kg	☼	05/03/17 14:09	05/04/17 13:48	1

TestAmerica Houston

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Client Sample ID: SJRP-SB03-1-2-04202017

Lab Sample ID: 600-147046-3
Date Collected: 04/20/17 09:15
Matrix: Solid
Date Received: 04/21/17 10:09
Percent Solids: 90.7

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.866	J	19.3	0.373	mg/Kg	☼	05/03/17 14:09	05/04/17 13:48	1
Cadmium	0.164	J	0.242	0.0248	mg/Kg	☼	05/03/17 14:09	05/04/17 13:48	1
Calcium	2930	B	96.7	0.836	mg/Kg	☼	05/03/17 14:09	05/04/17 13:48	1
Chromium	5.79		0.484	0.0489	mg/Kg	☼	05/03/17 14:09	05/04/17 13:48	1
Cobalt	10.0		0.484	0.0654	mg/Kg	☼	05/03/17 14:09	05/04/17 13:48	1
Iron	15300	B	19.3	2.45	mg/Kg	☼	05/03/17 14:09	05/04/17 13:48	1
Lead	37.9	B	0.484	0.102	mg/Kg	☼	05/03/17 14:09	05/04/17 13:48	1
Magnesium	4270		96.7	1.86	mg/Kg	☼	05/03/17 14:09	05/04/17 13:48	1
Manganese	296	B	1.45	0.0368	mg/Kg	☼	05/03/17 14:09	05/04/17 13:48	1
Molybdenum	0.604		0.484	0.132	mg/Kg	☼	05/03/17 14:09	05/04/17 13:48	1
Nickel	9.94		0.967	0.113	mg/Kg	☼	05/03/17 14:09	05/04/17 13:48	1
Potassium	1300		96.7	10.6	mg/Kg	☼	05/03/17 14:09	05/04/17 13:48	1
Selenium	0.314	J	1.93	0.250	mg/Kg	☼	05/03/17 14:09	05/04/17 13:48	1
Sodium	13300	B	484	4.28	mg/Kg	☼	05/03/17 14:09	05/04/17 17:13	5

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00870	J	0.0181	0.00382	mg/Kg	☼	04/24/17 15:01	04/25/17 12:22	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.3		1.0	1.0	%			04/24/17 17:05	1
Percent Solids	90.7		1.0	1.0	%			04/24/17 17:05	1

Client Sample ID: SJRP-SB11-1-2-04202017

Lab Sample ID: 600-147046-4
Date Collected: 04/20/17 11:30
Matrix: Solid
Date Received: 04/21/17 10:09
Percent Solids: 89.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000625	U F1 F2	0.00496	0.000625	mg/Kg	☼	04/21/17 14:30	04/24/17 13:08	1
Ethylbenzene	0.00101	U F1 F2	0.00496	0.00101	mg/Kg	☼	04/21/17 14:30	04/24/17 13:08	1
Toluene	0.00137	U F1 F2	0.00496	0.00137	mg/Kg	☼	04/21/17 14:30	04/24/17 13:08	1
Xylenes, Total	0.00112	U F1 F2	0.00496	0.00112	mg/Kg	☼	04/21/17 14:30	04/24/17 13:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*62*		*61 - 130*	*04/21/17 14:30*	*04/24/17 13:08*	*1*
Dibromofluoromethane	*76*		*68 - 140*	*04/21/17 14:30*	*04/24/17 13:08*	*1*
Toluene-d8 (Surr)	*88*		*50 - 130*	*04/21/17 14:30*	*04/24/17 13:08*	*1*
4-Bromofluorobenzene	*103*		*57 - 140*	*04/21/17 14:30*	*04/24/17 13:08*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.00	U	6.00	3.00	mg/Kg	☼	04/26/17 09:37	04/27/17 22:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*56*		*50 - 150*	*04/26/17 09:37*	*04/27/17 22:34*	*1*

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Client Sample ID: SJRP-SB11-1-2-04202017

Lab Sample ID: 600-147046-4
Date Collected: 04/20/17 11:30
Matrix: Solid
Date Received: 04/21/17 10:09
Percent Solids: 89.6

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.73	U	5.46	2.73	mg/Kg	☼	04/26/17 10:25	04/27/17 03:12	1
ORO C24-C40	4.83	J B	5.46	2.73	mg/Kg	☼	04/26/17 10:25	04/27/17 15:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*81*		*50 - 150*	*04/26/17 10:25*	*04/27/17 03:12*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	12500	B	24.7	0.296	mg/Kg	☼	05/03/17 14:09	05/04/17 13:50	1
Arsenic	4.01		0.988	0.215	mg/Kg	☼	05/03/17 14:09	05/04/17 13:50	1
Barium	101	B F1	0.988	0.0296	mg/Kg	☼	05/03/17 14:09	05/04/17 13:50	1
Boron	1.10	J F1	19.8	0.381	mg/Kg	☼	05/03/17 14:09	05/04/17 13:50	1
Cadmium	0.237	J	0.247	0.0253	mg/Kg	☼	05/03/17 14:09	05/04/17 13:50	1
Calcium	12700	B F2	98.8	0.853	mg/Kg	☼	05/03/17 14:09	05/04/17 13:50	1
Chromium	6.64		0.494	0.0500	mg/Kg	☼	05/03/17 14:09	05/04/17 13:50	1
Cobalt	16.7		0.494	0.0668	mg/Kg	☼	05/03/17 14:09	05/04/17 13:50	1
Iron	20100	B	19.8	2.50	mg/Kg	☼	05/03/17 14:09	05/04/17 13:50	1
Lead	17.6	B	0.494	0.104	mg/Kg	☼	05/03/17 14:09	05/04/17 13:50	1
Magnesium	3280		98.8	1.90	mg/Kg	☼	05/03/17 14:09	05/04/17 13:50	1
Manganese	332	B	1.48	0.0376	mg/Kg	☼	05/03/17 14:09	05/04/17 13:50	1
Molybdenum	0.301	J F1	0.494	0.134	mg/Kg	☼	05/03/17 14:09	05/04/17 13:50	1
Nickel	11.1		0.988	0.116	mg/Kg	☼	05/03/17 14:09	05/04/17 13:50	1
Potassium	1260	F1	98.8	10.9	mg/Kg	☼	05/03/17 14:09	05/04/17 13:50	1
Selenium	0.430	J	1.98	0.256	mg/Kg	☼	05/03/17 14:09	05/04/17 13:50	1
Sodium	5410	B	98.8	0.875	mg/Kg	☼	05/03/17 14:09	05/04/17 13:50	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0325		0.0175	0.00369	mg/Kg	☼	04/24/17 15:01	04/25/17 12:24	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.4		1.0	1.0	%			04/24/17 17:05	1
Percent Solids	89.6		1.0	1.0	%			04/24/17 17:05	1

Client Sample ID: SJRP-SB17-1-2-04202017

Lab Sample ID: 600-147046-5
Date Collected: 04/20/17 12:50
Matrix: Solid
Date Received: 04/21/17 10:09
Percent Solids: 94.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000545	U	0.00432	0.000545	mg/Kg	☼	04/21/17 14:30	04/24/17 13:59	1
Ethylbenzene	0.000882	U	0.00432	0.000882	mg/Kg	☼	04/21/17 14:30	04/24/17 13:59	1
Toluene	0.00119	U	0.00432	0.00119	mg/Kg	☼	04/21/17 14:30	04/24/17 13:59	1
Xylenes, Total	0.000977	U	0.00432	0.000977	mg/Kg	☼	04/21/17 14:30	04/24/17 13:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*67*		*61 - 130*	*04/21/17 14:30*	*04/24/17 13:59*	*1*
Dibromofluoromethane	*74*		*68 - 140*	*04/21/17 14:30*	*04/24/17 13:59*	*1*
Toluene-d8 (Surr)	*90*		*50 - 130*	*04/21/17 14:30*	*04/24/17 13:59*	*1*
4-Bromofluorobenzene	*118*		*57 - 140*	*04/21/17 14:30*	*04/24/17 13:59*	*1*

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.76	U	5.52	2.76	mg/Kg	☼	04/26/17 09:37	04/27/17 23:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*55*		*50 - 150*	*04/26/17 09:37*	*04/27/17 23:04*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.64	U	5.28	2.64	mg/Kg	☼	04/26/17 10:25	04/27/17 04:01	1
ORO C24-C40	**4.48**	**J B**	5.28	2.64	mg/Kg	☼	04/26/17 10:25	04/27/17 15:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*71*		*50 - 150*	*04/26/17 10:25*	*04/27/17 04:01*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**6800**	**B**	25.1	0.301	mg/Kg	☼	05/03/17 14:09	05/04/17 13:57	1
Arsenic	**3.24**		1.00	0.219	mg/Kg	☼	05/03/17 14:09	05/04/17 13:57	1
Barium	**332**	**B**	5.02	0.151	mg/Kg	☼	05/03/17 14:09	05/04/17 17:16	5
Boron	**1.95**	**J**	20.1	0.387	mg/Kg	☼	05/03/17 14:09	05/04/17 13:57	1
Cadmium	**0.136**	**J**	0.251	0.0257	mg/Kg	☼	05/03/17 14:09	05/04/17 13:57	1
Calcium	**39700**	**B**	100	0.867	mg/Kg	☼	05/03/17 14:09	05/04/17 13:57	1
Chromium	**4.48**		0.502	0.0508	mg/Kg	☼	05/03/17 14:09	05/04/17 13:57	1
Cobalt	**4.53**		0.502	0.0679	mg/Kg	☼	05/03/17 14:09	05/04/17 13:57	1
Iron	**10300**	**B**	20.1	2.54	mg/Kg	☼	05/03/17 14:09	05/04/17 13:57	1
Lead	**6.05**	**B**	0.502	0.105	mg/Kg	☼	05/03/17 14:09	05/04/17 13:57	1
Magnesium	**2480**		100	1.93	mg/Kg	☼	05/03/17 14:09	05/04/17 13:57	1
Manganese	**301**	**B**	1.51	0.0382	mg/Kg	☼	05/03/17 14:09	05/04/17 13:57	1
Molybdenum	**0.542**		0.502	0.137	mg/Kg	☼	05/03/17 14:09	05/04/17 13:57	1
Nickel	**5.23**		1.00	0.117	mg/Kg	☼	05/03/17 14:09	05/04/17 13:57	1
Potassium	**852**		100	11.0	mg/Kg	☼	05/03/17 14:09	05/04/17 13:57	1
Selenium	0.260	U	2.01	0.260	mg/Kg	☼	05/03/17 14:09	05/04/17 13:57	1
Sodium	**440**	**B**	100	0.889	mg/Kg	☼	05/03/17 14:09	05/04/17 13:57	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0130**	**J**	0.0175	0.00369	mg/Kg	☼	04/24/17 15:01	04/25/17 12:36	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**6.0**		1.0	1.0	%			04/24/17 17:05	1
Percent Solids	**94.0**		1.0	1.0	%			04/24/17 17:05	1

Client Sample ID: SJRP-TB-04192017 — **Lab Sample ID: 600-147046-6**
Date Collected: 04/19/17 16:00 — **Matrix: Water**
Date Received: 04/21/17 10:09

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/29/17 15:18	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/29/17 15:18	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/29/17 15:18	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/29/17 15:18	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Client Sample ID: SJRP-TB-04192017

Lab Sample ID: 600-147046-6
Date Collected: 04/19/17 16:00
Matrix: Water
Date Received: 04/21/17 10:09

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*76*		*50 - 134*		*04/29/17 15:18*	*1*
Dibromofluoromethane	*96*		*62 - 130*		*04/29/17 15:18*	*1*
Toluene-d8 (Surr)	*111*		*70 - 130*		*04/29/17 15:18*	*1*
4-Bromofluorobenzene	*102*		*67 - 139*		*04/29/17 15:18*	*1*

Client Sample ID: SJRP-EB-04202017

Lab Sample ID: 600-147046-7
Date Collected: 04/20/17 12:30
Matrix: Water
Date Received: 04/21/17 10:09

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/29/17 16:19	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/29/17 16:19	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/29/17 16:19	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/29/17 16:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*61*		*50 - 134*		*04/29/17 16:19*	*1*
Dibromofluoromethane	*80*		*62 - 130*		*04/29/17 16:19*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*04/29/17 16:19*	*1*
4-Bromofluorobenzene	*81*		*67 - 139*		*04/29/17 16:19*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			04/28/17 22:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	*112*		*50 - 150*		*04/28/17 22:55*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0968	U	0.106	0.0968	mg/L		04/27/17 07:19	04/27/17 15:55	1
ORO C24-C40	0.0968	U	0.106	0.0968	mg/L		04/27/17 07:19	04/27/17 15:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	*65*		*50 - 150*	*04/27/17 07:19*	*04/27/17 15:55*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		05/01/17 19:44	05/02/17 16:43	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		05/01/17 19:44	05/02/17 16:43	1
Barium	0.000530	U	0.0200	0.000530	mg/L		05/01/17 19:44	05/02/17 16:43	1
Boron	0.0116	U	0.200	0.0116	mg/L		05/01/17 19:44	05/02/17 16:43	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		05/01/17 19:44	05/02/17 16:43	1
Calcium	**0.0833**	**J**	1.00	0.0240	mg/L		05/01/17 19:44	05/02/17 16:43	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		05/01/17 19:44	05/02/17 16:43	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		05/01/17 19:44	05/02/17 16:43	1
Iron	0.0270	U	0.400	0.0270	mg/L		05/01/17 19:44	05/02/17 16:43	1
Lead	0.00219	U	0.0100	0.00219	mg/L		05/01/17 19:44	05/02/17 16:43	1
Magnesium	0.0555	U	1.00	0.0555	mg/L		05/01/17 19:44	05/02/17 16:43	1
Manganese	**0.000400**	**J B**	0.0100	0.000360	mg/L		05/01/17 19:44	05/02/17 16:43	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Client Sample ID: SJRP-EB-04202017
Date Collected: 04/20/17 12:30
Date Received: 04/21/17 10:09

Lab Sample ID: 600-147046-7
Matrix: Water

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	**0.0330**	**B**	0.0100	0.000540	mg/L		05/01/17 19:44	05/03/17 14:26	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		05/01/17 19:44	05/02/17 16:43	1
Potassium	**0.232**	**J**	1.00	0.0374	mg/L		05/01/17 19:44	05/02/17 16:43	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		05/01/17 19:44	05/02/17 16:43	1
Sodium	**0.0934**	**J B**	1.00	0.0214	mg/L		05/01/17 19:44	05/03/17 14:26	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000820	U	0.000200	0.0000820	mg/L		04/24/17 08:31	04/24/17 12:53	1

Definitions/Glossary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F2	MS/MSD RPD exceeds control limits
*	RPD of the LCS and LCSD exceeds the control limits

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
F3	Duplicate RPD exceeds the control limit

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit

Definitions/Glossary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(61-130)	(68-140)	(50-130)	(57-140)
600-147046-1	SJRP-MW14-1-2-04192017	63	68	81	106
600-147046-2	SJRP-SB03-1-2-04202017	64	73	87	105
600-147046-3	SJRP-SB03-1-2-04202017	80	74	76	108
600-147046-4	SJRP-SB11-1-2-04202017	62	76	88	103
600-147046-4 MS	SJRP-SB11-1-2-04202017	69	70	90	112
600-147046-4 MSD	SJRP-SB11-1-2-04202017	72	74	89	111
600-147046-5	SJRP-SB17-1-2-04202017	67	74	90	118
LCS 600-211370/3	Lab Control Sample	76	86	95	112
LCS 600-211470/3	Lab Control Sample	86	80	90	116
LCSD 600-211370/4	Lab Control Sample Dup	83	85	92	113
LCSD 600-211470/4	Lab Control Sample Dup	98	82	86	113
MB 600-211370/6	Method Blank	84	82	85	109
MB 600-211470/6	Method Blank	85	70	77	108

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(50-134)	(62-130)	(70-130)	(67-139)
600-147046-6	SJRP-TB-04192017	76	96	111	102
600-147046-7	SJRP-EB-04202017	61	80	104	81
LCS 600-211844/4	Lab Control Sample	80	98	104	108
LCSD 600-211844/5	Lab Control Sample Dup	78	85	90	100
MB 600-211844/7	Method Blank	89	111	112	115

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(50-150)
600-147046-1	SJRP-MW14-1-2-04192017	53
600-147046-2	SJRP-SB03-1-2-04202017	50
600-147046-3	SJRP-SB03-1-2-04202017	51
600-147046-4	SJRP-SB11-1-2-04202017	56
600-147046-4 MS	SJRP-SB11-1-2-04202017	68
600-147046-4 MSD	SJRP-SB11-1-2-04202017	63

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(50-150)
600-147046-5	SJRP-SB17-1-2-04202017	55
LCS 490-425109/2-A	Lab Control Sample	56
LCSD 490-425109/3-A	Lab Control Sample Dup	78
MB 490-425109/1-A	Method Blank	53

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(50-150)
600-147046-7	SJRP-EB-04202017	112
LCS 490-425762/14	Lab Control Sample	111
LCSD 490-425762/15	Lab Control Sample Dup	113
MB 490-425762/18	Method Blank	112

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		OTPH1
Lab Sample ID	Client Sample ID	(50-150)
600-147046-1	SJRP-MW14-1-2-04192017	123
600-147046-2	SJRP-SB03-1-2-04202017	89
600-147046-3	SJRP-SB03-1-2-04202017	98
600-147046-4	SJRP-SB11-1-2-04202017	81
600-147046-4 MS	SJRP-SB11-1-2-04202017	79
600-147046-4 MSD	SJRP-SB11-1-2-04202017	100
600-147046-5	SJRP-SB17-1-2-04202017	71
LCS 490-425110/2-A	Lab Control Sample	83
LCS 490-425163/2-A	Lab Control Sample	92
MB 490-425110/1-A	Method Blank	101
MB 490-425163/1-A	Method Blank	101

Surrogate Legend

OTPH = o-Terphenyl (Surr)

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	OTPH1 (50-150)								
600-147046-7	SJRP-EB-04202017	65								
LCS 490-425403/2-A	Lab Control Sample	85								
LCSD 490-425403/3-A	Lab Control Sample Dup	81								
MB 490-425403/1-A	Method Blank	50								

Surrogate Legend

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-211370/6
Matrix: Solid
Analysis Batch: 211370

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			04/24/17 10:41	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			04/24/17 10:41	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			04/24/17 10:41	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			04/24/17 10:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*61 - 130*		*04/24/17 10:41*	*1*
Dibromofluoromethane	*82*		*68 - 140*		*04/24/17 10:41*	*1*
Toluene-d8 (Surr)	*85*		*50 - 130*		*04/24/17 10:41*	*1*
4-Bromofluorobenzene	*109*		*57 - 140*		*04/24/17 10:41*	*1*

Lab Sample ID: LCS 600-211370/3
Matrix: Solid
Analysis Batch: 211370

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.04665		mg/Kg		93	70 - 131		
Ethylbenzene			0.0500	0.04335		mg/Kg		87	66 - 130		
Toluene			0.0500	0.04383		mg/Kg		88	67 - 130		
Xylenes, Total			0.100	0.08674		mg/Kg		87	63 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*76*		*61 - 130*
Dibromofluoromethane	*86*		*68 - 140*
Toluene-d8 (Surr)	*95*		*50 - 130*
4-Bromofluorobenzene	*112*		*57 - 140*

Lab Sample ID: LCSD 600-211370/4
Matrix: Solid
Analysis Batch: 211370

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.04700		mg/Kg		94	70 - 131	1	30
Ethylbenzene			0.0500	0.04274		mg/Kg		85	66 - 130	1	30
Toluene			0.0500	0.04312		mg/Kg		86	67 - 130	2	30
Xylenes, Total			0.100	0.08235		mg/Kg		82	63 - 130	5	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*83*		*61 - 130*
Dibromofluoromethane	*85*		*68 - 140*
Toluene-d8 (Surr)	*92*		*50 - 130*
4-Bromofluorobenzene	*113*		*57 - 140*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 600-147046-4 MS — **Client Sample ID: SJRP-SB11-1-2-04202017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211370 — **Prep Batch: 211402**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.000625	U F1 F2	0.0548	0.03245	F1	mg/Kg	☼	59	70 - 131
Ethylbenzene	0.00101	U F1 F2	0.0548	0.03105	F1	mg/Kg	☼	57	66 - 130
Toluene	0.00137	U F1 F2	0.0548	0.03184	F1	mg/Kg	☼	58	67 - 130
Xylenes, Total	0.00112	U F1 F2	0.110	0.06129	F1	mg/Kg	☼	56	63 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*69*		*61 - 130*
Dibromofluoromethane	*70*		*68 - 140*
Toluene-d8 (Surr)	*90*		*50 - 130*
4-Bromofluorobenzene	*112*		*57 - 140*

Lab Sample ID: 600-147046-4 MSD — **Client Sample ID: SJRP-SB11-1-2-04202017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211370 — **Prep Batch: 211402**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.000625	U F1 F2	0.0584	0.04851	F2	mg/Kg	☼	83	70 - 131	40	30
Ethylbenzene	0.00101	U F1 F2	0.0584	0.04346	F2	mg/Kg	☼	74	66 - 130	33	30
Toluene	0.00137	U F1 F2	0.0584	0.04567	F2	mg/Kg	☼	78	67 - 130	36	30
Xylenes, Total	0.00112	U F1 F2	0.117	0.08722	F2	mg/Kg	☼	75	63 - 130	35	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*72*		*61 - 130*
Dibromofluoromethane	*74*		*68 - 140*
Toluene-d8 (Surr)	*89*		*50 - 130*
4-Bromofluorobenzene	*111*		*57 - 140*

Lab Sample ID: MB 600-211470/6 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211470

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			04/25/17 10:58	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			04/25/17 10:58	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			04/25/17 10:58	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			04/25/17 10:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*61 - 130*		*04/25/17 10:58*	*1*
Dibromofluoromethane	*70*		*68 - 140*		*04/25/17 10:58*	*1*
Toluene-d8 (Surr)	*77*		*50 - 130*		*04/25/17 10:58*	*1*
4-Bromofluorobenzene	*108*		*57 - 140*		*04/25/17 10:58*	*1*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-211470/3
Matrix: Solid
Analysis Batch: 211470

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.05184		mg/Kg		104	70 - 131		
Ethylbenzene			0.0500	0.04942		mg/Kg		99	66 - 130		
Toluene			0.0500	0.04950		mg/Kg		99	67 - 130		
Xylenes, Total			0.100	0.09749		mg/Kg		97	63 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*61 - 130*
Dibromofluoromethane	*80*		*68 - 140*
Toluene-d8 (Surr)	*90*		*50 - 130*
4-Bromofluorobenzene	*116*		*57 - 140*

Lab Sample ID: LCSD 600-211470/4
Matrix: Solid
Analysis Batch: 211470

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.05229		mg/Kg		105	70 - 131	1	30
Ethylbenzene			0.0500	0.04551		mg/Kg		91	66 - 130	8	30
Toluene			0.0500	0.04805		mg/Kg		96	67 - 130	3	30
Xylenes, Total			0.100	0.09059		mg/Kg		91	63 - 130	7	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*61 - 130*
Dibromofluoromethane	*82*		*68 - 140*
Toluene-d8 (Surr)	*86*		*50 - 130*
4-Bromofluorobenzene	*113*		*57 - 140*

Lab Sample ID: MB 600-211844/7
Matrix: Water
Analysis Batch: 211844

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/29/17 14:18	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/29/17 14:18	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/29/17 14:18	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/29/17 14:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*50 - 134*		*04/29/17 14:18*	*1*
Dibromofluoromethane	*111*		*62 - 130*		*04/29/17 14:18*	*1*
Toluene-d8 (Surr)	*112*		*70 - 130*		*04/29/17 14:18*	*1*
4-Bromofluorobenzene	*115*		*67 - 139*		*04/29/17 14:18*	*1*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-211844/4
Matrix: Water
Analysis Batch: 211844

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0100	0.008645		mg/L		86	70 - 130
Ethylbenzene	0.0100	0.009701		mg/L		97	70 - 130
Toluene	0.0100	0.009465		mg/L		95	70 - 130
Xylenes, Total	0.0200	0.01867		mg/L		93	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*80*		*50 - 134*
Dibromofluoromethane	*98*		*62 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*
4-Bromofluorobenzene	*108*		*67 - 139*

Lab Sample ID: LCSD 600-211844/5
Matrix: Water
Analysis Batch: 211844

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0100	0.009226		mg/L		92	70 - 130	7	20
Ethylbenzene	0.0100	0.009526		mg/L		95	70 - 130	2	20
Toluene	0.0100	0.008836		mg/L		88	70 - 130	7	20
Xylenes, Total	0.0200	0.01850		mg/L		93	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*78*		*50 - 134*
Dibromofluoromethane	*85*		*62 - 130*
Toluene-d8 (Surr)	*90*		*70 - 130*
4-Bromofluorobenzene	*100*		*67 - 139*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 490-425109/1-A
Matrix: Solid
Analysis Batch: 425527

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 425109

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		04/26/17 09:36	04/27/17 15:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*53*		*50 - 150*	*04/26/17 09:36*	*04/27/17 15:04*	*1*

Lab Sample ID: LCS 490-425109/2-A
Matrix: Solid
Analysis Batch: 425527

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 425109

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	500	433.7		mg/Kg		87	70 - 130

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: LCS 490-425109/2-A
Matrix: Solid
Analysis Batch: 425527

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 425109

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	56		50 - 150

Lab Sample ID: LCSD 490-425109/3-A
Matrix: Solid
Analysis Batch: 425527

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 425109

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10			500	566.1	*	mg/Kg		113	70 - 130	26	21

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	78		50 - 150

Lab Sample ID: 600-147046-4 MS
Matrix: Solid
Analysis Batch: 425527

Client Sample ID: SJRP-SB11-1-2-04202017
Prep Type: Total/NA
Prep Batch: 425109

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C6-C10	3.00	U	600	535.6		mg/Kg	☼	89	56 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene	68		50 - 150

Lab Sample ID: 600-147046-4 MSD
Matrix: Solid
Analysis Batch: 425527

Client Sample ID: SJRP-SB11-1-2-04202017
Prep Type: Total/NA
Prep Batch: 425109

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	3.00	U	600	373.2	F2	mg/Kg	☼	62	56 - 130	36	21

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene	63		50 - 150

Lab Sample ID: MB 490-425762/18
Matrix: Water
Analysis Batch: 425762

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			04/28/17 17:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	112		50 - 150		04/28/17 17:42	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: LCS 490-425762/14
Matrix: Water
Analysis Batch: 425762

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C6-C10			1.00	0.9497		mg/L		95	66 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*111*		*50 - 150*

Lab Sample ID: LCSD 490-425762/15
Matrix: Water
Analysis Batch: 425762

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10			1.00	0.9290		mg/L		93	66 - 140	2	42

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*113*		*50 - 150*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Lab Sample ID: MB 490-425110/1-A
Matrix: Solid
Analysis Batch: 425777

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 425110

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.50	U	5.00	2.50	mg/Kg		04/26/17 09:43	04/28/17 09:25	1
ORO C24-C40	2.50	U	5.00	2.50	mg/Kg		04/26/17 09:43	04/28/17 09:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*101*		*50 - 150*	*04/26/17 09:43*	*04/28/17 09:25*	*1*

Lab Sample ID: LCS 490-425110/2-A
Matrix: Solid
Analysis Batch: 425777

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 425110

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			40.0	28.52		mg/Kg		71	54 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*83*		*50 - 150*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Lab Sample ID: MB 490-425163/1-A
Matrix: Solid
Analysis Batch: 425055

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 425163

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.50	U	5.00	2.50	mg/Kg		04/26/17 10:25	04/26/17 22:00	1
ORO C24-C40	2.687	J	5.00	2.50	mg/Kg		04/26/17 10:25	04/26/17 22:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*101*		*50 - 150*	*04/26/17 10:25*	*04/26/17 22:00*	*1*

Lab Sample ID: LCS 490-425163/2-A
Matrix: Solid
Analysis Batch: 425055

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 425163

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	40.0	32.11		mg/Kg		80	54 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*92*		*50 - 150*

Lab Sample ID: 600-147046-4 MS
Matrix: Solid
Analysis Batch: 425055

Client Sample ID: SJRP-SB11-1-2-04202017
Prep Type: Total/NA
Prep Batch: 425163

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	2.73	U	43.9	31.80		mg/Kg	☼	72	10 - 142

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
o-Terphenyl (Surr)	*79*		*50 - 150*

Lab Sample ID: 600-147046-4 MSD
Matrix: Solid
Analysis Batch: 425055

Client Sample ID: SJRP-SB11-1-2-04202017
Prep Type: Total/NA
Prep Batch: 425163

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	2.73	U	43.2	36.46		mg/Kg	☼	84	10 - 142	14	47

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
o-Terphenyl (Surr)	*100*		*50 - 150*

Lab Sample ID: MB 490-425403/1-A
Matrix: Water
Analysis Batch: 425453

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 425403

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0910	U	0.100	0.0910	mg/L		04/27/17 07:19	04/27/17 15:10	1
ORO C24-C40	0.0910	U	0.100	0.0910	mg/L		04/27/17 07:19	04/27/17 15:10	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Lab Sample ID: MB 490-425403/1-A
Matrix: Water
Analysis Batch: 425453

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 425403

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	50		50 - 150	04/27/17 07:19	04/27/17 15:10	1

Lab Sample ID: LCS 490-425403/2-A
Matrix: Water
Analysis Batch: 425453

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 425403

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	0.800	0.7581		mg/L		95	46 - 132

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	85		50 - 150

Lab Sample ID: LCSD 490-425403/3-A
Matrix: Water
Analysis Batch: 425453

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 425403

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	0.800	0.7276		mg/L		91	46 - 132	4	31

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o-Terphenyl (Surr)	81		50 - 150

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-211954/1-A
Matrix: Water
Analysis Batch: 212039

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 211954

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		05/01/17 19:44	05/02/17 15:47	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		05/01/17 19:44	05/02/17 15:47	1
Barium	0.000530	U	0.0200	0.000530	mg/L		05/01/17 19:44	05/02/17 15:47	1
Boron	0.0116	U	0.200	0.0116	mg/L		05/01/17 19:44	05/02/17 15:47	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		05/01/17 19:44	05/02/17 15:47	1
Calcium	0.0240	U	1.00	0.0240	mg/L		05/01/17 19:44	05/02/17 15:47	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		05/01/17 19:44	05/02/17 15:47	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		05/01/17 19:44	05/02/17 15:47	1
Iron	0.0270	U	0.400	0.0270	mg/L		05/01/17 19:44	05/02/17 15:47	1
Lead	0.00219	U	0.0100	0.00219	mg/L		05/01/17 19:44	05/02/17 15:47	1
Magnesium	0.0555	U	1.00	0.0555	mg/L		05/01/17 19:44	05/02/17 15:47	1
Manganese	0.0004000	J	0.0100	0.000360	mg/L		05/01/17 19:44	05/02/17 15:47	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		05/01/17 19:44	05/02/17 15:47	1
Potassium	0.0374	U	1.00	0.0374	mg/L		05/01/17 19:44	05/02/17 15:47	1
Selenium	0.01170	J	0.0400	0.00287	mg/L		05/01/17 19:44	05/02/17 15:47	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: MB 600-211954/1-A
Matrix: Water
Analysis Batch: 212162

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 211954

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	0.0214	U	1.00	0.0214	mg/L		05/01/17 19:44	05/03/17 14:13	1

Lab Sample ID: MB 600-211954/1-A
Matrix: Water
Analysis Batch: 212162

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 211954

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	0.001300	J	0.0100	0.000540	mg/L		05/01/17 19:44	05/03/17 15:52	1

Lab Sample ID: LCS 600-211954/2-A
Matrix: Water
Analysis Batch: 212039

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211954

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	10.33		mg/L		103	80 - 120
Arsenic	1.00	1.083		mg/L		108	80 - 120
Barium	1.00	1.040		mg/L		104	80 - 120
Boron	1.00	1.014		mg/L		101	80 - 120
Cadmium	0.500	0.5315		mg/L		106	80 - 120
Calcium	10.0	10.33		mg/L		103	80 - 120
Chromium	1.00	1.040		mg/L		104	80 - 120
Cobalt	1.00	1.037		mg/L		104	80 - 120
Iron	10.0	10.31		mg/L		103	80 - 120
Lead	1.00	1.045		mg/L		105	80 - 120
Magnesium	10.0	10.59		mg/L		106	80 - 120
Manganese	1.00	1.050		mg/L		105	80 - 120
Nickel	1.00	1.042		mg/L		104	80 - 120
Potassium	10.0	10.56		mg/L		106	80 - 120
Selenium	1.00	1.085		mg/L		109	80 - 120

Lab Sample ID: LCS 600-211954/2-A
Matrix: Water
Analysis Batch: 212162

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 211954

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Molybdenum	1.00	0.9198		mg/L		92	80 - 120
Sodium	10.0	10.53		mg/L		105	80 - 120

Lab Sample ID: MB 600-212161/1-A
Matrix: Solid
Analysis Batch: 212257

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 212161

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	2.015	J	25.0	0.300	mg/Kg		05/03/17 14:09	05/04/17 13:27	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		05/03/17 14:09	05/04/17 13:27	1
Barium	0.2350	J	1.00	0.0300	mg/Kg		05/03/17 14:09	05/04/17 13:27	1
Boron	0.386	U	20.0	0.386	mg/Kg		05/03/17 14:09	05/04/17 13:27	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		05/03/17 14:09	05/04/17 13:27	1
Calcium	1.710	J	100	0.864	mg/Kg		05/03/17 14:09	05/04/17 13:27	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: MB 600-212161/1-A
Matrix: Solid
Analysis Batch: 212257

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 212161

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.0506	U	0.500	0.0506	mg/Kg		05/03/17 14:09	05/04/17 13:27	1
Cobalt	0.0676	U	0.500	0.0676	mg/Kg		05/03/17 14:09	05/04/17 13:27	1
Iron	3.320	J	20.0	2.53	mg/Kg		05/03/17 14:09	05/04/17 13:27	1
Lead	0.1100	J	0.500	0.105	mg/Kg		05/03/17 14:09	05/04/17 13:27	1
Magnesium	1.92	U	100	1.92	mg/Kg		05/03/17 14:09	05/04/17 13:27	1
Manganese	0.06000	J	1.50	0.0381	mg/Kg		05/03/17 14:09	05/04/17 13:27	1
Molybdenum	0.136	U	0.500	0.136	mg/Kg		05/03/17 14:09	05/04/17 13:27	1
Nickel	0.117	U	1.00	0.117	mg/Kg		05/03/17 14:09	05/04/17 13:27	1
Potassium	11.0	U	100	11.0	mg/Kg		05/03/17 14:09	05/04/17 13:27	1
Selenium	0.259	U	2.00	0.259	mg/Kg		05/03/17 14:09	05/04/17 13:27	1
Sodium	2.745	J	100	0.886	mg/Kg		05/03/17 14:09	05/04/17 13:27	1

Lab Sample ID: LCSSRM 600-212161/2-A
Matrix: Solid
Analysis Batch: 212257

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 212161

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	7590	6001		mg/Kg		79.1	34.9 - 151.5
Arsenic	97.5	94.17		mg/Kg		96.6	69.2 - 145.6
Barium	306	282.3		mg/Kg		92.3	82.7 - 117.0
Boron	116	111.2		mg/Kg		95.9	73.0 - 127.6
Cadmium	76.6	73.75		mg/Kg		96.3	73.2 - 126.8
Calcium	5880	5665		mg/Kg		96.3	81.8 - 118.4
Chromium	103	94.07		mg/Kg		91.3	79.7 - 121.4
Cobalt	103	103.4		mg/Kg		100.4	83.3 - 116.5
Iron	14500	9827		mg/Kg		67.8	45.0 - 155.9
Lead	96.7	90.77		mg/Kg		93.9	81.7 - 117.9
Magnesium	2680	2292		mg/Kg		85.5	75.4 - 124.6
Manganese	400	361.4		mg/Kg		90.4	81.0 - 119.0
Molybdenum	94.9	90.91		mg/Kg		95.8	78.5 - 121.2
Nickel	153	153.3		mg/Kg		100.2	73.2 - 126.8
Potassium	2230	1891		mg/Kg		84.8	69.5 - 130.5
Selenium	161	158.2		mg/Kg		98.3	77.6 - 123.0
Sodium	370	341.5		mg/Kg		92.3	70.5 - 129.7

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-147046-4 MS | **Client Sample ID: SJRP-SB11-1-2-04202017**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 212257 | **Prep Batch: 212161**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	12500	B	521	15430	4	mg/Kg	☼	565	75 - 125
Arsenic	4.01		52.1	53.82		mg/Kg	☼	96	75 - 125
Barium	101	B F1	52.1	132.9	F1	mg/Kg	☼	61	75 - 125
Boron	1.10	J F1	52.1	29.32	F1	mg/Kg	☼	54	75 - 125
Cadmium	0.237	J	26.1	25.64		mg/Kg	☼	97	75 - 125
Calcium	12700	B F2	521	16030	4	mg/Kg	☼	636	75 - 125
Chromium	6.64		52.1	55.23		mg/Kg	☼	93	75 - 125
Cobalt	16.7		52.1	61.01		mg/Kg	☼	85	75 - 125
Iron	20100	B	521	20440	4	mg/Kg	☼	58	75 - 125
Lead	17.6	B	52.1	65.19		mg/Kg	☼	91	75 - 125
Magnesium	3280		521	4009	4	mg/Kg	☼	140	75 - 125
Manganese	332	B	52.1	317.1	4	mg/Kg	☼	-28	75 - 125
Molybdenum	0.301	J F1	52.1	36.56	F1	mg/Kg	☼	70	75 - 125
Nickel	11.1		52.1	61.80		mg/Kg	☼	97	75 - 125
Potassium	1260	F1	521	1816		mg/Kg	☼	107	75 - 125
Selenium	0.430	J	52.1	50.50		mg/Kg	☼	96	75 - 125
Sodium	5410	B	521	8328	4	mg/Kg	☼	559	75 - 125

Lab Sample ID: 600-147046-4 MSD | **Client Sample ID: SJRP-SB11-1-2-04202017**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 212257 | **Prep Batch: 212161**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	12500	B	552	17000	4	mg/Kg	☼	818	75 - 125	10	20
Arsenic	4.01		55.2	58.40		mg/Kg	☼	98	75 - 125	8	20
Barium	101	B F1	55.2	129.6	F1	mg/Kg	☼	51	75 - 125	3	20
Boron	1.10	J F1	55.2	31.20	F1	mg/Kg	☼	54	75 - 125	6	20
Cadmium	0.237	J	27.6	27.77		mg/Kg	☼	100	75 - 125	8	20
Calcium	12700	B F2	552	10910	4 F2	mg/Kg	☼	-327	75 - 125	38	20
Chromium	6.64		55.2	60.72		mg/Kg	☼	98	75 - 125	9	20
Cobalt	16.7		55.2	65.96		mg/Kg	☼	89	75 - 125	8	20
Iron	20100	B	552	21430	4	mg/Kg	☼	234	75 - 125	5	20
Lead	17.6	B	55.2	71.88		mg/Kg	☼	98	75 - 125	10	20
Magnesium	3280		552	4323	4	mg/Kg	☼	189	75 - 125	8	20
Manganese	332	B	55.2	313.4	4	mg/Kg	☼	-33	75 - 125	1	20
Molybdenum	0.301	J F1	55.2	38.96	F1	mg/Kg	☼	70	75 - 125	6	20
Nickel	11.1		55.2	67.73		mg/Kg	☼	103	75 - 125	9	20
Potassium	1260	F1	552	2086	F1	mg/Kg	☼	150	75 - 125	14	20
Selenium	0.430	J	55.2	54.20		mg/Kg	☼	97	75 - 125	7	20
Sodium	5410	B	552	9265	4	mg/Kg	☼	697	75 - 125	11	20

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Lab Sample ID: LB 600-211189/1-F — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 211404 — **Prep Batch: 211371**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000820	U	0.000200	0.0000820	mg/L		04/24/17 08:31	04/24/17 12:29	1

Lab Sample ID: MB 600-211371/7-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 211404 — **Prep Batch: 211371**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000820	U	0.000200	0.0000820	mg/L		04/24/17 08:31	04/24/17 11:56	1

Lab Sample ID: LCS 600-211371/8-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 211404 — **Prep Batch: 211371**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00300	0.002507		mg/L		84	70 - 130

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-211425/7-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211513 — **Prep Batch: 211425**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00325	U	0.0155	0.00325	mg/Kg		04/24/17 15:01	04/25/17 11:46	1

Lab Sample ID: LCSSRM 600-211425/8-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211513 — **Prep Batch: 211425**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	20.2	25.30		mg/Kg		125.3	70.8 - 129.2

Lab Sample ID: 600-147046-4 MS — **Client Sample ID: SJRP-SB11-1-2-04202017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211513 — **Prep Batch: 211425**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0325		0.254	0.3041		mg/Kg	☼	107	75 - 125

Lab Sample ID: 600-147046-4 MSD — **Client Sample ID: SJRP-SB11-1-2-04202017**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 211513 — **Prep Batch: 211425**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.0325		0.270	0.3235		mg/Kg	☼	108	75 - 125	6	20

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) (Continued)

Lab Sample ID: 600-147046-4 DU
Matrix: Solid
Analysis Batch: 211513

Client Sample ID: SJRP-SB11-1-2-04202017
Prep Type: Total/NA
Prep Batch: 211425

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Mercury	0.0325			0.02544	F5	mg/Kg	☼			24	20

Method: 2540B - Percent Moisture

Lab Sample ID: 600-147046-5 DU
Matrix: Solid
Analysis Batch: 211434

Client Sample ID: SJRP-SB17-1-2-04202017
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	6.0			9.5	F3	%				45	20
Percent Solids	94.0			90.5		%				4	20

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

GC/MS VOA

Analysis Batch: 211370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147046-1	SJRP-MW14-1-2-04192017	Total/NA	Solid	8260B	211402
600-147046-2	SJRP-SB03-1-2-04202017	Total/NA	Solid	8260B	211402
600-147046-4	SJRP-SB11-1-2-04202017	Total/NA	Solid	8260B	211402
600-147046-5	SJRP-SB17-1-2-04202017	Total/NA	Solid	8260B	211402
MB 600-211370/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-211370/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-211370/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
600-147046-4 MS	SJRP-SB11-1-2-04202017	Total/NA	Solid	8260B	211402
600-147046-4 MSD	SJRP-SB11-1-2-04202017	Total/NA	Solid	8260B	211402

Prep Batch: 211402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147046-1	SJRP-MW14-1-2-04192017	Total/NA	Solid	5035	
600-147046-2	SJRP-SB03-1-2-04202017	Total/NA	Solid	5035	
600-147046-3	SJRP-SB03-1-2-04202017	Total/NA	Solid	5035	
600-147046-4	SJRP-SB11-1-2-04202017	Total/NA	Solid	5035	
600-147046-5	SJRP-SB17-1-2-04202017	Total/NA	Solid	5035	
600-147046-4 MS	SJRP-SB11-1-2-04202017	Total/NA	Solid	5035	
600-147046-4 MSD	SJRP-SB11-1-2-04202017	Total/NA	Solid	5035	

Analysis Batch: 211470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147046-3	SJRP-SB03-1-2-04202017	Total/NA	Solid	8260B	211402
MB 600-211470/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-211470/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-211470/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 211844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147046-6	SJRP-TB-04192017	Total/NA	Water	8260B	
600-147046-7	SJRP-EB-04202017	Total/NA	Water	8260B	
MB 600-211844/7	Method Blank	Total/NA	Water	8260B	
LCS 600-211844/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-211844/5	Lab Control Sample Dup	Total/NA	Water	8260B	

GC VOA

Prep Batch: 425109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147046-1	SJRP-MW14-1-2-04192017	Total/NA	Solid	5030B	
600-147046-2	SJRP-SB03-1-2-04202017	Total/NA	Solid	5030B	
600-147046-3	SJRP-SB03-1-2-04202017	Total/NA	Solid	5030B	
600-147046-4	SJRP-SB11-1-2-04202017	Total/NA	Solid	5030B	
600-147046-5	SJRP-SB17-1-2-04202017	Total/NA	Solid	5030B	
MB 490-425109/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 490-425109/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 490-425109/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
600-147046-4 MS	SJRP-SB11-1-2-04202017	Total/NA	Solid	5030B	
600-147046-4 MSD	SJRP-SB11-1-2-04202017	Total/NA	Solid	5030B	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

GC VOA (Continued)

Analysis Batch: 425527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147046-1	SJRP-MW14-1-2-04192017	Total/NA	Solid	8015C	425109
600-147046-2	SJRP-SB03-1-2-04202017	Total/NA	Solid	8015C	425109
600-147046-3	SJRP-SB03-1-2-04202017	Total/NA	Solid	8015C	425109
600-147046-4	SJRP-SB11-1-2-04202017	Total/NA	Solid	8015C	425109
600-147046-5	SJRP-SB17-1-2-04202017	Total/NA	Solid	8015C	425109
MB 490-425109/1-A	Method Blank	Total/NA	Solid	8015C	425109
LCS 490-425109/2-A	Lab Control Sample	Total/NA	Solid	8015C	425109
LCSD 490-425109/3-A	Lab Control Sample Dup	Total/NA	Solid	8015C	425109
600-147046-4 MS	SJRP-SB11-1-2-04202017	Total/NA	Solid	8015C	425109
600-147046-4 MSD	SJRP-SB11-1-2-04202017	Total/NA	Solid	8015C	425109

Analysis Batch: 425762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147046-7	SJRP-EB-04202017	Total/NA	Water	8015C	
MB 490-425762/18	Method Blank	Total/NA	Water	8015C	
LCS 490-425762/14	Lab Control Sample	Total/NA	Water	8015C	
LCSD 490-425762/15	Lab Control Sample Dup	Total/NA	Water	8015C	

GC Semi VOA

Analysis Batch: 425055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147046-2	SJRP-SB03-1-2-04202017	Total/NA	Solid	8015C	425163
600-147046-3	SJRP-SB03-1-2-04202017	Total/NA	Solid	8015C	425163
600-147046-4	SJRP-SB11-1-2-04202017	Total/NA	Solid	8015C	425163
600-147046-5	SJRP-SB17-1-2-04202017	Total/NA	Solid	8015C	425163
MB 490-425163/1-A	Method Blank	Total/NA	Solid	8015C	425163
LCS 490-425163/2-A	Lab Control Sample	Total/NA	Solid	8015C	425163
600-147046-4 MS	SJRP-SB11-1-2-04202017	Total/NA	Solid	8015C	425163
600-147046-4 MSD	SJRP-SB11-1-2-04202017	Total/NA	Solid	8015C	425163

Prep Batch: 425110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147046-1	SJRP-MW14-1-2-04192017	Total/NA	Solid	3550C	
MB 490-425110/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-425110/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Prep Batch: 425163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147046-2	SJRP-SB03-1-2-04202017	Total/NA	Solid	3550C	
600-147046-3	SJRP-SB03-1-2-04202017	Total/NA	Solid	3550C	
600-147046-4	SJRP-SB11-1-2-04202017	Total/NA	Solid	3550C	
600-147046-5	SJRP-SB17-1-2-04202017	Total/NA	Solid	3550C	
MB 490-425163/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-425163/2-A	Lab Control Sample	Total/NA	Solid	3550C	
600-147046-4 MS	SJRP-SB11-1-2-04202017	Total/NA	Solid	3550C	
600-147046-4 MSD	SJRP-SB11-1-2-04202017	Total/NA	Solid	3550C	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

GC Semi VOA (Continued)

Prep Batch: 425403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147046-7	SJRP-EB-04202017	Total/NA	Water	3510C	
MB 490-425403/1-A	Method Blank	Total/NA	Water	3510C	
LCS 490-425403/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 490-425403/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 425451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147046-2	SJRP-SB03-1-2-04202017	Total/NA	Solid	8015C	425163
600-147046-3	SJRP-SB03-1-2-04202017	Total/NA	Solid	8015C	425163
600-147046-4	SJRP-SB11-1-2-04202017	Total/NA	Solid	8015C	425163
600-147046-5	SJRP-SB17-1-2-04202017	Total/NA	Solid	8015C	425163

Analysis Batch: 425453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147046-7	SJRP-EB-04202017	Total/NA	Water	8015C	425403
MB 490-425403/1-A	Method Blank	Total/NA	Water	8015C	425403
LCS 490-425403/2-A	Lab Control Sample	Total/NA	Water	8015C	425403
LCSD 490-425403/3-A	Lab Control Sample Dup	Total/NA	Water	8015C	425403

Analysis Batch: 425777

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147046-1	SJRP-MW14-1-2-04192017	Total/NA	Solid	8015C	425110
MB 490-425110/1-A	Method Blank	Total/NA	Solid	8015C	425110
LCS 490-425110/2-A	Lab Control Sample	Total/NA	Solid	8015C	425110

Metals

Leach Batch: 211189

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 600-211189/1-F	Method Blank	Total/NA	Water	1311	

Prep Batch: 211371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147046-7	SJRP-EB-04202017	Total/NA	Water	7470A	
LB 600-211189/1-F	Method Blank	Total/NA	Water	7470A	211189
MB 600-211371/7-A	Method Blank	Total/NA	Water	7470A	
LCS 600-211371/8-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 211404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147046-7	SJRP-EB-04202017	Total/NA	Water	7470A	211371
LB 600-211189/1-F	Method Blank	Total/NA	Water	7470A	211371
MB 600-211371/7-A	Method Blank	Total/NA	Water	7470A	211371
LCS 600-211371/8-A	Lab Control Sample	Total/NA	Water	7470A	211371

Prep Batch: 211425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147046-1	SJRP-MW14-1-2-04192017	Total/NA	Solid	7471A	
600-147046-2	SJRP-SB03-1-2-04202017	Total/NA	Solid	7471A	
600-147046-3	SJRP-SB03-1-2-04202017	Total/NA	Solid	7471A	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Metals (Continued)

Prep Batch: 211425 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147046-4	SJRP-SB11-1-2-04202017	Total/NA	Solid	7471A	
600-147046-5	SJRP-SB17-1-2-04202017	Total/NA	Solid	7471A	
MB 600-211425/7-A	Method Blank	Total/NA	Solid	7471A	
LCSSRM 600-211425/8-A	Lab Control Sample	Total/NA	Solid	7471A	
600-147046-4 MS	SJRP-SB11-1-2-04202017	Total/NA	Solid	7471A	
600-147046-4 MSD	SJRP-SB11-1-2-04202017	Total/NA	Solid	7471A	
600-147046-4 DU	SJRP-SB11-1-2-04202017	Total/NA	Solid	7471A	

Analysis Batch: 211513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147046-1	SJRP-MW14-1-2-04192017	Total/NA	Solid	7471A	211425
600-147046-2	SJRP-SB03-1-2-04202017	Total/NA	Solid	7471A	211425
600-147046-3	SJRP-SB03-1-2-04202017	Total/NA	Solid	7471A	211425
600-147046-4	SJRP-SB11-1-2-04202017	Total/NA	Solid	7471A	211425
600-147046-5	SJRP-SB17-1-2-04202017	Total/NA	Solid	7471A	211425
MB 600-211425/7-A	Method Blank	Total/NA	Solid	7471A	211425
LCSSRM 600-211425/8-A	Lab Control Sample	Total/NA	Solid	7471A	211425
600-147046-4 MS	SJRP-SB11-1-2-04202017	Total/NA	Solid	7471A	211425
600-147046-4 MSD	SJRP-SB11-1-2-04202017	Total/NA	Solid	7471A	211425
600-147046-4 DU	SJRP-SB11-1-2-04202017	Total/NA	Solid	7471A	211425

Prep Batch: 211954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147046-7	SJRP-EB-04202017	Total/NA	Water	3010A	
MB 600-211954/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-211954/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 212039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147046-7	SJRP-EB-04202017	Total/NA	Water	6010B	211954
MB 600-211954/1-A	Method Blank	Total/NA	Water	6010B	211954
LCS 600-211954/2-A	Lab Control Sample	Total/NA	Water	6010B	211954

Prep Batch: 212161

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147046-1	SJRP-MW14-1-2-04192017	Total/NA	Solid	3050B	
600-147046-2	SJRP-SB03-1-2-04202017	Total/NA	Solid	3050B	
600-147046-3	SJRP-SB03-1-2-04202017	Total/NA	Solid	3050B	
600-147046-4	SJRP-SB11-1-2-04202017	Total/NA	Solid	3050B	
600-147046-5	SJRP-SB17-1-2-04202017	Total/NA	Solid	3050B	
MB 600-212161/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 600-212161/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-147046-4 MS	SJRP-SB11-1-2-04202017	Total/NA	Solid	3050B	
600-147046-4 MSD	SJRP-SB11-1-2-04202017	Total/NA	Solid	3050B	

Analysis Batch: 212162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147046-7	SJRP-EB-04202017	Total/NA	Water	6010B	211954
MB 600-211954/1-A	Method Blank	Total/NA	Water	6010B	211954
MB 600-211954/1-A	Method Blank	Total/NA	Water	6010B	211954
LCS 600-211954/2-A	Lab Control Sample	Total/NA	Water	6010B	211954

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Analysis Batch: 212257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147046-1	SJRP-MW14-1-2-04192017	Total/NA	Solid	6010B	212161
600-147046-2	SJRP-SB03-1-2-04202017	Total/NA	Solid	6010B	212161
600-147046-2	SJRP-SB03-1-2-04202017	Total/NA	Solid	6010B	212161
600-147046-3	SJRP-SB03-1-2-04202017	Total/NA	Solid	6010B	212161
600-147046-3	SJRP-SB03-1-2-04202017	Total/NA	Solid	6010B	212161
600-147046-4	SJRP-SB11-1-2-04202017	Total/NA	Solid	6010B	212161
600-147046-5	SJRP-SB17-1-2-04202017	Total/NA	Solid	6010B	212161
600-147046-5	SJRP-SB17-1-2-04202017	Total/NA	Solid	6010B	212161
MB 600-212161/1-A	Method Blank	Total/NA	Solid	6010B	212161
LCSSRM 600-212161/2-A	Lab Control Sample	Total/NA	Solid	6010B	212161
600-147046-4 MS	SJRP-SB11-1-2-04202017	Total/NA	Solid	6010B	212161
600-147046-4 MSD	SJRP-SB11-1-2-04202017	Total/NA	Solid	6010B	212161

General Chemistry

Analysis Batch: 211434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147046-2	SJRP-SB03-1-2-04202017	Total/NA	Solid	2540B	
600-147046-3	SJRP-SB03-1-2-04202017	Total/NA	Solid	2540B	
600-147046-4	SJRP-SB11-1-2-04202017	Total/NA	Solid	2540B	
600-147046-5	SJRP-SB17-1-2-04202017	Total/NA	Solid	2540B	
600-147046-4 MS	SJRP-SB11-1-2-04202017	Total/NA	Solid	2540B	
600-147046-4 MSD	SJRP-SB11-1-2-04202017	Total/NA	Solid	2540B	
600-147046-5 DU	SJRP-SB17-1-2-04202017	Total/NA	Solid	2540B	

Analysis Batch: 211542

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-147046-1	SJRP-MW14-1-2-04192017	Total/NA	Solid	2540B	

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Client Sample ID: SJRP-MW14-1-2-04192017 — Lab Sample ID: 600-147046-1

Date Collected: 04/19/17 15:00 — **Matrix: Solid**
Date Received: 04/21/17 10:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			211542	04/25/17 20:38	KRD	TAL HOU

Client Sample ID: SJRP-MW14-1-2-04192017 — Lab Sample ID: 600-147046-1

Date Collected: 04/19/17 15:00 — **Matrix: Solid**
Date Received: 04/21/17 10:09 — **Percent Solids: 72.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.219 g	5 mL	211402	04/21/17 14:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	211370	04/24/17 15:11	WS1	TAL HOU
Total/NA	Prep	5030B			5.44 g	5.0 mL	425109	04/26/17 09:37	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	425527	04/27/17 21:04	A1B	TAL NSH
Total/NA	Prep	3550C			25.03 g	1.00 mL	425110	04/26/17 09:43	MNM	TAL NSH
Total/NA	Analysis	8015C		1			425777	04/28/17 16:20	GMH	TAL NSH
Total/NA	Prep	3050B			1.14 g	50 mL	212161	05/03/17 14:09	JAH	TAL HOU
Total/NA	Analysis	6010B		1			212257	05/04/17 13:44	DCL	TAL HOU
Total/NA	Prep	7471A			.65 g	50 mL	211425	04/24/17 15:01	DDE	TAL HOU
Total/NA	Analysis	7471A		1			211513	04/25/17 12:18	DDE	TAL HOU

Client Sample ID: SJRP-SB03-1-2-04202017 — Lab Sample ID: 600-147046-2

Date Collected: 04/20/17 09:15 — **Matrix: Solid**
Date Received: 04/21/17 10:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			211434	04/24/17 17:05	B1K	TAL HOU

Client Sample ID: SJRP-SB03-1-2-04202017 — Lab Sample ID: 600-147046-2

Date Collected: 04/20/17 09:15 — **Matrix: Solid**
Date Received: 04/21/17 10:09 — **Percent Solids: 90.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.91 g	5 mL	211402	04/21/17 14:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	211370	04/24/17 13:33	WS1	TAL HOU
Total/NA	Prep	5030B			5.07 g	5.0 mL	425109	04/26/17 09:37	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	425527	04/27/17 21:34	A1B	TAL NSH
Total/NA	Prep	3550C			25.11 g	1.00 mL	425163	04/26/17 10:25	MNM	TAL NSH
Total/NA	Analysis	8015C		1			425055	04/27/17 02:39	MDW	TAL NSH
Total/NA	Prep	3550C			25.11 g	1.00 mL	425163	04/26/17 10:25	MNM	TAL NSH
Total/NA	Analysis	8015C		1			425451	04/27/17 14:36	AK1	TAL NSH
Total/NA	Prep	3050B			1.08 g	50 mL	212161	05/03/17 14:09	JAH	TAL HOU
Total/NA	Analysis	6010B		1			212257	05/04/17 13:46	DCL	TAL HOU
Total/NA	Prep	3050B			1.08 g	50 mL	212161	05/03/17 14:09	JAH	TAL HOU
Total/NA	Analysis	6010B		5			212257	05/04/17 17:11	DCL	TAL HOU
Total/NA	Prep	7471A			.64 g	50 mL	211425	04/24/17 15:01	DDE	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Client Sample ID: SJRP-SB03-1-2-04202017 — **Lab Sample ID: 600-147046-2**
Date Collected: 04/20/17 09:15 — **Matrix: Solid**
Date Received: 04/21/17 10:09 — **Percent Solids: 90.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1			211513	04/25/17 12:20	DDE	TAL HOU

Client Sample ID: SJRP-SB03-1-2-04202017 — **Lab Sample ID: 600-147046-3**
Date Collected: 04/20/17 09:15 — **Matrix: Solid**
Date Received: 04/21/17 10:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			211434	04/24/17 17:05	B1K	TAL HOU

Client Sample ID: SJRP-SB03-1-2-04202017 — **Lab Sample ID: 600-147046-3**
Date Collected: 04/20/17 09:15 — **Matrix: Solid**
Date Received: 04/21/17 10:09 — **Percent Solids: 90.7**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.312 g	5 mL	211402	04/21/17 14:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	211470	04/25/17 11:46	WS1	TAL HOU
Total/NA	Prep	5030B			5.31 g	5.0 mL	425109	04/26/17 09:37	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	425527	04/27/17 22:04	A1B	TAL NSH
Total/NA	Prep	3550C			25.72 g	1.00 mL	425163	04/26/17 10:25	MNM	TAL NSH
Total/NA	Analysis	8015C		1			425055	04/27/17 02:55	MDW	TAL NSH
Total/NA	Prep	3550C			25.72 g	1.00 mL	425163	04/26/17 10:25	MNM	TAL NSH
Total/NA	Analysis	8015C		1			425451	04/27/17 14:53	AK1	TAL NSH
Total/NA	Prep	3050B			1.14 g	50 mL	212161	05/03/17 14:09	JAH	TAL HOU
Total/NA	Analysis	6010B		1			212257	05/04/17 13:48	DCL	TAL HOU
Total/NA	Prep	3050B			1.14 g	50 mL	212161	05/03/17 14:09	JAH	TAL HOU
Total/NA	Analysis	6010B		5			212257	05/04/17 17:13	DCL	TAL HOU
Total/NA	Prep	7471A			.62 g	50 mL	211425	04/24/17 15:01	DDE	TAL HOU
Total/NA	Analysis	7471A		1			211513	04/25/17 12:22	DDE	TAL HOU

Client Sample ID: SJRP-SB11-1-2-04202017 — **Lab Sample ID: 600-147046-4**
Date Collected: 04/20/17 11:30 — **Matrix: Solid**
Date Received: 04/21/17 10:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			211434	04/24/17 17:05	B1K	TAL HOU

Client Sample ID: SJRP-SB11-1-2-04202017 — **Lab Sample ID: 600-147046-4**
Date Collected: 04/20/17 11:30 — **Matrix: Solid**
Date Received: 04/21/17 10:09 — **Percent Solids: 89.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.621 g	5 mL	211402	04/21/17 14:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	211370	04/24/17 13:08	WS1	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.15 g	5.0 mL	425109	04/26/17 09:37	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	425527	04/27/17 22:34	A1B	TAL NSH
Total/NA	Prep	3550C			25.54 g	1.00 mL	425163	04/26/17 10:25	MNM	TAL NSH
Total/NA	Analysis	8015C		1			425055	04/27/17 03:12	MDW	TAL NSH
Total/NA	Prep	3550C			25.54 g	1.00 mL	425163	04/26/17 10:25	MNM	TAL NSH
Total/NA	Analysis	8015C		1			425451	04/27/17 15:09	AK1	TAL NSH
Total/NA	Prep	3050B			1.13 g	50 mL	212161	05/03/17 14:09	JAH	TAL HOU
Total/NA	Analysis	6010B		1			212257	05/04/17 13:50	DCL	TAL HOU
Total/NA	Prep	7471A			.65 g	50 mL	211425	04/24/17 15:01	DDE	TAL HOU
Total/NA	Analysis	7471A		1			211513	04/25/17 12:24	DDE	TAL HOU

Client Sample ID: SJRP-SB17-1-2-04202017

Lab Sample ID: 600-147046-5

Date Collected: 04/20/17 12:50

Matrix: Solid

Date Received: 04/21/17 10:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			211434	04/24/17 17:05	B1K	TAL HOU

Client Sample ID: SJRP-SB17-1-2-04202017

Lab Sample ID: 600-147046-5

Date Collected: 04/20/17 12:50

Matrix: Solid

Date Received: 04/21/17 10:09

Percent Solids: 94.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.153 g	5 mL	211402	04/21/17 14:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	211370	04/24/17 13:59	WS1	TAL HOU
Total/NA	Prep	5030B			5.12 g	5.0 mL	425109	04/26/17 09:37	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	425527	04/27/17 23:04	A1B	TAL NSH
Total/NA	Prep	3550C			25.17 g	1.00 mL	425163	04/26/17 10:25	MNM	TAL NSH
Total/NA	Analysis	8015C		1			425055	04/27/17 04:01	MDW	TAL NSH
Total/NA	Prep	3550C			25.17 g	1.00 mL	425163	04/26/17 10:25	MNM	TAL NSH
Total/NA	Analysis	8015C		1			425451	04/27/17 15:25	AK1	TAL NSH
Total/NA	Prep	3050B			1.06 g	50 mL	212161	05/03/17 14:09	JAH	TAL HOU
Total/NA	Analysis	6010B		1			212257	05/04/17 13:57	DCL	TAL HOU
Total/NA	Prep	3050B			1.06 g	50 mL	212161	05/03/17 14:09	JAH	TAL HOU
Total/NA	Analysis	6010B		5			212257	05/04/17 17:16	DCL	TAL HOU
Total/NA	Prep	7471A			.62 g	50 mL	211425	04/24/17 15:01	DDE	TAL HOU
Total/NA	Analysis	7471A		1			211513	04/25/17 12:36	DDE	TAL HOU

Client Sample ID: SJRP-TB-04192017

Lab Sample ID: 600-147046-6

Date Collected: 04/19/17 16:00

Matrix: Water

Date Received: 04/21/17 10:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	211844	04/29/17 15:18	KLV	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Client Sample ID: SJRP-EB-04202017 **Lab Sample ID: 600-147046-7**
Date Collected: 04/20/17 12:30 **Matrix: Water**
Date Received: 04/21/17 10:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	211844	04/29/17 16:19	KLV	TAL HOU
Total/NA	Analysis	8015C		1	5 mL	5 mL	425762	04/28/17 22:55	FKG	TAL NSH
Total/NA	Prep	3510C			235 mL	1 mL	425403	04/27/17 07:19	KB	TAL NSH
Total/NA	Analysis	8015C		1			425453	04/27/17 15:55	AK1	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	211954	05/01/17 19:44	JAH	TAL HOU
Total/NA	Analysis	6010B		1			212039	05/02/17 16:43	DCL	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	211954	05/01/17 19:44	JAH	TAL HOU
Total/NA	Analysis	6010B		1			212162	05/03/17 14:26	DCL	TAL HOU
Total/NA	Prep	7470A			40 mL	40 mL	211371	04/24/17 08:31	DDE	TAL HOU
Total/NA	Analysis	7470A		1			211404	04/24/17 12:53	DDE	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Site Characterization

TestAmerica Job ID: 600-147046-1

Laboratory: TestAmerica Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	16-046-0	08-04-17
Louisiana	NELAP	6	01967	06-30-17
Oklahoma	State Program	6	2015-050	08-31-17
Texas	NELAP	6	T104704223-17-21	10-31-17
USDA	Federal		P330-14-00192	06-06-17

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	A2LA		NA: NELAP & A2LA	12-31-17
A2LA	ISO/IEC 17025		0453.07	12-31-17
Alaska (UST)	State Program	10	UST-087	09-01-17
Arizona	State Program	9	AZ0473	05-05-17 *
Arkansas DEQ	State Program	6	88-0737	04-25-18
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-17
Florida	NELAP	4	E87358	06-30-17
Georgia	State Program	4	N/A	12-31-17
Illinois	NELAP	5	200010	12-09-17
Iowa	State Program	7	131	04-01-18
Kansas	NELAP	7	E-10229	10-31-17
Kentucky (UST)	State Program	4	19	06-30-17
Kentucky (WW)	State Program	4	90038	12-31-17
Louisiana	NELAP	6	30613	06-30-17
Maine	State Program	1	TN00032	11-03-17
Maryland	State Program	3	316	03-31-18
Massachusetts	State Program	1	M-TN032	06-30-17
Minnesota	NELAP	5	047-999-345	12-31-17
Mississippi	State Program	4	N/A	06-30-17
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-17
New Hampshire	NELAP	1	2963	10-09-17
New Jersey	NELAP	2	TN965	06-30-17
New York	NELAP	2	11342	03-31-18
North Carolina (WW/SW)	State Program	4	387	12-31-17
North Dakota	State Program	8	R-146	06-30-17
Ohio VAP	State Program	5	CL0033	07-10-17
Oklahoma	State Program	6	9412	08-31-17
Oregon	NELAP	10	TN200001	04-27-17 *
Pennsylvania	NELAP	3	68-00585	06-30-17
Rhode Island	State Program	1	LAO00268	12-30-17
South Carolina	State Program	4	84009 (001)	02-28-18
South Carolina (Do Not Use - DW)	State Program	4	84009 (002)	12-16-17
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-17
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-17
Virginia	NELAP	3	460152	06-14-17
Washington	State Program	10	C789	07-19-17

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc. TestAmerica Job ID: 600-147046-1
Project/Site: San Juan Site Characterization

Laboratory: TestAmerica Nashville (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
West Virginia DEP	State Program	3	219	02-28-18
Wisconsin	State Program	5	998020430	08-31-17
Wyoming (UST)	A2LA	8	453.07	12-31-17

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Katherine Moutakis	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-52002-15345.10
Client Contact: Jeffrey Minchak	Phone: 9043866573	E-Mail: cathy.upton@testamericainc.com		Page: Page 10 of 10
Company: CH2M Hill, Inc.				Job #:
Address: 3721 Rutledge Rd. NE Suite B-1	Due Date Requested:			
City: Albuquerque	TAT Requested (days):			
State, Zip: NM, 87109				
Phone: 281-721-8546(Tel)	PO #: Purchase Order Requested			
Email: Jeffrey.Minchak@ch2m.com	WO #: WD225383			
Project Name: Kinder Morgan Bloomfield, NM San Juan	Project #: 60005961-Analysis group BTEX/GRO/DRO/Metals			
Site: San Juan Site Characterization	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
Other:

600-147046 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO - Diesel and Oil Range Organics	8015C_GRO - GRO Range (C6-C10)	6010B, 7471A - NMWQCC List Metals	8260B - 5035 BTEX	Moisture	Waters	6010B, 7470A - NMWQCC List Metals	8260B_LL - BTEX Only	8015C_GRO - GRO Range (C6-C10)	8015C_DRO - Diesel and Oil Range Organics	Total Number of containers	Special Ins
			Preservation Code:				N	N	N	N	N		D	A	A	N		
SJRP-MW4-1-2-04192017	4/19/17	1500	G	Solid	N	N												
SJRP-SB03-1-2-04202017	4/20/17	915	G	Solid	N	N												
SJRP-SB03-1-2-04202017	4/20/17	915	G	Solid	N	N												2 coolers-
SJRP-SB11-1-2-04202017	4/20/17	1130	G	Solid	N	Y												
SJRP-SB11-1-2-04202017MS	4/20/17	1130	G	Solid	N	Y												COC in
SJRP-SB11-1-2-04202017MSD	4/20/17	1130	G	Solid	N	Y												Cooler 1
SJRP-SB17-1-2-04202017	4/20/17	1250	G	Solid	N	N												
			G	Solid														
			G	Solid														
SJRP-TB-04192017-2	4/19/17	1600	G	Solid	N	N												
SJRP-EB-04202017	4/20/17	1230	G	Water	N	N												

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☑ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature] CH2M	4/20/17 1630		Sherry Justus	4/21/17 1004	JAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Loc: 600
147046

TestAmerica Houston

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Receipt

Date/Time Received: '17 APR 21 10:09

JOB NUMBER: _____ CLIENT: CH2M

UNPACKED BY: _____ CARRIER/DRIVER: Fed Ex

Custody Seal Present: ☑ YES ☐ NO Number of Coolers Received: 2

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Them CF	Corrected Temp (°C)
G/W	Y / N	Y / N	0.4	675	-0.2	0.2
G/W	Y / N	Y / N	0.6	675	-0.2	0.4
~~Y / N~~	~~Y / N~~					
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	~~Y / N~~				
	~~Y / N~~	Y / N	SJ	4/21/17		
	~~Y / N~~	~~Y / N~~				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☑ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☐ YES ☐ NO

pH paper Lot #_____

VOA headspace acceptable (5-6mm): ☒ YES ☐ NO ☐ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?		

COMMENTS: Frozen 4-21-17 @ 14:30

FedEx
TRK# 0221 7304 4481 5923

4/21/17

HS-SA-WI-013 Rev. 3; 07/01/2014

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

600-147046 Chain of Custody

Cooler Received/Opened On 4/25/2017 @ 0930

Time Samples Removed From Cooler 1750 Time Samples Placed In Storage 1847 (2 Hour Window)

1. Tracking # 0937 (last 4 digits, FedEx) Courier: _FedEx_

IR Gun ID_160406069_ pH Strip Lot NA Chlorine Strip Lot NA

2. Temperature of rep. sample or temp blank when opened: 2.1 Degrees Celsius

3. If Item #2 temperatures is 0°C or less, was the representative sample or temp blank frozen? YES NO..NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: NA

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) _____

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA HKG 4/25/17

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (initial) HKG

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) HKG

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) HKG

I certify that I attached a label with the unique LIMS number to each container (initial) HKG

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 12/15/15

Page 862 of 1581

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Loc: 600
147046

testAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Upton, Cathy L	IC No: 00-26579.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: cathy.upton@testamericainc.com	State of Origin: New Mexico
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):	Page: Page 1 of 1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 5/3/2017		Job #: 600-147046-1
City: Nashville	TAT Requested (days):		
State, Zip: TN, 37204			
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:		
Email:	WO #:		
Project Name: San Juan Site Characterization	Project #: 60005961		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO/3550C DRO/ORO	8015C_GRO/5030B_H Standard GRO Range (C6-C10)	8015C_GRO/5030B GRO Range (C6-C10)	8015C_DRO/3510C_LVI DRO/ORO	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
SJRP-MW14-1-2-04192017 (600-147046-1)	4/19/17	15:00 Mountain		Solid			X	X			2	
SJRP-SB03-1-2-04202017 (600-147046-2)	4/20/17	09:15 Mountain		Solid			X	X			2	
SJRP-SB03-1-2-04202017 (600-147046-3)	4/20/17	09:15 Mountain		Solid			X	X			2	
SJRP-SB11-1-2-04202017 (600-147046-4)	4/20/17	11:30 Mountain		Solid			X	X			2	
SJRP-SB11-1-2-04202017 (600-147046-4MS)	4/20/17	11:30 Mountain	MS	Solid			X	X			2	
SJRP-SB11-1-2-04202017 (600-147046-4MSD)	4/20/17	11:30 Mountain	MSD	Solid			X	X			2	
SJRP-SB17-1-2-04202017 (600-147046-5)	4/20/17	12:50 Mountain		Solid			X	X			2	
SJRP-EB-04202017 (600-147046-7)	4/20/17	12:30 Mountain		Water					X	X	5	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 4/24/17 1645	Company	Received by: 2.1	Date/Time: 4/25/17 0930	Company TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Received by OCD: 11/13/2025 11:14:36 AM

Released to Imaging: 11/14/2025 9:30:04 AM

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc. Job Number: 600-147046-1

Login Number: 147046 **List Source: TestAmerica Houston**
List Number: 1
Creator: Crafton, Tommie S

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.2 0.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-147046-1

Login Number: 147046
List Number: 2
Creator: Gundi, Hozar K

List Source: TestAmerica Nashville
List Creation: 04/25/17 06:44 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-147046-1

Login Number: 147046
List Number: 3
Creator: Gundi, Hozar K

List Source: TestAmerica Nashville
List Creation: 04/25/17 06:45 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-150688-1
Client Project/Site: San Juan Waters 7/6/17
Revision: 1

For:
CH2M Hill Constructors, Inc.
14701 St. Mary's Lane
Suite 300
Houston, Texas 77079-2923

Attn: Mr. John Ynfante

Bethany McDaniel

Authorized for release by:
12/9/2020 8:26:35 PM
Bethany McDaniel, Senior Project Manager
(713)358-2005
Bethany.McDaniel@Eurofinset.com

Designee for

Cathy Upton, Project Manager I
(713)690-4444
cathy.upton@testamericainc.com

LINKS
Review your project results through TotalAccess
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

Laboratory Job ID: 600-150688-1

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Case Narrative

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

Job ID: 600-150688-1

Job ID: 600-150688-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-150688-1

Comments
This report was revised to a Level 2 deliverable per client's request.

The final report was revised on 8/9/17 to update the narrative and again to include the IC forms, replacing the final report generated on 7/25/17.

Receipt
The samples were received on 7/7/2017 9:51 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 5.2º C, 5.7º C and 5.8º C.

GC/MS VOA
Method(s) 8260B: The Bromofluorobenzene surrogate recovery for the following sample in analytical batch 600-216901 was outside control limits: SJRP-MW16-07062017 (600-150688-13). Evidence of matrix interference is present and the sample was re-analyzed at a dilution.

Method(s) 8260B: The following sample was diluted due to the nature of the sample matrix: SJRP-MW13-07062017 (600-150688-11). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following samples was diluted to bring the concentration of target analytes within the calibration range: SJRP-MW9-07062017 (600-150688-7), SJRP-MW9-07062017-2 (600-150688-8), SJRP-MW13-07062017 (600-150688-11) and SJRP-MW16-07062017 (600-150688-13). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA
Method(s) 8015C: The following sample(s) were collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory and corrective action was not possible: SJRP-MW8-07062017 (600-150688-6), SJRP-MW13-07062017 (600-150688-11) and SJRP-MW16-07062017 (600-150688-13).

Method(s) 8015C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 490-444861.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8015C: Surrogate recovery for the following samples was outside control limits: SJRP-MW8-07062017 (600-150688-6) and SJRP-MW13-07062017 (600-150688-11). Re-extraction and/or re-analysis was performed outside of holding time with acceptable results. The out of hold results were significantly higher than the original in hold results. Both sets of data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 6010B: The method blank for Prep Batch 216811 contained Dissolved Molybdenum, Dissolved Sodium and Dissolved Nickel above the method detection limit. These target analyte concentrations were less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 6010B: Due to the high concentration of Dissolved Calcium and Dissolved Sodium, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 600-216811 and analytical batch 600-217361 could not be evaluated for accuracy. The associated laboratory control sample (LCS) met acceptance criteria.

Method(s) 6010B: Due to the high concentration of target analytes, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 600-216811 and analytical batch 600-217361 could not be evaluated for accuracy. The associated laboratory control sample (LCS) met

Case Narrative

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

Job ID: 600-150688-1

Job ID: 600-150688-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

acceptance criteria.

Method(s) 6010B: The sample duplicate (DUP) precision for preparation batch 600-216811 and analytical batch 600-217361 was outside control limits for Dissolved Cobalt, Dissolved Manganese and Dissolved Molybdenum.

Method(s) 6010B: The following samples were diluted to bring the concentration of target analytes within the calibration range: SJRP-MW2-07062017 (600-150688-1), SJRP-MW4-07062017 (600-150688-2), SJRP-MW6-07062017 (600-150688-3), SJRP-MW6-07062017-MS (600-150688-3[MS]), SJRP-MW6-07062017-MSD (600-150688-3[MSD]), SJRP-MW8-07062017 (600-150688-6), SJRP-MW9-07062017 (600-150688-7), SJRP-MW9-07062017-2 (600-150688-8), SJRP-MW11-07062017 (600-150688-9), SJRP-MW12-07062017 (600-150688-10), SJRP-MW13-07062017 (600-150688-11), SJRP-MW14-07062017 (600-150688-12), SJRP-MW16-07062017 (600-150688-13), (600-150688-B-1-C DU), (600-150688-B-1-D MS) and (600-150688-B-1-E MSD). Elevated reporting limits (RLs) are provided.

Method(s) 7470A: The matrix spike (MS) recovery for analytical batch 600-217076 was outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
Method(s) 300.0: Due to the high concentration of chloride and sulfate, samples 600-150688-3 MS/MSD could not be evaluated for accuracy. The associated laboratory control sample (LCS) met acceptance criteria.

Method(s) 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 600-216665 were outside control limits for Nitrate. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 300.0: The following samples were diluted due to the nature of the sample matrix: SJRP-MW4-07062017 (600-150688-2), SJRP-MW8-07062017 (600-150688-6), SJRP-MW9-07062017 (600-150688-7), SJRP-MW9-07062017-2 (600-150688-8), SJRP-MW12-07062017 (600-150688-10), SJRP-MW13-07062017 (600-150688-11) and SJRP-MW16-07062017 (600-150688-13). Samples high in Sulfate. Elevated reporting limits (RLs) are provided.

Method(s) SM 2320B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 600-216902 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Industrial Hygiene
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Method Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL NSH
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL NSH
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2320B-1997	Alkalinity, Total - SM Online, 2011	SM-Online	TAL HOU
2540 C-1997	Total Dissolved Solids (Dried at 180 °C)	SM	TAL HOU

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SM-Online = Standard Methods Online

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-150688-1	SJRP-MW2-07062017	Water	07/06/17 08:10	07/07/17 09:51
600-150688-2	SJRP-MW4-07062017	Water	07/06/17 08:30	07/07/17 09:51
600-150688-3	SJRP-MW6-07062017	Water	07/06/17 09:00	07/07/17 09:51
600-150688-4	SJRP-TB01-07062017	Water	07/06/17 07:00	07/07/17 09:51
600-150688-5	SJRP-TB02-07062017	Water	07/06/17 07:00	07/07/17 09:51
600-150688-6	SJRP-MW8-07062017	Water	07/06/17 11:30	07/07/17 09:51
600-150688-7	SJRP-MW9-07062017	Water	07/06/17 12:00	07/07/17 09:51
600-150688-8	SJRP-MW9-07062017-2	Water	07/06/17 12:00	07/07/17 09:51
600-150688-9	SJRP-MW11-07062017	Water	07/06/17 13:00	07/07/17 09:51
600-150688-10	SJRP-MW12-07062017	Water	07/06/17 13:30	07/07/17 09:51
600-150688-11	SJRP-MW13-07062017	Water	07/06/17 14:00	07/07/17 09:51
600-150688-12	SJRP-MW14-07062017	Water	07/06/17 14:50	07/07/17 09:51
600-150688-13	SJRP-MW16-07062017	Water	07/06/17 15:30	07/07/17 09:51

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Client Sample ID: SJRP-MW2-07062017
Date Collected: 07/06/17 08:10
Date Received: 07/07/17 09:51

Lab Sample ID: 600-150688-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			07/12/17 15:29	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			07/12/17 15:29	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			07/12/17 15:29	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			07/12/17 15:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*50 - 134*		*07/12/17 15:29*	*1*
Dibromofluoromethane	*93*		*62 - 130*		*07/12/17 15:29*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*07/12/17 15:29*	*1*
4-Bromofluorobenzene	*92*		*67 - 139*		*07/12/17 15:29*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**10.7**		2.00	0.251	mg/L			07/07/17 18:49	10
Chloride	**238**		4.00	0.534	mg/L			07/07/17 18:49	10
Nitrate Nitrite as N	**10.7**		2.00	0.251	mg/L			07/07/17 18:49	10
Nitrite as N	0.297	U	2.00	0.297	mg/L			07/07/17 18:49	10
Sulfate	**2960**		125	23.9	mg/L			07/14/17 21:49	250

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Aluminum	0.0926	U	0.500	0.0926	mg/L		07/10/17 18:17	07/18/17 13:04	1
Dissolved Arsenic	0.00285	U	0.0100	0.00285	mg/L		07/10/17 18:17	07/18/17 13:04	1
Dissolved Barium	**0.0107**	**J**	0.0200	0.000530	mg/L		07/10/17 18:17	07/18/17 13:04	1
Dissolved Boron	**0.580**		0.200	0.0116	mg/L		07/10/17 18:17	07/18/17 13:04	1
Dissolved Cadmium	0.000280	U	0.00500	0.000280	mg/L		07/10/17 18:17	07/18/17 13:04	1
Dissolved Calcium	**267**		1.00	0.0240	mg/L		07/10/17 18:17	07/18/17 13:04	1
Dissolved Chromium	**0.00200**	**J**	0.0100	0.00159	mg/L		07/10/17 18:17	07/18/17 13:04	1
Dissolved Cobalt	**0.000487**	**J**	0.0100	0.000310	mg/L		07/10/17 18:17	07/18/17 13:04	1
Dissolved Iron	0.0270	U	0.400	0.0270	mg/L		07/10/17 18:17	07/18/17 13:04	1
Dissolved Lead	0.00219	U	0.0100	0.00219	mg/L		07/10/17 18:17	07/18/17 13:04	1
Dissolved Magnesium	**82.2**		1.00	0.0555	mg/L		07/10/17 18:17	07/18/17 13:04	1
Dissolved Manganese	**0.00118**	**J**	0.0100	0.000360	mg/L		07/10/17 18:17	07/18/17 13:04	1
Dissolved Molybdenum	**0.00487**	**J B**	0.0100	0.000540	mg/L		07/10/17 18:17	07/18/17 13:04	1
Dissolved Nickel	**0.000966**	**J B**	0.0100	0.000800	mg/L		07/10/17 18:17	07/18/17 13:04	1
Dissolved Potassium	**3.09**		1.00	0.0374	mg/L		07/10/17 18:17	07/18/17 13:04	1
Dissolved Selenium	**0.112**		0.0400	0.00287	mg/L		07/10/17 18:17	07/18/17 13:04	1
Dissolved Sodium	**1080**	**B**	10.0	0.214	mg/L		07/10/17 18:17	07/20/17 13:24	10

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury (Dissolved)	0.0000820	U	0.000200	0.0000820	mg/L		07/10/17 07:07	07/10/17 10:50	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**181**		20.0	20.0	mg/L			07/11/17 13:20	1
Bicarbonate Alkalinity as CaCO3	**181**		20.0	20.0	mg/L			07/11/17 13:20	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			07/11/17 13:20	1
Total Dissolved Solids	**4760**		40.0	40.0	mg/L			07/11/17 09:51	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Client Sample ID: SJRP-MW4-07062017
Date Collected: 07/06/17 08:30
Date Received: 07/07/17 09:51

Lab Sample ID: 600-150688-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			07/12/17 14:59	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			07/12/17 14:59	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			07/12/17 14:59	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			07/12/17 14:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*50 - 134*		*07/12/17 14:59*	*1*
Dibromofluoromethane	*89*		*62 - 130*		*07/12/17 14:59*	*1*
Toluene-d8 (Surr)	*90*		*70 - 130*		*07/12/17 14:59*	*1*
4-Bromofluorobenzene	*89*		*67 - 139*		*07/12/17 14:59*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**1.23**	**J**	2.00	0.251	mg/L			07/07/17 19:09	10
Chloride	**379**		4.00	0.534	mg/L			07/07/17 19:09	10
Nitrate Nitrite as N	**1.23**	**J**	2.00	0.251	mg/L			07/07/17 19:09	10
Nitrite as N	0.297	U	2.00	0.297	mg/L			07/07/17 19:09	10
Sulfate	**2520**		125	23.9	mg/L			07/14/17 22:07	250

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Aluminum	0.0926	U	0.500	0.0926	mg/L		07/10/17 18:17	07/18/17 13:16	1
Dissolved Arsenic	**0.00287**	**J**	0.0100	0.00285	mg/L		07/10/17 18:17	07/18/17 13:16	1
Dissolved Barium	**0.00916**	**J**	0.0200	0.000530	mg/L		07/10/17 18:17	07/18/17 13:16	1
Dissolved Boron	**0.870**		0.200	0.0116	mg/L		07/10/17 18:17	07/18/17 13:16	1
Dissolved Cadmium	0.000280	U	0.00500	0.000280	mg/L		07/10/17 18:17	07/18/17 13:16	1
Dissolved Calcium	**274**		1.00	0.0240	mg/L		07/10/17 18:17	07/18/17 13:16	1
Dissolved Chromium	0.00159	U	0.0100	0.00159	mg/L		07/10/17 18:17	07/18/17 13:16	1
Dissolved Cobalt	**0.0448**		0.0100	0.000310	mg/L		07/10/17 18:17	07/18/17 13:16	1
Dissolved Iron	**3.84**		0.400	0.0270	mg/L		07/10/17 18:17	07/18/17 13:16	1
Dissolved Lead	0.00219	U	0.0100	0.00219	mg/L		07/10/17 18:17	07/18/17 13:16	1
Dissolved Magnesium	**118**		1.00	0.0555	mg/L		07/10/17 18:17	07/18/17 13:16	1
Dissolved Manganese	**5.28**		0.0100	0.000360	mg/L		07/10/17 18:17	07/18/17 13:16	1
Dissolved Molybdenum	**0.00362**	**J B**	0.0100	0.000540	mg/L		07/10/17 18:17	07/18/17 13:16	1
Dissolved Nickel	**0.190**	**B**	0.0100	0.000800	mg/L		07/10/17 18:17	07/18/17 13:16	1
Dissolved Potassium	**5.99**		1.00	0.0374	mg/L		07/10/17 18:17	07/18/17 13:16	1
Dissolved Selenium	0.00287	U	0.0400	0.00287	mg/L		07/10/17 18:17	07/18/17 13:16	1
Dissolved Sodium	**1170**	**B**	10.0	0.214	mg/L		07/10/17 18:17	07/20/17 12:44	10

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury (Dissolved)	0.0000820	U	0.000200	0.0000820	mg/L		07/10/17 07:07	07/10/17 10:52	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**744**		20.0	20.0	mg/L			07/11/17 13:32	1
Bicarbonate Alkalinity as CaCO3	**744**		20.0	20.0	mg/L			07/11/17 13:32	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			07/11/17 13:32	1
Total Dissolved Solids	**5110**		40.0	40.0	mg/L			07/11/17 09:51	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Client Sample ID: SJRP-MW6-07062017
Date Collected: 07/06/17 09:00
Date Received: 07/07/17 09:51

Lab Sample ID: 600-150688-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			07/12/17 06:16	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			07/12/17 06:16	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			07/12/17 06:16	1
Xylenes, Total	**0.000585**	**J**	0.00200	0.000366	mg/L			07/12/17 06:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*50 - 134*		*07/12/17 06:16*	*1*
Dibromofluoromethane	*89*		*62 - 130*		*07/12/17 06:16*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*07/12/17 06:16*	*1*
4-Bromofluorobenzene	*103*		*67 - 139*		*07/12/17 06:16*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			07/13/17 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*99*		*50 - 150*		*07/13/17 18:05*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**0.179**		0.109	0.0989	mg/L		07/13/17 09:20	07/14/17 12:17	1
ORO C24-C40	0.0989	U	0.109	0.0989	mg/L		07/13/17 09:20	07/15/17 18:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*107*		*50 - 150*	*07/13/17 09:20*	*07/14/17 12:17*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**63.6**	**F1**	4.00	0.502	mg/L			07/07/17 19:49	20
Chloride	**938**		400	53.4	mg/L			07/14/17 22:26	1000
Nitrate Nitrite as N	**63.6**		4.00	0.502	mg/L			07/07/17 19:49	20
Nitrite as N	0.594	U	4.00	0.594	mg/L			07/07/17 19:49	20
Sulfate	**9980**		500	95.7	mg/L			07/14/17 22:26	1000

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Aluminum	**14.6**		0.500	0.0926	mg/L		07/10/17 18:17	07/18/17 13:18	1
Dissolved Arsenic	0.00285	U	0.0100	0.00285	mg/L		07/10/17 18:17	07/18/17 13:18	1
Dissolved Barium	**0.00722**	**J**	0.0200	0.000530	mg/L		07/10/17 18:17	07/18/17 13:18	1
Dissolved Boron	**0.851**		0.200	0.0116	mg/L		07/10/17 18:17	07/18/17 13:18	1
Dissolved Cadmium	**0.00887**		0.00500	0.000280	mg/L		07/10/17 18:17	07/18/17 13:18	1
Dissolved Calcium	**336**		1.00	0.0240	mg/L		07/10/17 18:17	07/18/17 13:18	1
Dissolved Chromium	0.00159	U	0.0100	0.00159	mg/L		07/10/17 18:17	07/18/17 13:18	1
Dissolved Cobalt	**0.192**		0.0100	0.000310	mg/L		07/10/17 18:17	07/18/17 13:18	1
Dissolved Iron	0.0270	U	0.400	0.0270	mg/L		07/10/17 18:17	07/18/17 13:18	1
Dissolved Lead	0.00219	U	0.0100	0.00219	mg/L		07/10/17 18:17	07/18/17 13:18	1
Dissolved Magnesium	**299**		1.00	0.0555	mg/L		07/10/17 18:17	07/18/17 13:18	1
Dissolved Manganese	**6.54**		0.0100	0.000360	mg/L		07/10/17 18:17	07/18/17 13:18	1
Dissolved Molybdenum	**0.00141**	**J B**	0.0100	0.000540	mg/L		07/10/17 18:17	07/18/17 13:18	1
Dissolved Nickel	**0.228**	**B**	0.0100	0.000800	mg/L		07/10/17 18:17	07/18/17 13:18	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Client Sample ID: SJRP-MW6-07062017

Lab Sample ID: 600-150688-3
Date Collected: 07/06/17 09:00
Matrix: Water
Date Received: 07/07/17 09:51

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Potassium	**17.7**		1.00	0.0374	mg/L		07/10/17 18:17	07/18/17 13:18	1
Dissolved Selenium	**0.279**		0.0400	0.00287	mg/L		07/10/17 18:17	07/18/17 13:18	1
Dissolved Sodium	**3780**	**B**	50.0	1.07	mg/L		07/10/17 18:17	07/20/17 12:46	50

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury (Dissolved)	0.0000820	U	0.000200	0.0000820	mg/L		07/10/17 07:07	07/10/17 10:54	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	20.0	U F1	20.0	20.0	mg/L			07/11/17 12:45	1
Bicarbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			07/11/17 12:45	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			07/11/17 12:45	1
Total Dissolved Solids	**16400**		100	100	mg/L			07/11/17 09:51	1

Client Sample ID: SJRP-TB01-07062017

Lab Sample ID: 600-150688-4
Date Collected: 07/06/17 07:00
Matrix: Water
Date Received: 07/07/17 09:51

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			07/11/17 18:51	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			07/11/17 18:51	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			07/11/17 18:51	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			07/11/17 18:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*50 - 134*		*07/11/17 18:51*	*1*
Dibromofluoromethane	*89*		*62 - 130*		*07/11/17 18:51*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*07/11/17 18:51*	*1*
4-Bromofluorobenzene	*100*		*67 - 139*		*07/11/17 18:51*	*1*

Client Sample ID: SJRP-TB02-07062017

Lab Sample ID: 600-150688-5
Date Collected: 07/06/17 07:00
Matrix: Water
Date Received: 07/07/17 09:51

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			07/13/17 17:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*50 - 150*		*07/13/17 17:06*	*1*

Client Sample ID: SJRP-MW8-07062017

Lab Sample ID: 600-150688-6
Date Collected: 07/06/17 11:30
Matrix: Water
Date Received: 07/07/17 09:51

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.000814**	**J**	0.00100	0.000176	mg/L			07/11/17 19:17	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Client Sample ID: SJRP-MW8-07062017
Date Collected: 07/06/17 11:30
Date Received: 07/07/17 09:51

Lab Sample ID: 600-150688-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			07/11/17 19:17	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			07/11/17 19:17	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			07/11/17 19:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*50 - 134*		*07/11/17 19:17*	*1*
Dibromofluoromethane	*89*		*62 - 130*		*07/11/17 19:17*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*07/11/17 19:17*	*1*
4-Bromofluorobenzene	*100*		*67 - 139*		*07/11/17 19:17*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			07/13/17 20:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*82*		*50 - 150*		*07/13/17 20:04*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0989	U	0.109	0.0989	mg/L		07/13/17 09:20	07/14/17 13:03	1
ORO C24-C40	0.0989	U	0.109	0.0989	mg/L		07/13/17 09:20	07/14/17 13:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*19*	*X*	*50 - 150*	*07/13/17 09:20*	*07/14/17 13:03*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.251	U	2.00	0.251	mg/L			07/07/17 19:29	10
Chloride	**277**		4.00	0.534	mg/L			07/07/17 19:29	10
Nitrate Nitrite as N	0.251	U	2.00	0.251	mg/L			07/07/17 19:29	10
Nitrite as N	0.297	U	2.00	0.297	mg/L			07/07/17 19:29	10
Sulfate	**3060**		125	23.9	mg/L			07/14/17 22:44	250

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Aluminum	**0.381**	**J**	0.500	0.0926	mg/L		07/10/17 18:17	07/18/17 13:24	1
Dissolved Arsenic	0.00285	U	0.0100	0.00285	mg/L		07/10/17 18:17	07/18/17 13:24	1
Dissolved Barium	**0.0508**		0.0200	0.000530	mg/L		07/10/17 18:17	07/18/17 13:24	1
Dissolved Boron	**0.210**		0.200	0.0116	mg/L		07/10/17 18:17	07/18/17 13:24	1
Dissolved Cadmium	0.000280	U	0.00500	0.000280	mg/L		07/10/17 18:17	07/18/17 13:24	1
Dissolved Calcium	**87.7**		1.00	0.0240	mg/L		07/10/17 18:17	07/18/17 13:24	1
Dissolved Chromium	0.00159	U	0.0100	0.00159	mg/L		07/10/17 18:17	07/18/17 13:24	1
Dissolved Cobalt	**0.00126**	**J**	0.0100	0.000310	mg/L		07/10/17 18:17	07/18/17 13:24	1
Dissolved Iron	**6.81**		0.400	0.0270	mg/L		07/10/17 18:17	07/18/17 13:24	1
Dissolved Lead	0.00219	U	0.0100	0.00219	mg/L		07/10/17 18:17	07/18/17 13:24	1
Dissolved Magnesium	**71.5**		1.00	0.0555	mg/L		07/10/17 18:17	07/18/17 13:24	1
Dissolved Manganese	**0.924**		0.0100	0.000360	mg/L		07/10/17 18:17	07/18/17 13:24	1
Dissolved Molybdenum	**0.0188**	**B**	0.0100	0.000540	mg/L		07/10/17 18:17	07/18/17 13:24	1
Dissolved Nickel	**0.00233**	**J B**	0.0100	0.000800	mg/L		07/10/17 18:17	07/18/17 13:24	1
Dissolved Potassium	**20.9**		1.00	0.0374	mg/L		07/10/17 18:17	07/18/17 13:24	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Client Sample ID: SJRP-MW8-07062017

Lab Sample ID: 600-150688-6
Date Collected: 07/06/17 11:30
Matrix: Water
Date Received: 07/07/17 09:51

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Selenium	0.00287	U	0.0400	0.00287	mg/L		07/10/17 18:17	07/18/17 13:24	1
Dissolved Sodium	**2480**	**B**	20.0	0.428	mg/L		07/10/17 18:17	07/20/17 12:51	20

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury (Dissolved)	0.0000820	U	0.000200	0.0000820	mg/L		07/10/17 07:07	07/10/17 11:01	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**2650**		20.0	20.0	mg/L			07/14/17 14:23	1
Bicarbonate Alkalinity as CaCO3	**2650**		20.0	20.0	mg/L			07/14/17 14:23	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			07/14/17 14:23	1
Total Dissolved Solids	**8130**		100	100	mg/L			07/11/17 09:51	1

Client Sample ID: SJRP-MW9-07062017

Lab Sample ID: 600-150688-7
Date Collected: 07/06/17 12:00
Matrix: Water
Date Received: 07/07/17 09:51

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	**0.0429**		0.00100	0.000212	mg/L			07/11/17 19:43	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			07/11/17 19:43	1
Xylenes, Total	**0.0215**		0.00200	0.000366	mg/L			07/11/17 19:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*50 - 134*		*07/11/17 19:43*	*1*
Dibromofluoromethane	*90*		*62 - 130*		*07/11/17 19:43*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*07/11/17 19:43*	*1*
4-Bromofluorobenzene	*101*		*67 - 139*		*07/11/17 19:43*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.103**		0.0100	0.00176	mg/L			07/12/17 18:33	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*50 - 134*		*07/12/17 18:33*	*10*
Dibromofluoromethane	*95*		*62 - 130*		*07/12/17 18:33*	*10*
Toluene-d8 (Surr)	*93*		*70 - 130*		*07/12/17 18:33*	*10*
4-Bromofluorobenzene	*93*		*67 - 139*		*07/12/17 18:33*	*10*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	**0.638**		0.100	0.0500	mg/L			07/13/17 20:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*77*		*50 - 150*		*07/13/17 20:34*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**0.349**		0.104	0.0948	mg/L		07/13/17 09:20	07/14/17 13:19	1
ORO C24-C40	0.0948	U	0.104	0.0948	mg/L		07/13/17 09:20	07/15/17 19:15	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Client Sample ID: SJRP-MW9-07062017

Lab Sample ID: 600-150688-7
Date Collected: 07/06/17 12:00
Matrix: Water
Date Received: 07/07/17 09:51

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	102		50 - 150	07/13/17 09:20	07/14/17 13:19	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.502	U	4.00	0.502	mg/L			07/07/17 20:49	20
Chloride	**611**		8.00	1.07	mg/L			07/07/17 20:49	20
Nitrate Nitrite as N	0.502	U	4.00	0.502	mg/L			07/07/17 20:49	20
Nitrite as N	0.594	U	4.00	0.594	mg/L			07/07/17 20:49	20
Sulfate	**10900**		500	95.7	mg/L			07/14/17 23:39	1000

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Aluminum	**11.2**		0.500	0.0926	mg/L		07/10/17 18:17	07/18/17 13:26	1
Dissolved Arsenic	0.00285	U	0.0100	0.00285	mg/L		07/10/17 18:17	07/18/17 13:26	1
Dissolved Barium	**0.00978**	**J**	0.0200	0.000530	mg/L		07/10/17 18:17	07/18/17 13:26	1
Dissolved Boron	**0.821**		0.200	0.0116	mg/L		07/10/17 18:17	07/18/17 13:26	1
Dissolved Cadmium	**0.00597**		0.00500	0.000280	mg/L		07/10/17 18:17	07/18/17 13:26	1
Dissolved Calcium	**315**		1.00	0.0240	mg/L		07/10/17 18:17	07/18/17 13:26	1
Dissolved Chromium	0.00159	U	0.0100	0.00159	mg/L		07/10/17 18:17	07/18/17 13:26	1
Dissolved Cobalt	**0.227**		0.0100	0.000310	mg/L		07/10/17 18:17	07/18/17 13:26	1
Dissolved Iron	**33.6**		0.400	0.0270	mg/L		07/10/17 18:17	07/18/17 13:26	1
Dissolved Lead	0.00219	U	0.0100	0.00219	mg/L		07/10/17 18:17	07/18/17 13:26	1
Dissolved Magnesium	**212**		1.00	0.0555	mg/L		07/10/17 18:17	07/18/17 13:26	1
Dissolved Manganese	**6.59**		0.0100	0.000360	mg/L		07/10/17 18:17	07/18/17 13:26	1
Dissolved Molybdenum	**0.000606**	**J B**	0.0100	0.000540	mg/L		07/10/17 18:17	07/18/17 13:26	1
Dissolved Nickel	**0.338**	**B**	0.0100	0.000800	mg/L		07/10/17 18:17	07/18/17 13:26	1
Dissolved Potassium	**12.4**		1.00	0.0374	mg/L		07/10/17 18:17	07/18/17 13:26	1
Dissolved Selenium	0.00287	U	0.0400	0.00287	mg/L		07/10/17 18:17	07/18/17 13:26	1
Dissolved Sodium	**4270**	**B**	50.0	1.07	mg/L		07/10/17 18:17	07/20/17 12:53	50

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury (Dissolved)	0.0000820	U F1	0.000200	0.0000820	mg/L		07/11/17 07:26	07/13/17 09:49	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	20.0	U	20.0	20.0	mg/L			07/11/17 14:12	1
Bicarbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			07/11/17 14:12	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			07/11/17 14:12	1
Total Dissolved Solids	**16600**		100	100	mg/L			07/11/17 09:51	1

Client Sample ID: SJRP-MW9-07062017-2

Lab Sample ID: 600-150688-8
Date Collected: 07/06/17 12:00
Matrix: Water
Date Received: 07/07/17 09:51

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	**0.0444**		0.00100	0.000212	mg/L			07/11/17 20:09	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			07/11/17 20:09	1
Xylenes, Total	**0.0217**		0.00200	0.000366	mg/L			07/11/17 20:09	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Client Sample ID: SJRP-MW9-07062017-2
Date Collected: 07/06/17 12:00
Date Received: 07/07/17 09:51

Lab Sample ID: 600-150688-8
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*50 - 134*		*07/11/17 20:09*	*1*
Dibromofluoromethane	*91*		*62 - 130*		*07/11/17 20:09*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*07/11/17 20:09*	*1*
4-Bromofluorobenzene	*101*		*67 - 139*		*07/11/17 20:09*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.101**		0.0100	0.00176	mg/L			07/12/17 19:04	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*50 - 134*		*07/12/17 19:04*	*10*
Dibromofluoromethane	*96*		*62 - 130*		*07/12/17 19:04*	*10*
Toluene-d8 (Surr)	*94*		*70 - 130*		*07/12/17 19:04*	*10*
4-Bromofluorobenzene	*93*		*67 - 139*		*07/12/17 19:04*	*10*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	**0.587**		0.100	0.0500	mg/L			07/13/17 21:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*76*		*50 - 150*		*07/13/17 21:04*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**0.348**		0.100	0.0910	mg/L		07/13/17 09:20	07/14/17 13:35	1
ORO C24-C40	0.0910	U	0.100	0.0910	mg/L		07/13/17 09:20	07/15/17 19:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*105*		*50 - 150*	*07/13/17 09:20*	*07/14/17 13:35*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.502	U	4.00	0.502	mg/L			07/07/17 22:29	20
Chloride	**574**		8.00	1.07	mg/L			07/07/17 22:29	20
Nitrate Nitrite as N	0.502	U	4.00	0.502	mg/L			07/07/17 22:29	20
Nitrite as N	0.594	U	4.00	0.594	mg/L			07/07/17 22:29	20
Sulfate	**11400**		500	95.7	mg/L			07/14/17 23:58	1000

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Aluminum	**11.3**		0.500	0.0926	mg/L		07/10/17 18:17	07/18/17 13:28	1
Dissolved Arsenic	0.00285	U	0.0100	0.00285	mg/L		07/10/17 18:17	07/18/17 13:28	1
Dissolved Barium	**0.00973**	**J**	0.0200	0.000530	mg/L		07/10/17 18:17	07/18/17 13:28	1
Dissolved Boron	**0.811**		0.200	0.0116	mg/L		07/10/17 18:17	07/18/17 13:28	1
Dissolved Cadmium	**0.00577**		0.00500	0.000280	mg/L		07/10/17 18:17	07/18/17 13:28	1
Dissolved Calcium	**316**		1.00	0.0240	mg/L		07/10/17 18:17	07/18/17 13:28	1
Dissolved Chromium	0.00159	U	0.0100	0.00159	mg/L		07/10/17 18:17	07/18/17 13:28	1
Dissolved Cobalt	**0.232**		0.0100	0.000310	mg/L		07/10/17 18:17	07/18/17 13:28	1
Dissolved Iron	**31.6**		0.400	0.0270	mg/L		07/10/17 18:17	07/18/17 13:28	1
Dissolved Lead	0.00219	U	0.0100	0.00219	mg/L		07/10/17 18:17	07/18/17 13:28	1
Dissolved Magnesium	**212**		1.00	0.0555	mg/L		07/10/17 18:17	07/18/17 13:28	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Client Sample ID: SJRP-MW9-07062017-2

Lab Sample ID: 600-150688-8
Date Collected: 07/06/17 12:00
Matrix: Water
Date Received: 07/07/17 09:51

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Manganese	**6.62**		0.0100	0.000360	mg/L		07/10/17 18:17	07/18/17 13:28	1
Dissolved Molybdenum	0.000540	U	0.0100	0.000540	mg/L		07/10/17 18:17	07/18/17 13:28	1
Dissolved Nickel	**0.344**	**B**	0.0100	0.000800	mg/L		07/10/17 18:17	07/18/17 13:28	1
Dissolved Potassium	**11.9**		1.00	0.0374	mg/L		07/10/17 18:17	07/18/17 13:28	1
Dissolved Selenium	0.00287	U	0.0400	0.00287	mg/L		07/10/17 18:17	07/18/17 13:28	1
Dissolved Sodium	**4240**	**B**	50.0	1.07	mg/L		07/10/17 18:17	07/20/17 12:55	50

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury (Dissolved)	0.0000820	U	0.000200	0.0000820	mg/L		07/11/17 07:26	07/13/17 09:54	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	20.0	U	20.0	20.0	mg/L			07/11/17 14:15	1
Bicarbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			07/11/17 14:15	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			07/11/17 14:15	1
Total Dissolved Solids	**16600**		100	100	mg/L			07/11/17 09:51	1

Client Sample ID: SJRP-MW11-07062017

Lab Sample ID: 600-150688-9
Date Collected: 07/06/17 13:00
Matrix: Water
Date Received: 07/07/17 09:51

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			07/11/17 20:35	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			07/11/17 20:35	1
Toluene	**0.000309**	**J**	0.00100	0.000198	mg/L			07/11/17 20:35	1
Xylenes, Total	**0.000913**	**J**	0.00200	0.000366	mg/L			07/11/17 20:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*50 - 134*		*07/11/17 20:35*	*1*
Dibromofluoromethane	*88*		*62 - 130*		*07/11/17 20:35*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*07/11/17 20:35*	*1*
4-Bromofluorobenzene	*101*		*67 - 139*		*07/11/17 20:35*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			07/13/17 21:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*75*		*50 - 150*		*07/13/17 21:34*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**0.129**		0.114	0.103	mg/L		07/13/17 09:20	07/14/17 13:50	1
ORO C24-C40	**0.229**		0.114	0.103	mg/L		07/13/17 09:20	07/15/17 19:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*85*		*50 - 150*	*07/13/17 09:20*	*07/14/17 13:50*	*1*

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Client Sample ID: SJRP-MW11-07062017

Lab Sample ID: 600-150688-9
Date Collected: 07/06/17 13:00
Matrix: Water
Date Received: 07/07/17 09:51

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**4.65**		2.00	0.251	mg/L			07/07/17 22:49	10
Chloride	**197**		4.00	0.534	mg/L			07/07/17 22:49	10
Nitrate Nitrite as N	**4.65**		2.00	0.251	mg/L			07/07/17 22:49	10
Nitrite as N	0.297	U	2.00	0.297	mg/L			07/07/17 22:49	10
Sulfate	**4390**		125	23.9	mg/L			07/15/17 00:53	250

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Aluminum	0.0926	U	0.500	0.0926	mg/L		07/10/17 18:17	07/18/17 13:33	1
Dissolved Arsenic	0.00285	U	0.0100	0.00285	mg/L		07/10/17 18:17	07/18/17 13:33	1
Dissolved Barium	**0.0183**	**J**	0.0200	0.000530	mg/L		07/10/17 18:17	07/18/17 13:33	1
Dissolved Boron	**0.375**		0.200	0.0116	mg/L		07/10/17 18:17	07/18/17 13:33	1
Dissolved Cadmium	0.000280	U	0.00500	0.000280	mg/L		07/10/17 18:17	07/18/17 13:33	1
Dissolved Calcium	**452**		1.00	0.0240	mg/L		07/10/17 18:17	07/18/17 13:33	1
Dissolved Chromium	0.00159	U	0.0100	0.00159	mg/L		07/10/17 18:17	07/18/17 13:33	1
Dissolved Cobalt	**0.00393**	**J**	0.0100	0.000310	mg/L		07/10/17 18:17	07/18/17 13:33	1
Dissolved Iron	0.0270	U	0.400	0.0270	mg/L		07/10/17 18:17	07/18/17 13:33	1
Dissolved Lead	0.00219	U	0.0100	0.00219	mg/L		07/10/17 18:17	07/18/17 13:33	1
Dissolved Magnesium	**136**		1.00	0.0555	mg/L		07/10/17 18:17	07/18/17 13:33	1
Dissolved Manganese	**1.23**		0.0100	0.000360	mg/L		07/10/17 18:17	07/18/17 13:33	1
Dissolved Molybdenum	**0.00154**	**J B**	0.0100	0.000540	mg/L		07/10/17 18:17	07/18/17 13:33	1
Dissolved Nickel	**0.0120**	**B**	0.0100	0.000800	mg/L		07/10/17 18:17	07/18/17 13:33	1
Dissolved Potassium	**10.4**		1.00	0.0374	mg/L		07/10/17 18:17	07/18/17 13:33	1
Dissolved Selenium	0.00287	U	0.0400	0.00287	mg/L		07/10/17 18:17	07/18/17 13:33	1
Dissolved Sodium	**1540**	**B**	10.0	0.214	mg/L		07/10/17 18:17	07/20/17 12:57	10

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury (Dissolved)	0.0000820	U	0.000200	0.0000820	mg/L		07/11/17 07:26	07/13/17 09:56	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**591**		20.0	20.0	mg/L			07/11/17 14:24	1
Bicarbonate Alkalinity as CaCO3	**591**		20.0	20.0	mg/L			07/11/17 14:24	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			07/11/17 14:24	1
Total Dissolved Solids	**7130**		40.0	40.0	mg/L			07/11/17 09:51	1

Client Sample ID: SJRP-MW12-07062017

Lab Sample ID: 600-150688-10
Date Collected: 07/06/17 13:30
Matrix: Water
Date Received: 07/07/17 09:51

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.000647**	**J**	0.00100	0.000176	mg/L			07/11/17 21:00	1
Ethylbenzene	**0.000602**	**J**	0.00100	0.000212	mg/L			07/11/17 21:00	1
Toluene	**0.000426**	**J**	0.00100	0.000198	mg/L			07/11/17 21:00	1
Xylenes, Total	**0.00268**		0.00200	0.000366	mg/L			07/11/17 21:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*50 - 134*		*07/11/17 21:00*	*1*
Dibromofluoromethane	*89*		*62 - 130*		*07/11/17 21:00*	*1*

TestAmerica Houston

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Client Sample ID: SJRP-MW12-07062017
Date Collected: 07/06/17 13:30
Date Received: 07/07/17 09:51

Lab Sample ID: 600-150688-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*70 - 130*		*07/11/17 21:00*	*1*
4-Bromofluorobenzene	*103*		*67 - 139*		*07/11/17 21:00*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	**0.748**		0.100	0.0500	mg/L			07/13/17 22:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*56*		*50 - 150*		*07/13/17 22:03*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**0.267**		0.109	0.0989	mg/L		07/13/17 09:20	07/14/17 14:06	1
ORO C24-C40	0.0989	U	0.109	0.0989	mg/L		07/13/17 09:20	07/15/17 20:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*100*		*50 - 150*	*07/13/17 09:20*	*07/14/17 14:06*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.251	U	2.00	0.251	mg/L			07/07/17 23:09	10
Chloride	**406**		100	13.4	mg/L			07/15/17 01:11	250
Nitrate Nitrite as N	0.251	U	2.00	0.251	mg/L			07/07/17 23:09	10
Nitrite as N	0.297	U	2.00	0.297	mg/L			07/07/17 23:09	10
Sulfate	**3230**		125	23.9	mg/L			07/15/17 01:11	250

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Aluminum	0.0926	U	0.500	0.0926	mg/L		07/10/17 18:17	07/18/17 13:35	1
Dissolved Arsenic	0.00285	U	0.0100	0.00285	mg/L		07/10/17 18:17	07/18/17 13:35	1
Dissolved Barium	**0.0194**	**J**	0.0200	0.000530	mg/L		07/10/17 18:17	07/18/17 13:35	1
Dissolved Boron	**0.400**		0.200	0.0116	mg/L		07/10/17 18:17	07/18/17 13:35	1
Dissolved Cadmium	0.000280	U	0.00500	0.000280	mg/L		07/10/17 18:17	07/18/17 13:35	1
Dissolved Calcium	**461**		1.00	0.0240	mg/L		07/10/17 18:17	07/18/17 13:35	1
Dissolved Chromium	0.00159	U	0.0100	0.00159	mg/L		07/10/17 18:17	07/18/17 13:35	1
Dissolved Cobalt	**0.0301**		0.0100	0.000310	mg/L		07/10/17 18:17	07/18/17 13:35	1
Dissolved Iron	**3.15**		0.400	0.0270	mg/L		07/10/17 18:17	07/18/17 13:35	1
Dissolved Lead	0.00219	U	0.0100	0.00219	mg/L		07/10/17 18:17	07/18/17 13:35	1
Dissolved Magnesium	**107**		1.00	0.0555	mg/L		07/10/17 18:17	07/18/17 13:35	1
Dissolved Manganese	**5.94**		0.0100	0.000360	mg/L		07/10/17 18:17	07/18/17 13:35	1
Dissolved Molybdenum	**0.00118**	**J B**	0.0100	0.000540	mg/L		07/10/17 18:17	07/18/17 13:35	1
Dissolved Nickel	**0.0243**	**B**	0.0100	0.000800	mg/L		07/10/17 18:17	07/18/17 13:35	1
Dissolved Potassium	**12.7**		1.00	0.0374	mg/L		07/10/17 18:17	07/18/17 13:35	1
Dissolved Selenium	0.00287	U	0.0400	0.00287	mg/L		07/10/17 18:17	07/18/17 13:35	1
Dissolved Sodium	**1260**	**B**	10.0	0.214	mg/L		07/10/17 18:17	07/20/17 12:59	10

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury (Dissolved)	0.0000820	U	0.000200	0.0000820	mg/L		07/11/17 07:26	07/13/17 09:58	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Client Sample ID: SJRP-MW12-07062017

Lab Sample ID: 600-150688-10
Date Collected: 07/06/17 13:30
Matrix: Water
Date Received: 07/07/17 09:51

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**687**		20.0	20.0	mg/L			07/11/17 14:36	1
Bicarbonate Alkalinity as CaCO3	**687**		20.0	20.0	mg/L			07/11/17 14:36	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			07/11/17 14:36	1
Total Dissolved Solids	**6210**		40.0	40.0	mg/L			07/11/17 09:51	1

Client Sample ID: SJRP-MW13-07062017

Lab Sample ID: 600-150688-11
Date Collected: 07/06/17 14:00
Matrix: Water
Date Received: 07/07/17 09:51

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	**0.664**		0.0200	0.00424	mg/L			07/11/17 21:26	20
Toluene	**0.137**		0.0200	0.00396	mg/L			07/11/17 21:26	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*50 - 134*		*07/11/17 21:26*	*20*
Dibromofluoromethane	*89*		*62 - 130*		*07/11/17 21:26*	*20*
Toluene-d8 (Surr)	*95*		*70 - 130*		*07/11/17 21:26*	*20*
4-Bromofluorobenzene	*101*		*67 - 139*		*07/11/17 21:26*	*20*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**4.09**		0.250	0.0440	mg/L			07/12/17 19:34	250
Xylenes, Total	**6.19**		0.500	0.0915	mg/L			07/12/17 19:34	250

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*50 - 134*		*07/12/17 19:34*	*250*
Dibromofluoromethane	*96*		*62 - 130*		*07/12/17 19:34*	*250*
Toluene-d8 (Surr)	*95*		*70 - 130*		*07/12/17 19:34*	*250*
4-Bromofluorobenzene	*93*		*67 - 139*		*07/12/17 19:34*	*250*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	**35.6**		2.50	1.25	mg/L			07/14/17 23:00	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*50 - 150*		*07/14/17 23:00*	*25*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**0.511**		0.109	0.0989	mg/L		07/13/17 09:20	07/14/17 14:21	1
ORO C24-C40	0.0989	U	0.109	0.0989	mg/L		07/13/17 09:20	07/14/17 14:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*38*	*X*	*50 - 150*	*07/13/17 09:20*	*07/14/17 14:21*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.502	U	4.00	0.502	mg/L			07/07/17 23:29	20
Chloride	**1300**		100	13.4	mg/L			07/15/17 01:30	250
Nitrate Nitrite as N	0.502	U	4.00	0.502	mg/L			07/07/17 23:29	20

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Client Sample ID: SJRP-MW13-07062017

Lab Sample ID: 600-150688-11
Date Collected: 07/06/17 14:00
Matrix: Water
Date Received: 07/07/17 09:51

Method: 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	0.594	U	4.00	0.594	mg/L			07/07/17 23:29	20
Sulfate	**4970**		125	23.9	mg/L			07/15/17 01:30	250

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Aluminum	0.0926	U	0.500	0.0926	mg/L		07/10/17 18:17	07/18/17 13:37	1
Dissolved Arsenic	**0.0405**		0.0100	0.00285	mg/L		07/10/17 18:17	07/18/17 13:37	1
Dissolved Barium	**0.0443**		0.0200	0.000530	mg/L		07/10/17 18:17	07/18/17 13:37	1
Dissolved Boron	**0.747**		0.200	0.0116	mg/L		07/10/17 18:17	07/18/17 13:37	1
Dissolved Cadmium	0.000280	U	0.00500	0.000280	mg/L		07/10/17 18:17	07/18/17 13:37	1
Dissolved Calcium	**227**		1.00	0.0240	mg/L		07/10/17 18:17	07/18/17 13:37	1
Dissolved Chromium	**0.00239**	**J**	0.0100	0.00159	mg/L		07/10/17 18:17	07/18/17 13:37	1
Dissolved Cobalt	**0.00428**	**J**	0.0100	0.000310	mg/L		07/10/17 18:17	07/18/17 13:37	1
Dissolved Iron	**7.34**		0.400	0.0270	mg/L		07/10/17 18:17	07/18/17 13:37	1
Dissolved Lead	0.00219	U	0.0100	0.00219	mg/L		07/10/17 18:17	07/18/17 13:37	1
Dissolved Magnesium	**75.0**		1.00	0.0555	mg/L		07/10/17 18:17	07/18/17 13:37	1
Dissolved Manganese	**2.39**		0.0100	0.000360	mg/L		07/10/17 18:17	07/18/17 13:37	1
Dissolved Molybdenum	0.000540	U	0.0100	0.000540	mg/L		07/10/17 18:17	07/18/17 13:37	1
Dissolved Nickel	**0.00509**	**J B**	0.0100	0.000800	mg/L		07/10/17 18:17	07/18/17 13:37	1
Dissolved Potassium	**12.3**		1.00	0.0374	mg/L		07/10/17 18:17	07/18/17 13:37	1
Dissolved Selenium	0.00287	U	0.0400	0.00287	mg/L		07/10/17 18:17	07/18/17 13:37	1
Dissolved Sodium	**3850**	**B**	50.0	1.07	mg/L		07/10/17 18:17	07/20/17 13:18	50

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury (Dissolved)	0.0000820	U	0.000200	0.0000820	mg/L		07/11/17 07:26	07/13/17 10:01	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**2030**		20.0	20.0	mg/L			07/11/17 15:21	1
Bicarbonate Alkalinity as CaCO3	**2030**		20.0	20.0	mg/L			07/11/17 15:21	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			07/11/17 15:21	1
Total Dissolved Solids	**12500**		100	100	mg/L			07/11/17 09:51	1

Client Sample ID: SJRP-MW14-07062017

Lab Sample ID: 600-150688-12
Date Collected: 07/06/17 14:50
Matrix: Water
Date Received: 07/07/17 09:51

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			07/11/17 21:52	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			07/11/17 21:52	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			07/11/17 21:52	1
Xylenes, Total	**0.000529**	**J**	0.00200	0.000366	mg/L			07/11/17 21:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*50 - 134*		*07/11/17 21:52*	*1*
Dibromofluoromethane	*89*		*62 - 130*		*07/11/17 21:52*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*07/11/17 21:52*	*1*
4-Bromofluorobenzene	*101*		*67 - 139*		*07/11/17 21:52*	*1*

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Client Sample ID: SJRP-MW14-07062017
Date Collected: 07/06/17 14:50
Date Received: 07/07/17 09:51

Lab Sample ID: 600-150688-12
Matrix: Water

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			07/14/17 22:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*98*		*50 - 150*		*07/14/17 22:30*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**0.212**		0.104	0.0948	mg/L		07/13/17 09:20	07/14/17 14:37	1
ORO C24-C40	**0.212**		0.104	0.0948	mg/L		07/13/17 09:20	07/15/17 20:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*102*		*50 - 150*	*07/13/17 09:20*	*07/14/17 14:37*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**5.68**		4.00	0.502	mg/L			07/07/17 23:49	20
Chloride	**321**		8.00	1.07	mg/L			07/07/17 23:49	20
Nitrate Nitrite as N	**5.68**		4.00	0.502	mg/L			07/07/17 23:49	20
Nitrite as N	0.594	U	4.00	0.594	mg/L			07/07/17 23:49	20
Sulfate	**9080**		500	95.7	mg/L			07/15/17 01:49	1000

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Aluminum	0.0926	U	0.500	0.0926	mg/L		07/10/17 18:17	07/18/17 13:39	1
Dissolved Arsenic	0.00285	U	0.0100	0.00285	mg/L		07/10/17 18:17	07/18/17 13:39	1
Dissolved Barium	**0.0114**	**J**	0.0200	0.000530	mg/L		07/10/17 18:17	07/18/17 13:39	1
Dissolved Boron	**0.689**		0.200	0.0116	mg/L		07/10/17 18:17	07/18/17 13:39	1
Dissolved Cadmium	**0.00193**	**J**	0.00500	0.000280	mg/L		07/10/17 18:17	07/18/17 13:39	1
Dissolved Calcium	**392**		1.00	0.0240	mg/L		07/10/17 18:17	07/18/17 13:39	1
Dissolved Chromium	0.00159	U	0.0100	0.00159	mg/L		07/10/17 18:17	07/18/17 13:39	1
Dissolved Cobalt	**0.00813**	**J**	0.0100	0.000310	mg/L		07/10/17 18:17	07/18/17 13:39	1
Dissolved Iron	0.0270	U	0.400	0.0270	mg/L		07/10/17 18:17	07/18/17 13:39	1
Dissolved Lead	0.00219	U	0.0100	0.00219	mg/L		07/10/17 18:17	07/18/17 13:39	1
Dissolved Magnesium	**244**		1.00	0.0555	mg/L		07/10/17 18:17	07/18/17 13:39	1
Dissolved Manganese	**8.82**		0.0100	0.000360	mg/L		07/10/17 18:17	07/18/17 13:39	1
Dissolved Molybdenum	**0.00218**	**J B**	0.0100	0.000540	mg/L		07/10/17 18:17	07/18/17 13:39	1
Dissolved Nickel	**0.0558**	**B**	0.0100	0.000800	mg/L		07/10/17 18:17	07/18/17 13:39	1
Dissolved Potassium	**15.7**		1.00	0.0374	mg/L		07/10/17 18:17	07/18/17 13:39	1
Dissolved Selenium	**0.0115**	**J**	0.0400	0.00287	mg/L		07/10/17 18:17	07/18/17 13:39	1
Dissolved Sodium	**3090**	**B**	20.0	0.428	mg/L		07/10/17 18:17	07/20/17 13:20	20

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury (Dissolved)	0.0000820	U	0.000200	0.0000820	mg/L		07/11/17 07:26	07/13/17 09:59	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**532**		20.0	20.0	mg/L			07/11/17 15:31	1
Bicarbonate Alkalinity as CaCO3	**532**		20.0	20.0	mg/L			07/11/17 15:31	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			07/11/17 15:31	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Client Sample ID: SJRP-MW14-07062017

Lab Sample ID: 600-150688-12
Date Collected: 07/06/17 14:50
Matrix: Water
Date Received: 07/07/17 09:51

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**13400**		100	100	mg/L			07/11/17 09:51	1

Client Sample ID: SJRP-MW16-07062017

Lab Sample ID: 600-150688-13
Date Collected: 07/06/17 15:30
Matrix: Water
Date Received: 07/07/17 09:51

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	**0.000943**	**J**	0.00100	0.000198	mg/L			07/12/17 05:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*50 - 134*		*07/12/17 05:00*	*1*
Dibromofluoromethane	*92*		*62 - 130*		*07/12/17 05:00*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*07/12/17 05:00*	*1*
4-Bromofluorobenzene	*140*	*X*	*67 - 139*		*07/12/17 05:00*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2.07**		0.100	0.0176	mg/L			07/12/17 20:04	100
Ethylbenzene	**0.442**		0.100	0.0212	mg/L			07/12/17 20:04	100
Xylenes, Total	**3.96**		0.200	0.0366	mg/L			07/12/17 20:04	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*50 - 134*		*07/12/17 20:04*	*100*
Dibromofluoromethane	*97*		*62 - 130*		*07/12/17 20:04*	*100*
Toluene-d8 (Surr)	*94*		*70 - 130*		*07/12/17 20:04*	*100*
4-Bromofluorobenzene	*94*		*67 - 139*		*07/12/17 20:04*	*100*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	**21.7**		1.00	0.500	mg/L			07/14/17 00:32	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*63*		*50 - 150*		*07/14/17 00:32*	*10*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**1.02**		0.109	0.0989	mg/L		07/13/17 09:20	07/14/17 14:52	1
ORO C24-C40	0.0989	U	0.109	0.0989	mg/L		07/13/17 09:20	07/15/17 20:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*84*		*50 - 150*	*07/13/17 09:20*	*07/14/17 14:52*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.502	U	4.00	0.502	mg/L			07/08/17 00:09	20
Chloride	**1840**		400	53.4	mg/L			07/15/17 02:07	1000
Nitrate Nitrite as N	0.502	U	4.00	0.502	mg/L			07/08/17 00:09	20
Nitrite as N	0.594	U	4.00	0.594	mg/L			07/08/17 00:09	20
Sulfate	**7890**		500	95.7	mg/L			07/15/17 02:07	1000

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Client Sample ID: SJRP-MW16-07062017
Date Collected: 07/06/17 15:30
Date Received: 07/07/17 09:51

Lab Sample ID: 600-150688-13
Matrix: Water

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Aluminum	0.107	J	0.500	0.0926	mg/L		07/10/17 18:17	07/18/17 13:41	1
Dissolved Arsenic	0.0273		0.0100	0.00285	mg/L		07/10/17 18:17	07/18/17 13:41	1
Dissolved Barium	0.0466		0.0200	0.000530	mg/L		07/10/17 18:17	07/18/17 13:41	1
Dissolved Boron	1.03		0.200	0.0116	mg/L		07/10/17 18:17	07/18/17 13:41	1
Dissolved Cadmium	0.000280	U	0.00500	0.000280	mg/L		07/10/17 18:17	07/18/17 13:41	1
Dissolved Calcium	244		1.00	0.0240	mg/L		07/10/17 18:17	07/18/17 13:41	1
Dissolved Chromium	0.00159	U	0.0100	0.00159	mg/L		07/10/17 18:17	07/18/17 13:41	1
Dissolved Cobalt	0.000775	J	0.0100	0.000310	mg/L		07/10/17 18:17	07/18/17 13:41	1
Dissolved Iron	0.483		0.400	0.0270	mg/L		07/10/17 18:17	07/18/17 13:41	1
Dissolved Lead	0.00219	U	0.0100	0.00219	mg/L		07/10/17 18:17	07/18/17 13:41	1
Dissolved Magnesium	40.6		1.00	0.0555	mg/L		07/10/17 18:17	07/18/17 13:41	1
Dissolved Manganese	0.646		0.0100	0.000360	mg/L		07/10/17 18:17	07/18/17 13:41	1
Dissolved Molybdenum	0.00184	J B	0.0100	0.000540	mg/L		07/10/17 18:17	07/18/17 13:41	1
Dissolved Nickel	0.000800	U	0.0100	0.000800	mg/L		07/10/17 18:17	07/18/17 13:41	1
Dissolved Potassium	10.5		1.00	0.0374	mg/L		07/10/17 18:17	07/18/17 13:41	1
Dissolved Selenium	0.00287	U	0.0400	0.00287	mg/L		07/10/17 18:17	07/18/17 13:41	1
Dissolved Sodium	4910	B	50.0	1.07	mg/L		07/10/17 18:17	07/20/17 13:22	50

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury (Dissolved)	0.0000820	U	0.000200	0.0000820	mg/L		07/11/17 07:26	07/13/17 10:07	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	1630		20.0	20.0	mg/L			07/11/17 15:51	1
Bicarbonate Alkalinity as CaCO3	1630		20.0	20.0	mg/L			07/11/17 15:51	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			07/11/17 15:51	1
Total Dissolved Solids	15800		200	200	mg/L			07/11/17 09:51	1

Definitions/Glossary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery is outside acceptance limits.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)

Definitions/Glossary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(50-134)	(62-130)	(70-130)	(67-139)
600-150688-1	SJRP-MW2-07062017	92	93	92	92
600-150688-2	SJRP-MW4-07062017	88	89	90	89
600-150688-3	SJRP-MW6-07062017	83	89	96	103
600-150688-3 MS	SJRP-MW6-07062017-MS	87	92	94	104
600-150688-3 MSD	SJRP-MW6-07062017-MSD	77	91	93	103
600-150688-4	SJRP-TB01-07062017	82	89	97	100
600-150688-6	SJRP-MW8-07062017	82	89	96	100
600-150688-7	SJRP-MW9-07062017	85	90	96	101
600-150688-7 - DL	SJRP-MW9-07062017	94	95	93	93
600-150688-8	SJRP-MW9-07062017-2	85	91	96	101
600-150688-8 - DL	SJRP-MW9-07062017-2	94	96	94	93
600-150688-9	SJRP-MW11-07062017	81	88	97	101
600-150688-10	SJRP-MW12-07062017	80	89	97	103
600-150688-11	SJRP-MW13-07062017	82	89	95	101
600-150688-11 - DL	SJRP-MW13-07062017	95	96	95	93
600-150688-12	SJRP-MW14-07062017	84	89	96	101
600-150688-13	SJRP-MW16-07062017	86	92	94	140 X
600-150688-13 - DL	SJRP-MW16-07062017	95	97	94	94
LCS 600-216861/3	Lab Control Sample	77	93	94	99
LCS 600-216901/3	Lab Control Sample	77	93	95	103
LCS 600-216955/3	Lab Control Sample	86	88	88	89
LCSD 600-216861/4	Lab Control Sample Dup	85	91	92	96
LCSD 600-216901/4	Lab Control Sample Dup	85	93	95	102
LCSD 600-216955/4	Lab Control Sample Dup	79	86	82	82
MB 600-216861/6	Method Blank	81	88	95	96
MB 600-216901/6	Method Blank	82	89	98	102
MB 600-216955/6	Method Blank	83	85	86	85

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(50-150)
600-150688-3	SJRP-MW6-07062017	99
600-150688-3 MS	SJRP-MW6-07062017-MS	98
600-150688-3 MSD	SJRP-MW6-07062017-MSD	95
600-150688-5	SJRP-TB02-07062017	96
600-150688-6	SJRP-MW8-07062017	82
600-150688-7	SJRP-MW9-07062017	77
600-150688-8	SJRP-MW9-07062017-2	76
600-150688-9	SJRP-MW11-07062017	75
600-150688-10	SJRP-MW12-07062017	56

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(50-150)
600-150688-11	SJRP-MW13-07062017	96
600-150688-12	SJRP-MW14-07062017	98
600-150688-13	SJRP-MW16-07062017	63
LCS 490-444616/28	Lab Control Sample	64
LCS 490-444861/17	Lab Control Sample	96
LCSD 490-444616/29	Lab Control Sample Dup	65
LCSD 490-444861/18	Lab Control Sample Dup	97
MB 490-444616/7	Method Blank	95
MB 490-444861/6	Method Blank	98

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		OTPH1
Lab Sample ID	Client Sample ID	(50-150)
600-150688-3	SJRP-MW6-07062017	107
600-150688-3 MS	SJRP-MW6-07062017-MS	85
600-150688-3 MSD	SJRP-MW6-07062017-MSD	102
600-150688-6	SJRP-MW8-07062017	19 X
600-150688-7	SJRP-MW9-07062017	102
600-150688-8	SJRP-MW9-07062017-2	105
600-150688-9	SJRP-MW11-07062017	85
600-150688-10	SJRP-MW12-07062017	100
600-150688-11	SJRP-MW13-07062017	38 X
600-150688-12	SJRP-MW14-07062017	102
600-150688-13	SJRP-MW16-07062017	84
LCS 490-444610/2-A	Lab Control Sample	117
MB 490-444610/1-A	Method Blank	114

Surrogate Legend

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-216861/6
Matrix: Water
Analysis Batch: 216861

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			07/11/17 13:11	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			07/11/17 13:11	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			07/11/17 13:11	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			07/11/17 13:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*50 - 134*		*07/11/17 13:11*	*1*
Dibromofluoromethane	*88*		*62 - 130*		*07/11/17 13:11*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*07/11/17 13:11*	*1*
4-Bromofluorobenzene	*96*		*67 - 139*		*07/11/17 13:11*	*1*

Lab Sample ID: LCS 600-216861/3
Matrix: Water
Analysis Batch: 216861

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0100	0.01031		mg/L		103	70 - 130		
Ethylbenzene			0.0100	0.01079		mg/L		108	70 - 130		
Toluene			0.0100	0.01059		mg/L		106	70 - 130		
Xylenes, Total			0.0200	0.02108		mg/L		105	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*77*		*50 - 134*
Dibromofluoromethane	*93*		*62 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*
4-Bromofluorobenzene	*99*		*67 - 139*

Lab Sample ID: LCSD 600-216861/4
Matrix: Water
Analysis Batch: 216861

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0100	0.009720		mg/L		97	70 - 130	6	20
Ethylbenzene			0.0100	0.01014		mg/L		101	70 - 130	6	20
Toluene			0.0100	0.009977		mg/L		100	70 - 130	6	20
Xylenes, Total			0.0200	0.01992		mg/L		100	70 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*50 - 134*
Dibromofluoromethane	*91*		*62 - 130*
Toluene-d8 (Surr)	*92*		*70 - 130*
4-Bromofluorobenzene	*96*		*67 - 139*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-216901/6
Matrix: Water
Analysis Batch: 216901

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			07/12/17 00:45	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			07/12/17 00:45	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			07/12/17 00:45	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			07/12/17 00:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*50 - 134*		*07/12/17 00:45*	*1*
Dibromofluoromethane	*89*		*62 - 130*		*07/12/17 00:45*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*07/12/17 00:45*	*1*
4-Bromofluorobenzene	*102*		*67 - 139*		*07/12/17 00:45*	*1*

Lab Sample ID: LCS 600-216901/3
Matrix: Water
Analysis Batch: 216901

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0100	0.009991		mg/L		100	70 - 130		
Ethylbenzene			0.0100	0.01050		mg/L		105	70 - 130		
Toluene			0.0100	0.01031		mg/L		103	70 - 130		
Xylenes, Total			0.0200	0.02045		mg/L		102	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*77*		*50 - 134*
Dibromofluoromethane	*93*		*62 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*
4-Bromofluorobenzene	*103*		*67 - 139*

Lab Sample ID: LCSD 600-216901/4
Matrix: Water
Analysis Batch: 216901

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0100	0.009573		mg/L		96	70 - 130	4	20
Ethylbenzene			0.0100	0.01010		mg/L		101	70 - 130	4	20
Toluene			0.0100	0.009925		mg/L		99	70 - 130	4	20
Xylenes, Total			0.0200	0.01970		mg/L		98	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*50 - 134*
Dibromofluoromethane	*93*		*62 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*
4-Bromofluorobenzene	*102*		*67 - 139*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 600-150688-3 MS — **Client Sample ID: SJRP-MW6-07062017-MS**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 216901

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.000176	U	0.0100	0.009973		mg/L		100	70 - 130
Ethylbenzene	0.000212	U	0.0100	0.01029		mg/L		103	70 - 130
Toluene	0.000198	U	0.0100	0.01022		mg/L		102	70 - 130
Xylenes, Total	0.000585	J	0.0200	0.02053		mg/L		100	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*50 - 134*
Dibromofluoromethane	*92*		*62 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*
4-Bromofluorobenzene	*104*		*67 - 139*

Lab Sample ID: 600-150688-3 MSD — **Client Sample ID: SJRP-MW6-07062017-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 216901

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.000176	U	0.0100	0.009937		mg/L		99	70 - 130	0	30
Ethylbenzene	0.000212	U	0.0100	0.01037		mg/L		104	70 - 130	1	30
Toluene	0.000198	U	0.0100	0.01031		mg/L		103	70 - 130	1	30
Xylenes, Total	0.000585	J	0.0200	0.02045		mg/L		99	70 - 130	0	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*77*		*50 - 134*
Dibromofluoromethane	*91*		*62 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*
4-Bromofluorobenzene	*103*		*67 - 139*

Lab Sample ID: MB 600-216955/6 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 216955

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			07/12/17 14:29	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			07/12/17 14:29	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			07/12/17 14:29	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			07/12/17 14:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*50 - 134*		*07/12/17 14:29*	*1*
Dibromofluoromethane	*85*		*62 - 130*		*07/12/17 14:29*	*1*
Toluene-d8 (Surr)	*86*		*70 - 130*		*07/12/17 14:29*	*1*
4-Bromofluorobenzene	*85*		*67 - 139*		*07/12/17 14:29*	*1*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-216955/3
Matrix: Water
Analysis Batch: 216955

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0100	0.009516		mg/L		95	70 - 130
Ethylbenzene	0.0100	0.009746		mg/L		97	70 - 130
Toluene	0.0100	0.009683		mg/L		97	70 - 130
Xylenes, Total	0.0200	0.01939		mg/L		97	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*50 - 134*
Dibromofluoromethane	*88*		*62 - 130*
Toluene-d8 (Surr)	*88*		*70 - 130*
4-Bromofluorobenzene	*89*		*67 - 139*

Lab Sample ID: LCSD 600-216955/4
Matrix: Water
Analysis Batch: 216955

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0100	0.009133		mg/L		91	70 - 130	4	20
Ethylbenzene	0.0100	0.009151		mg/L		92	70 - 130	6	20
Toluene	0.0100	0.008997		mg/L		90	70 - 130	7	20
Xylenes, Total	0.0200	0.01825		mg/L		91	70 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*79*		*50 - 134*
Dibromofluoromethane	*86*		*62 - 130*
Toluene-d8 (Surr)	*82*		*70 - 130*
4-Bromofluorobenzene	*82*		*67 - 139*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 490-444616/7
Matrix: Water
Analysis Batch: 444616

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			07/13/17 14:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*95*		*50 - 150*		*07/13/17 14:37*	*1*

Lab Sample ID: LCS 490-444616/28
Matrix: Water
Analysis Batch: 444616

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	1.00	0.8429		mg/L		84	66 - 140

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: LCS 490-444616/28
Matrix: Water
Analysis Batch: 444616

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	64		50 - 150

Lab Sample ID: LCSD 490-444616/29
Matrix: Water
Analysis Batch: 444616

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10			1.00	0.7938		mg/L		79	66 - 140	6	42

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	65		50 - 150

Lab Sample ID: 600-150688-3 MS
Matrix: Water
Analysis Batch: 444616

Client Sample ID: SJRP-MW6-07062017-MS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	1.00	0.9258		mg/L		93	33 - 175		

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene	98		50 - 150

Lab Sample ID: 600-150688-3 MSD
Matrix: Water
Analysis Batch: 444616

Client Sample ID: SJRP-MW6-07062017-MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	1.00	0.9506		mg/L		95	33 - 175	3	42

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene	95		50 - 150

Lab Sample ID: MB 490-444861/6
Matrix: Water
Analysis Batch: 444861

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			07/14/17 18:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	98		50 - 150		07/14/17 18:03	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: LCS 490-444861/17
Matrix: Water
Analysis Batch: 444861

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C6-C10			1.00	0.9213		mg/L		92	66 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*96*		*50 - 150*

Lab Sample ID: LCSD 490-444861/18
Matrix: Water
Analysis Batch: 444861

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10			1.00	0.8753		mg/L		88	66 - 140	5	42

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*97*		*50 - 150*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Lab Sample ID: MB 490-444610/1-A
Matrix: Water
Analysis Batch: 444872

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 444610

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0910	U	0.100	0.0910	mg/L		07/13/17 09:20	07/14/17 10:35	1
ORO C24-C40	0.0910	U	0.100	0.0910	mg/L		07/13/17 09:20	07/14/17 10:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*114*		*50 - 150*	*07/13/17 09:20*	*07/14/17 10:35*	*1*

Lab Sample ID: LCS 490-444610/2-A
Matrix: Water
Analysis Batch: 444872

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 444610

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			0.800	0.7959		mg/L		99	46 - 132		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*117*		*50 - 150*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Lab Sample ID: 600-150688-3 MS
Matrix: Water
Analysis Batch: 444872

Client Sample ID: SJRP-MW6-07062017-MS
Prep Type: Total/NA
Prep Batch: 444610

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	0.179		0.870	0.7121		mg/L		61	10 - 138

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
o-Terphenyl (Surr)	*85*		*50 - 150*

Lab Sample ID: 600-150688-3 MSD
Matrix: Water
Analysis Batch: 444872

Client Sample ID: SJRP-MW6-07062017-MSD
Prep Type: Total/NA
Prep Batch: 444610

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	0.179		0.833	0.8713		mg/L		83	10 - 138	20	31

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
o-Terphenyl (Surr)	*102*		*50 - 150*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-216664/4
Matrix: Water
Analysis Batch: 216664

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.0534	U	0.400	0.0534	mg/L			07/07/17 14:29	1
Sulfate	0.0957	U	0.500	0.0957	mg/L			07/07/17 14:29	1

Lab Sample ID: LCS 600-216664/5
Matrix: Water
Analysis Batch: 216664

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	20.0	19.04		mg/L		95	90 - 110
Sulfate	20.0	19.62		mg/L		98	90 - 110

Lab Sample ID: 600-150688-3 MS
Matrix: Water
Analysis Batch: 216664

Client Sample ID: SJRP-MW6-07062017-MS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	852	E	200	914.6	E 4	mg/L		31	80 - 120
Sulfate	12100	E	200	10220	E 4	mg/L		-935	80 - 120

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 600-150688-3 MSD — **Client Sample ID: SJRP-MW6-07062017-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 216664

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	852	E	200	915.3	E 4	mg/L		32	80 - 120	0	20
Sulfate	12100	E	200	10200	E 4	mg/L		-948	80 - 120	0	20

Lab Sample ID: MB 600-216665/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 216665

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.0251	U	0.200	0.0251	mg/L			07/07/17 14:29	1
Nitrate Nitrite as N	0.0251	U	0.200	0.0251	mg/L			07/07/17 14:29	1
Nitrite as N	0.0297	U	0.200	0.0297	mg/L			07/07/17 14:29	1

Lab Sample ID: LCS 600-216665/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 216665

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	10.0	9.713		mg/L		97	90 - 110
Nitrate Nitrite as N	20.0	19.41		mg/L		97	90 - 110
Nitrite as N	10.0	9.698		mg/L		97	90 - 110

Lab Sample ID: 600-150688-3 MS — **Client Sample ID: SJRP-MW6-07062017-MS**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 216665

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	63.6	F1	40.0	93.64	F1	mg/L		75	80 - 120
Nitrate Nitrite as N	63.6		80.0	132.2		mg/L		86	80 - 120
Nitrite as N	0.594	U	40.0	38.51		mg/L		96	80 - 120

Lab Sample ID: 600-150688-3 MSD — **Client Sample ID: SJRP-MW6-07062017-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 216665

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	63.6	F1	40.0	93.92	F1	mg/L		76	80 - 120	0	20
Nitrate Nitrite as N	63.6		80.0	132.7		mg/L		86	80 - 120	0	20
Nitrite as N	0.594	U	40.0	38.82		mg/L		97	80 - 120	1	20

Lab Sample ID: MB 600-217168/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 217168

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.0534	U	0.400	0.0534	mg/L			07/14/17 17:31	1
Sulfate	0.0957	U	0.500	0.0957	mg/L			07/14/17 17:31	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 600-217168/5
Matrix: Water
Analysis Batch: 217168

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	20.0	18.81		mg/L		94	90 - 110
Sulfate	20.0	20.22		mg/L		101	90 - 110

Lab Sample ID: 600-150688-6 MS
Matrix: Water
Analysis Batch: 217168

Client Sample ID: SJRP-MW8-07062017
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	295		2500	2737		mg/L		98	80 - 120
Sulfate	3060		2500	5440		mg/L		95	80 - 120

Lab Sample ID: 600-150688-6 MSD
Matrix: Water
Analysis Batch: 217168

Client Sample ID: SJRP-MW8-07062017
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	295		2500	2566		mg/L		91	80 - 120	6	20
Sulfate	3060		2500	5324		mg/L		90	80 - 120	2	20

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-216811/1-A
Matrix: Water
Analysis Batch: 217361

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 216811

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Aluminum	0.0926	U	0.500	0.0926	mg/L		07/10/17 18:17	07/18/17 13:00	1
Dissolved Arsenic	0.00285	U	0.0100	0.00285	mg/L		07/10/17 18:17	07/18/17 13:00	1
Dissolved Barium	0.000530	U	0.0200	0.000530	mg/L		07/10/17 18:17	07/18/17 13:00	1
Dissolved Boron	0.0116	U	0.200	0.0116	mg/L		07/10/17 18:17	07/18/17 13:00	1
Dissolved Cadmium	0.000280	U	0.00500	0.000280	mg/L		07/10/17 18:17	07/18/17 13:00	1
Dissolved Calcium	0.0240	U	1.00	0.0240	mg/L		07/10/17 18:17	07/18/17 13:00	1
Dissolved Chromium	0.00159	U	0.0100	0.00159	mg/L		07/10/17 18:17	07/18/17 13:00	1
Dissolved Cobalt	0.000310	U	0.0100	0.000310	mg/L		07/10/17 18:17	07/18/17 13:00	1
Dissolved Iron	0.0270	U	0.400	0.0270	mg/L		07/10/17 18:17	07/18/17 13:00	1
Dissolved Lead	0.00219	U	0.0100	0.00219	mg/L		07/10/17 18:17	07/18/17 13:00	1
Dissolved Magnesium	0.0555	U	1.00	0.0555	mg/L		07/10/17 18:17	07/18/17 13:00	1
Dissolved Manganese	0.000360	U	0.0100	0.000360	mg/L		07/10/17 18:17	07/18/17 13:00	1
Dissolved Molybdenum	0.001396	J	0.0100	0.000540	mg/L		07/10/17 18:17	07/18/17 13:00	1
Dissolved Nickel	0.0009710	J	0.0100	0.000800	mg/L		07/10/17 18:17	07/18/17 13:00	1
Dissolved Potassium	0.0374	U	1.00	0.0374	mg/L		07/10/17 18:17	07/18/17 13:00	1
Dissolved Selenium	0.00287	U	0.0400	0.00287	mg/L		07/10/17 18:17	07/18/17 13:00	1
Dissolved Sodium	0.2426	J	1.00	0.0214	mg/L		07/10/17 18:17	07/18/17 13:00	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCS 600-216811/2-A
Matrix: Water
Analysis Batch: 217361

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 216811

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Aluminum	10.0	10.14		mg/L		101	80 - 120
Dissolved Arsenic	1.00	0.9816		mg/L		98	80 - 120
Dissolved Barium	1.00	1.037		mg/L		104	80 - 120
Dissolved Boron	1.00	1.003		mg/L		100	80 - 120
Dissolved Cadmium	0.500	0.5092		mg/L		102	80 - 120
Dissolved Calcium	10.0	10.23		mg/L		102	80 - 120
Dissolved Chromium	1.00	1.047		mg/L		105	80 - 120
Dissolved Cobalt	1.00	1.023		mg/L		102	80 - 120
Dissolved Iron	10.0	10.46		mg/L		105	80 - 120
Dissolved Lead	1.00	1.021		mg/L		102	80 - 120
Dissolved Magnesium	10.0	10.09		mg/L		101	80 - 120
Dissolved Manganese	1.00	1.023		mg/L		102	80 - 120
Dissolved Molybdenum	1.00	1.035		mg/L		104	80 - 120
Dissolved Nickel	1.00	1.021		mg/L		102	80 - 120
Dissolved Potassium	10.0	10.33		mg/L		103	80 - 120
Dissolved Selenium	1.00	0.9104		mg/L		91	80 - 120
Dissolved Sodium	10.0	10.56		mg/L		106	80 - 120

Lab Sample ID: 600-150688-1 MS
Matrix: Water
Analysis Batch: 217361

Client Sample ID: SJRP-MW2-07062017
Prep Type: Dissolved
Prep Batch: 216811

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Aluminum	0.0926	U	10.0	10.86		mg/L		109	75 - 125
Dissolved Arsenic	0.00285	U	1.00	1.089		mg/L		109	75 - 125
Dissolved Barium	0.0107	J	1.00	1.035		mg/L		102	75 - 125
Dissolved Boron	0.580		1.00	1.671		mg/L		109	75 - 125
Dissolved Cadmium	0.000280	U	0.500	0.4954		mg/L		99	75 - 125
Dissolved Calcium	267		10.0	268.8	4	mg/L		19	75 - 125
Dissolved Chromium	0.00200	J	1.00	1.007		mg/L		101	75 - 125
Dissolved Cobalt	0.000487	J	1.00	1.004		mg/L		100	75 - 125
Dissolved Iron	0.0270	U	10.0	9.977		mg/L		100	75 - 125
Dissolved Lead	0.00219	U	1.00	0.9988		mg/L		100	75 - 125
Dissolved Magnesium	82.2		10.0	89.78	4	mg/L		76	75 - 125
Dissolved Manganese	0.00118	J	1.00	0.9846		mg/L		98	75 - 125
Dissolved Molybdenum	0.00487	J B	1.00	1.028		mg/L		102	75 - 125
Dissolved Nickel	0.000966	J B	1.00	0.9848		mg/L		98	75 - 125
Dissolved Potassium	3.09		10.0	13.54		mg/L		104	75 - 125
Dissolved Selenium	0.112		1.00	1.227		mg/L		112	75 - 125

Lab Sample ID: 600-150688-1 MS
Matrix: Water
Analysis Batch: 217549

Client Sample ID: SJRP-MW2-07062017
Prep Type: Dissolved
Prep Batch: 216811

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Sodium	1080	B	10.0	1081	4	mg/L		-30	75 - 125

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-150688-1 MSD — **Client Sample ID: SJRP-MW2-07062017**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 217361 — **Prep Batch: 216811**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dissolved Aluminum	0.0926	U	10.0	11.01		mg/L		110	75 - 125	1	20
Dissolved Arsenic	0.00285	U	1.00	1.113		mg/L		111	75 - 125	2	20
Dissolved Barium	0.0107	J	1.00	1.050		mg/L		104	75 - 125	1	20
Dissolved Boron	0.580		1.00	1.700		mg/L		112	75 - 125	2	20
Dissolved Cadmium	0.000280	U	0.500	0.5039		mg/L		101	75 - 125	2	20
Dissolved Calcium	267		10.0	271.6	4	mg/L		47	75 - 125	1	20
Dissolved Chromium	0.00200	J	1.00	1.021		mg/L		102	75 - 125	1	20
Dissolved Cobalt	0.000487	J	1.00	1.016		mg/L		102	75 - 125	1	20
Dissolved Iron	0.0270	U	10.0	10.13		mg/L		101	75 - 125	1	20
Dissolved Lead	0.00219	U	1.00	1.015		mg/L		102	75 - 125	2	20
Dissolved Magnesium	82.2		10.0	91.48	4	mg/L		93	75 - 125	2	20
Dissolved Manganese	0.00118	J	1.00	0.9924		mg/L		99	75 - 125	1	20
Dissolved Molybdenum	0.00487	J B	1.00	1.042		mg/L		104	75 - 125	1	20
Dissolved Nickel	0.000966	J B	1.00	0.9971		mg/L		100	75 - 125	1	20
Dissolved Potassium	3.09		10.0	13.50		mg/L		104	75 - 125	0	20
Dissolved Selenium	0.112		1.00	1.239		mg/L		113	75 - 125	1	20

Lab Sample ID: 600-150688-1 MSD — **Client Sample ID: SJRP-MW2-07062017**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 217549 — **Prep Batch: 216811**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dissolved Sodium	1100	B ^	10.0	1083	4	mg/L		-150	75 - 125	0	20

Lab Sample ID: 600-150688-3 MS — **Client Sample ID: SJRP-MW6-07062017-MS**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 217361 — **Prep Batch: 216811**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Aluminum	14.6		10.0	26.32		mg/L		117	75 - 125
Dissolved Arsenic	0.00285	U	1.00	1.096		mg/L		110	75 - 125
Dissolved Barium	0.00722	J	1.00	0.9577		mg/L		95	75 - 125
Dissolved Boron	0.851		1.00	1.937		mg/L		109	75 - 125
Dissolved Cadmium	0.00887		0.500	0.4505		mg/L		88	75 - 125
Dissolved Calcium	336		10.0	339.6	4	mg/L		38	75 - 125
Dissolved Chromium	0.00159	U	1.00	0.8972		mg/L		90	75 - 125
Dissolved Cobalt	0.192		1.00	1.104		mg/L		91	75 - 125
Dissolved Iron	0.0270	U	10.0	9.005		mg/L		90	75 - 125
Dissolved Lead	0.00219	U	1.00	0.8888		mg/L		89	75 - 125
Dissolved Magnesium	299		10.0	309.4	4	mg/L		101	75 - 125
Dissolved Manganese	6.54		1.00	7.626	4	mg/L		109	75 - 125
Dissolved Molybdenum	0.00141	J B	1.00	0.9359		mg/L		93	75 - 125
Dissolved Nickel	0.228	B	1.00	1.117		mg/L		89	75 - 125
Dissolved Potassium	17.7		10.0	26.66		mg/L		90	75 - 125
Dissolved Selenium	0.279		1.00	1.433		mg/L		115	75 - 125

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-150688-3 MS
Matrix: Water
Analysis Batch: 217549

Client Sample ID: SJRP-MW6-07062017-MS
Prep Type: Dissolved
Prep Batch: 216811

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Sodium	3780	B	10.0	3761	4	mg/L		-205	75 - 125

Lab Sample ID: 600-150688-3 MSD
Matrix: Water
Analysis Batch: 217361

Client Sample ID: SJRP-MW6-07062017-MSD
Prep Type: Dissolved
Prep Batch: 216811

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dissolved Aluminum	14.6		10.0	25.89		mg/L		113	75 - 125	2	20
Dissolved Arsenic	0.00285	U	1.00	1.099		mg/L		110	75 - 125	0	20
Dissolved Barium	0.00722	J	1.00	0.9491		mg/L		94	75 - 125	1	20
Dissolved Boron	0.851		1.00	1.911		mg/L		106	75 - 125	1	20
Dissolved Cadmium	0.00887		0.500	0.4464		mg/L		88	75 - 125	1	20
Dissolved Calcium	336		10.0	347.8	4	mg/L		120	75 - 125	2	20
Dissolved Chromium	0.00159	U	1.00	0.8879		mg/L		89	75 - 125	1	20
Dissolved Cobalt	0.192		1.00	1.089		mg/L		90	75 - 125	1	20
Dissolved Iron	0.0270	U	10.0	8.835		mg/L		88	75 - 125	2	20
Dissolved Lead	0.00219	U	1.00	0.8797		mg/L		88	75 - 125	1	20
Dissolved Magnesium	299		10.0	306.4	4	mg/L		70	75 - 125	1	20
Dissolved Manganese	6.54		1.00	7.375	4	mg/L		84	75 - 125	3	20
Dissolved Molybdenum	0.00141	J B	1.00	0.9184		mg/L		92	75 - 125	2	20
Dissolved Nickel	0.228	B	1.00	1.103		mg/L		87	75 - 125	1	20
Dissolved Potassium	17.7		10.0	26.15		mg/L		85	75 - 125	2	20
Dissolved Selenium	0.279		1.00	1.423		mg/L		114	75 - 125	1	20

Lab Sample ID: 600-150688-3 MSD
Matrix: Water
Analysis Batch: 217549

Client Sample ID: SJRP-MW6-07062017-MSD
Prep Type: Dissolved
Prep Batch: 216811

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dissolved Sodium	3780	B	10.0	3785	4	mg/L		40	75 - 125	1	20

Lab Sample ID: 600-150688-1 DU
Matrix: Water
Analysis Batch: 217361

Client Sample ID: SJRP-MW2-07062017
Prep Type: Dissolved
Prep Batch: 216811

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Dissolved Aluminum	0.0926	U	0.0926	U	mg/L		NC	20
Dissolved Arsenic	0.00285	U	0.00285	U	mg/L		NC	20
Dissolved Barium	0.0107	J	0.01075	J	mg/L		0.05	20
Dissolved Boron	0.580		0.5751		mg/L		0.8	20
Dissolved Cadmium	0.000280	U	0.000280	U	mg/L		NC	20
Dissolved Calcium	267		264.8		mg/L		0.8	20
Dissolved Chromium	0.00200	J	0.002017	J	mg/L		1	20
Dissolved Cobalt	0.000487	J	0.0003650	J F5	mg/L		29	20
Dissolved Iron	0.0270	U	0.0270	U	mg/L		NC	20
Dissolved Lead	0.00219	U	0.00219	U	mg/L		NC	20
Dissolved Magnesium	82.2		82.39		mg/L		0.2	20
Dissolved Manganese	0.00118	J	0.003661	J F5	mg/L		102	20
Dissolved Molybdenum	0.00487	J B	0.003108	J F5	mg/L		44	20

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-150688-1 DU — **Client Sample ID: SJRP-MW2-07062017**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 217361 — **Prep Batch: 216811**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Dissolved Nickel	0.000966	J B	0.0009510	J	mg/L		2	20
Dissolved Potassium	3.09		3.082		mg/L		0.3	20
Dissolved Selenium	0.112		0.1117		mg/L		0.06	20

Lab Sample ID: 600-150688-1 DU — **Client Sample ID: SJRP-MW2-07062017**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 217549 — **Prep Batch: 216811**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Dissolved Sodium	1080	B	1096		mg/L		1	20

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-216736/7-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 216769 — **Prep Batch: 216736**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury (Dissolved)	0.0000820	U	0.000200	0.0000820	mg/L		07/10/17 07:07	07/10/17 10:03	1

Lab Sample ID: LCS 600-216736/8-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 216769 — **Prep Batch: 216736**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury (Dissolved)	0.00300	0.003154		mg/L		105	70 - 130

Lab Sample ID: MB 600-216829/7-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 217076 — **Prep Batch: 216829**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury (Dissolved)	0.0000820	U	0.000200	0.0000820	mg/L		07/11/17 07:26	07/13/17 09:45	1

Lab Sample ID: LCS 600-216829/8-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 217076 — **Prep Batch: 216829**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury (Dissolved)	0.00300	0.002573		mg/L		86	70 - 130

Lab Sample ID: 600-150688-3 MS — **Client Sample ID: SJRP-MW6-07062017-MS**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 216769 — **Prep Batch: 216736**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury (Dissolved)	0.0000820	U	0.00300	0.003249		mg/L		108	75 - 125

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) (Continued)

Lab Sample ID: 600-150688-3 MSD — **Client Sample ID: SJRP-MW6-07062017-MSD**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 216769 — **Prep Batch: 216736**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury (Dissolved)	0.0000820	U	0.00300	0.002935		mg/L		98	75 - 125	10	20

Lab Sample ID: 600-150688-3 DU — **Client Sample ID: SJRP-MW6-07062017**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 216769 — **Prep Batch: 216736**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury (Dissolved)	0.0000820	U	0.0000820	U	mg/L		NC	20

Lab Sample ID: 600-150688-7 MS — **Client Sample ID: SJRP-MW9-07062017**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 217076 — **Prep Batch: 216829**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury (Dissolved)	0.0000820	U F1	0.00300	0.002097	F1	mg/L		70	75 - 125

Lab Sample ID: 600-150688-7 DU — **Client Sample ID: SJRP-MW9-07062017**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 217076 — **Prep Batch: 216829**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury (Dissolved)	0.0000820	U F1	0.0000820	U	mg/L		NC	20

Method: 2320B-1997 - Alkalinity, Total - SM Online, 2011

Lab Sample ID: MB 600-216902/2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 216902

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	20.0	U	20.0	20.0	mg/L			07/11/17 12:32	1
Bicarbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			07/11/17 12:32	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			07/11/17 12:32	1

Lab Sample ID: LCS 600-216902/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 216902

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	100	96.82		mg/L		97	90 - 110

Lab Sample ID: 600-150688-3 MS — **Client Sample ID: SJRP-MW6-07062017-MS**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 216902

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	20.0	U F1	250	177.3	F1	mg/L		71	75 - 125

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Method: 2320B-1997 - Alkalinity, Total - SM Online, 2011 (Continued)

Lab Sample ID: 600-150688-3 MSD — **Client Sample ID: SJRP-MW6-07062017-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 216902

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Alkalinity	20.0	U F1	250	170.4	F1	mg/L		68	75 - 125	4	20

Lab Sample ID: MB 600-217182/2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 217182

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	20.0	U	20.0	20.0	mg/L			07/14/17 14:07	1
Bicarbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			07/14/17 14:07	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			07/14/17 14:07	1

Lab Sample ID: LCS 600-217182/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 217182

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	100	108.5		mg/L		108	90 - 110

Lab Sample ID: 600-150688-6 DU — **Client Sample ID: SJRP-MW8-07062017**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 217182

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity	2650		2628		mg/L		0.7	20
Bicarbonate Alkalinity as CaCO3	2650		2628		mg/L		0.7	20
Carbonate Alkalinity as CaCO3	20.0	U	20.0	U	mg/L		NC	20

Method: 2540 C-1997 - Total Dissolved Solids (Dried at 180 °C)

Lab Sample ID: MB 600-216851/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 216851

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10.0	U	10.0	10.0	mg/L			07/11/17 09:51	1

Lab Sample ID: LCS 600-216851/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 216851

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1800	1767		mg/L		98	90 - 110

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

GC/MS VOA

Analysis Batch: 216861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150688-4	SJRP-TB01-07062017	Total/NA	Water	8260B	
600-150688-6	SJRP-MW8-07062017	Total/NA	Water	8260B	
600-150688-7	SJRP-MW9-07062017	Total/NA	Water	8260B	
600-150688-8	SJRP-MW9-07062017-2	Total/NA	Water	8260B	
600-150688-9	SJRP-MW11-07062017	Total/NA	Water	8260B	
600-150688-10	SJRP-MW12-07062017	Total/NA	Water	8260B	
600-150688-11	SJRP-MW13-07062017	Total/NA	Water	8260B	
600-150688-12	SJRP-MW14-07062017	Total/NA	Water	8260B	
MB 600-216861/6	Method Blank	Total/NA	Water	8260B	
LCS 600-216861/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-216861/4	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 216901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150688-3	SJRP-MW6-07062017	Total/NA	Water	8260B	
600-150688-13	SJRP-MW16-07062017	Total/NA	Water	8260B	
MB 600-216901/6	Method Blank	Total/NA	Water	8260B	
LCS 600-216901/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-216901/4	Lab Control Sample Dup	Total/NA	Water	8260B	
600-150688-3 MS	SJRP-MW6-07062017-MS	Total/NA	Water	8260B	
600-150688-3 MSD	SJRP-MW6-07062017-MSD	Total/NA	Water	8260B	

Analysis Batch: 216955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150688-1	SJRP-MW2-07062017	Total/NA	Water	8260B	
600-150688-2	SJRP-MW4-07062017	Total/NA	Water	8260B	
600-150688-7 - DL	SJRP-MW9-07062017	Total/NA	Water	8260B	
600-150688-8 - DL	SJRP-MW9-07062017-2	Total/NA	Water	8260B	
600-150688-11 - DL	SJRP-MW13-07062017	Total/NA	Water	8260B	
600-150688-13 - DL	SJRP-MW16-07062017	Total/NA	Water	8260B	
MB 600-216955/6	Method Blank	Total/NA	Water	8260B	
LCS 600-216955/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-216955/4	Lab Control Sample Dup	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 444616

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150688-3	SJRP-MW6-07062017	Total/NA	Water	8015C	
600-150688-5	SJRP-TB02-07062017	Total/NA	Water	8015C	
600-150688-6	SJRP-MW8-07062017	Total/NA	Water	8015C	
600-150688-7	SJRP-MW9-07062017	Total/NA	Water	8015C	
600-150688-8	SJRP-MW9-07062017-2	Total/NA	Water	8015C	
600-150688-9	SJRP-MW11-07062017	Total/NA	Water	8015C	
600-150688-10	SJRP-MW12-07062017	Total/NA	Water	8015C	
600-150688-13	SJRP-MW16-07062017	Total/NA	Water	8015C	
MB 490-444616/7	Method Blank	Total/NA	Water	8015C	
LCS 490-444616/28	Lab Control Sample	Total/NA	Water	8015C	
LCSD 490-444616/29	Lab Control Sample Dup	Total/NA	Water	8015C	
600-150688-3 MS	SJRP-MW6-07062017-MS	Total/NA	Water	8015C	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

GC VOA (Continued)

Analysis Batch: 444616 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150688-3 MSD	SJRP-MW6-07062017-MSD	Total/NA	Water	8015C	

Analysis Batch: 444861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150688-11	SJRP-MW13-07062017	Total/NA	Water	8015C	
600-150688-12	SJRP-MW14-07062017	Total/NA	Water	8015C	
MB 490-444861/6	Method Blank	Total/NA	Water	8015C	
LCS 490-444861/17	Lab Control Sample	Total/NA	Water	8015C	
LCSD 490-444861/18	Lab Control Sample Dup	Total/NA	Water	8015C	

GC Semi VOA

Prep Batch: 444610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150688-3	SJRP-MW6-07062017	Total/NA	Water	3510C	
600-150688-6	SJRP-MW8-07062017	Total/NA	Water	3510C	
600-150688-7	SJRP-MW9-07062017	Total/NA	Water	3510C	
600-150688-8	SJRP-MW9-07062017-2	Total/NA	Water	3510C	
600-150688-9	SJRP-MW11-07062017	Total/NA	Water	3510C	
600-150688-10	SJRP-MW12-07062017	Total/NA	Water	3510C	
600-150688-11	SJRP-MW13-07062017	Total/NA	Water	3510C	
600-150688-12	SJRP-MW14-07062017	Total/NA	Water	3510C	
600-150688-13	SJRP-MW16-07062017	Total/NA	Water	3510C	
MB 490-444610/1-A	Method Blank	Total/NA	Water	3510C	
LCS 490-444610/2-A	Lab Control Sample	Total/NA	Water	3510C	
600-150688-3 MS	SJRP-MW6-07062017-MS	Total/NA	Water	3510C	
600-150688-3 MSD	SJRP-MW6-07062017-MSD	Total/NA	Water	3510C	

Analysis Batch: 444872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150688-3	SJRP-MW6-07062017	Total/NA	Water	8015C	444610
600-150688-6	SJRP-MW8-07062017	Total/NA	Water	8015C	444610
600-150688-7	SJRP-MW9-07062017	Total/NA	Water	8015C	444610
600-150688-8	SJRP-MW9-07062017-2	Total/NA	Water	8015C	444610
600-150688-9	SJRP-MW11-07062017	Total/NA	Water	8015C	444610
600-150688-10	SJRP-MW12-07062017	Total/NA	Water	8015C	444610
600-150688-11	SJRP-MW13-07062017	Total/NA	Water	8015C	444610
600-150688-12	SJRP-MW14-07062017	Total/NA	Water	8015C	444610
600-150688-13	SJRP-MW16-07062017	Total/NA	Water	8015C	444610
MB 490-444610/1-A	Method Blank	Total/NA	Water	8015C	444610
LCS 490-444610/2-A	Lab Control Sample	Total/NA	Water	8015C	444610
600-150688-3 MS	SJRP-MW6-07062017-MS	Total/NA	Water	8015C	444610
600-150688-3 MSD	SJRP-MW6-07062017-MSD	Total/NA	Water	8015C	444610

Analysis Batch: 445166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150688-3	SJRP-MW6-07062017	Total/NA	Water	8015C	444610
600-150688-7	SJRP-MW9-07062017	Total/NA	Water	8015C	444610
600-150688-8	SJRP-MW9-07062017-2	Total/NA	Water	8015C	444610
600-150688-9	SJRP-MW11-07062017	Total/NA	Water	8015C	444610

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

GC Semi VOA (Continued)

Analysis Batch: 445166 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150688-10	SJRP-MW12-07062017	Total/NA	Water	8015C	444610
600-150688-12	SJRP-MW14-07062017	Total/NA	Water	8015C	444610
600-150688-13	SJRP-MW16-07062017	Total/NA	Water	8015C	444610

HPLC/IC

Analysis Batch: 216664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150688-1	SJRP-MW2-07062017	Total/NA	Water	300.0	
600-150688-2	SJRP-MW4-07062017	Total/NA	Water	300.0	
600-150688-6	SJRP-MW8-07062017	Total/NA	Water	300.0	
600-150688-7	SJRP-MW9-07062017	Total/NA	Water	300.0	
600-150688-8	SJRP-MW9-07062017-2	Total/NA	Water	300.0	
600-150688-9	SJRP-MW11-07062017	Total/NA	Water	300.0	
600-150688-12	SJRP-MW14-07062017	Total/NA	Water	300.0	
MB 600-216664/4	Method Blank	Total/NA	Water	300.0	
LCS 600-216664/5	Lab Control Sample	Total/NA	Water	300.0	
600-150688-3 MS	SJRP-MW6-07062017-MS	Total/NA	Water	300.0	
600-150688-3 MSD	SJRP-MW6-07062017-MSD	Total/NA	Water	300.0	

Analysis Batch: 216665

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150688-1	SJRP-MW2-07062017	Total/NA	Water	300.0	
600-150688-2	SJRP-MW4-07062017	Total/NA	Water	300.0	
600-150688-3	SJRP-MW6-07062017	Total/NA	Water	300.0	
600-150688-6	SJRP-MW8-07062017	Total/NA	Water	300.0	
600-150688-7	SJRP-MW9-07062017	Total/NA	Water	300.0	
600-150688-8	SJRP-MW9-07062017-2	Total/NA	Water	300.0	
600-150688-9	SJRP-MW11-07062017	Total/NA	Water	300.0	
600-150688-10	SJRP-MW12-07062017	Total/NA	Water	300.0	
600-150688-11	SJRP-MW13-07062017	Total/NA	Water	300.0	
600-150688-12	SJRP-MW14-07062017	Total/NA	Water	300.0	
600-150688-13	SJRP-MW16-07062017	Total/NA	Water	300.0	
MB 600-216665/4	Method Blank	Total/NA	Water	300.0	
LCS 600-216665/5	Lab Control Sample	Total/NA	Water	300.0	
600-150688-3 MS	SJRP-MW6-07062017-MS	Total/NA	Water	300.0	
600-150688-3 MSD	SJRP-MW6-07062017-MSD	Total/NA	Water	300.0	

Analysis Batch: 217168

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150688-1	SJRP-MW2-07062017	Total/NA	Water	300.0	
600-150688-2	SJRP-MW4-07062017	Total/NA	Water	300.0	
600-150688-3	SJRP-MW6-07062017	Total/NA	Water	300.0	
600-150688-6	SJRP-MW8-07062017	Total/NA	Water	300.0	
600-150688-7	SJRP-MW9-07062017	Total/NA	Water	300.0	
600-150688-8	SJRP-MW9-07062017-2	Total/NA	Water	300.0	
600-150688-9	SJRP-MW11-07062017	Total/NA	Water	300.0	
600-150688-10	SJRP-MW12-07062017	Total/NA	Water	300.0	
600-150688-11	SJRP-MW13-07062017	Total/NA	Water	300.0	
600-150688-12	SJRP-MW14-07062017	Total/NA	Water	300.0	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

HPLC/IC (Continued)

Analysis Batch: 217168 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150688-13	SJRP-MW16-07062017	Total/NA	Water	300.0	
MB 600-217168/4	Method Blank	Total/NA	Water	300.0	
LCS 600-217168/5	Lab Control Sample	Total/NA	Water	300.0	
600-150688-6 MS	SJRP-MW8-07062017	Total/NA	Water	300.0	
600-150688-6 MSD	SJRP-MW8-07062017	Total/NA	Water	300.0	

Metals

Prep Batch: 216736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150688-1	SJRP-MW2-07062017	Dissolved	Water	7470A	
600-150688-2	SJRP-MW4-07062017	Dissolved	Water	7470A	
600-150688-3	SJRP-MW6-07062017	Dissolved	Water	7470A	
600-150688-6	SJRP-MW8-07062017	Dissolved	Water	7470A	
MB 600-216736/7-A	Method Blank	Total/NA	Water	7470A	
LCS 600-216736/8-A	Lab Control Sample	Total/NA	Water	7470A	
600-150688-3 MS	SJRP-MW6-07062017-MS	Dissolved	Water	7470A	
600-150688-3 MSD	SJRP-MW6-07062017-MSD	Dissolved	Water	7470A	
600-150688-3 DU	SJRP-MW6-07062017	Dissolved	Water	7470A	

Analysis Batch: 216769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150688-1	SJRP-MW2-07062017	Dissolved	Water	7470A	216736
600-150688-2	SJRP-MW4-07062017	Dissolved	Water	7470A	216736
600-150688-3	SJRP-MW6-07062017	Dissolved	Water	7470A	216736
600-150688-6	SJRP-MW8-07062017	Dissolved	Water	7470A	216736
MB 600-216736/7-A	Method Blank	Total/NA	Water	7470A	216736
LCS 600-216736/8-A	Lab Control Sample	Total/NA	Water	7470A	216736
600-150688-3 MS	SJRP-MW6-07062017-MS	Dissolved	Water	7470A	216736
600-150688-3 MSD	SJRP-MW6-07062017-MSD	Dissolved	Water	7470A	216736
600-150688-3 DU	SJRP-MW6-07062017	Dissolved	Water	7470A	216736

Prep Batch: 216811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150688-1	SJRP-MW2-07062017	Dissolved	Water	3010A	
600-150688-2	SJRP-MW4-07062017	Dissolved	Water	3010A	
600-150688-3	SJRP-MW6-07062017	Dissolved	Water	3010A	
600-150688-6	SJRP-MW8-07062017	Dissolved	Water	3010A	
600-150688-7	SJRP-MW9-07062017	Dissolved	Water	3010A	
600-150688-8	SJRP-MW9-07062017-2	Dissolved	Water	3010A	
600-150688-9	SJRP-MW11-07062017	Dissolved	Water	3010A	
600-150688-10	SJRP-MW12-07062017	Dissolved	Water	3010A	
600-150688-11	SJRP-MW13-07062017	Dissolved	Water	3010A	
600-150688-12	SJRP-MW14-07062017	Dissolved	Water	3010A	
600-150688-13	SJRP-MW16-07062017	Dissolved	Water	3010A	
MB 600-216811/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-216811/2-A	Lab Control Sample	Total/NA	Water	3010A	
600-150688-1 MS	SJRP-MW2-07062017	Dissolved	Water	3010A	
600-150688-1 MSD	SJRP-MW2-07062017	Dissolved	Water	3010A	
600-150688-3 MS	SJRP-MW6-07062017-MS	Dissolved	Water	3010A	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Metals (Continued)

Prep Batch: 216811 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150688-3 MSD	SJRP-MW6-07062017-MSD	Dissolved	Water	3010A	
600-150688-1 DU	SJRP-MW2-07062017	Dissolved	Water	3010A	

Prep Batch: 216829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150688-7	SJRP-MW9-07062017	Dissolved	Water	7470A	
600-150688-8	SJRP-MW9-07062017-2	Dissolved	Water	7470A	
600-150688-9	SJRP-MW11-07062017	Dissolved	Water	7470A	
600-150688-10	SJRP-MW12-07062017	Dissolved	Water	7470A	
600-150688-11	SJRP-MW13-07062017	Dissolved	Water	7470A	
600-150688-12	SJRP-MW14-07062017	Dissolved	Water	7470A	
600-150688-13	SJRP-MW16-07062017	Dissolved	Water	7470A	
MB 600-216829/7-A	Method Blank	Total/NA	Water	7470A	
LCS 600-216829/8-A	Lab Control Sample	Total/NA	Water	7470A	
600-150688-7 MS	SJRP-MW9-07062017	Dissolved	Water	7470A	
600-150688-7 DU	SJRP-MW9-07062017	Dissolved	Water	7470A	

Analysis Batch: 217076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150688-7	SJRP-MW9-07062017	Dissolved	Water	7470A	216829
600-150688-8	SJRP-MW9-07062017-2	Dissolved	Water	7470A	216829
600-150688-9	SJRP-MW11-07062017	Dissolved	Water	7470A	216829
600-150688-10	SJRP-MW12-07062017	Dissolved	Water	7470A	216829
600-150688-11	SJRP-MW13-07062017	Dissolved	Water	7470A	216829
600-150688-12	SJRP-MW14-07062017	Dissolved	Water	7470A	216829
600-150688-13	SJRP-MW16-07062017	Dissolved	Water	7470A	216829
MB 600-216829/7-A	Method Blank	Total/NA	Water	7470A	216829
LCS 600-216829/8-A	Lab Control Sample	Total/NA	Water	7470A	216829
600-150688-7 MS	SJRP-MW9-07062017	Dissolved	Water	7470A	216829
600-150688-7 DU	SJRP-MW9-07062017	Dissolved	Water	7470A	216829

Analysis Batch: 217361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150688-1	SJRP-MW2-07062017	Dissolved	Water	6010B	216811
600-150688-2	SJRP-MW4-07062017	Dissolved	Water	6010B	216811
600-150688-3	SJRP-MW6-07062017	Dissolved	Water	6010B	216811
600-150688-6	SJRP-MW8-07062017	Dissolved	Water	6010B	216811
600-150688-7	SJRP-MW9-07062017	Dissolved	Water	6010B	216811
600-150688-8	SJRP-MW9-07062017-2	Dissolved	Water	6010B	216811
600-150688-9	SJRP-MW11-07062017	Dissolved	Water	6010B	216811
600-150688-10	SJRP-MW12-07062017	Dissolved	Water	6010B	216811
600-150688-11	SJRP-MW13-07062017	Dissolved	Water	6010B	216811
600-150688-12	SJRP-MW14-07062017	Dissolved	Water	6010B	216811
600-150688-13	SJRP-MW16-07062017	Dissolved	Water	6010B	216811
MB 600-216811/1-A	Method Blank	Total/NA	Water	6010B	216811
LCS 600-216811/2-A	Lab Control Sample	Total/NA	Water	6010B	216811
600-150688-1 MS	SJRP-MW2-07062017	Dissolved	Water	6010B	216811
600-150688-1 MSD	SJRP-MW2-07062017	Dissolved	Water	6010B	216811
600-150688-3 MS	SJRP-MW6-07062017-MS	Dissolved	Water	6010B	216811
600-150688-3 MSD	SJRP-MW6-07062017-MSD	Dissolved	Water	6010B	216811
600-150688-1 DU	SJRP-MW2-07062017	Dissolved	Water	6010B	216811

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Analysis Batch: 217549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150688-1	SJRP-MW2-07062017	Dissolved	Water	6010B	216811
600-150688-2	SJRP-MW4-07062017	Dissolved	Water	6010B	216811
600-150688-3	SJRP-MW6-07062017	Dissolved	Water	6010B	216811
600-150688-6	SJRP-MW8-07062017	Dissolved	Water	6010B	216811
600-150688-7	SJRP-MW9-07062017	Dissolved	Water	6010B	216811
600-150688-8	SJRP-MW9-07062017-2	Dissolved	Water	6010B	216811
600-150688-9	SJRP-MW11-07062017	Dissolved	Water	6010B	216811
600-150688-10	SJRP-MW12-07062017	Dissolved	Water	6010B	216811
600-150688-11	SJRP-MW13-07062017	Dissolved	Water	6010B	216811
600-150688-12	SJRP-MW14-07062017	Dissolved	Water	6010B	216811
600-150688-13	SJRP-MW16-07062017	Dissolved	Water	6010B	216811
600-150688-1 MS	SJRP-MW2-07062017	Dissolved	Water	6010B	216811
600-150688-1 MSD	SJRP-MW2-07062017	Dissolved	Water	6010B	216811
600-150688-3 MS	SJRP-MW6-07062017-MS	Dissolved	Water	6010B	216811
600-150688-3 MSD	SJRP-MW6-07062017-MSD	Dissolved	Water	6010B	216811
600-150688-1 DU	SJRP-MW2-07062017	Dissolved	Water	6010B	216811

General Chemistry

Analysis Batch: 216851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150688-1	SJRP-MW2-07062017	Total/NA	Water	2540 C-1997	
600-150688-2	SJRP-MW4-07062017	Total/NA	Water	2540 C-1997	
600-150688-3	SJRP-MW6-07062017	Total/NA	Water	2540 C-1997	
600-150688-6	SJRP-MW8-07062017	Total/NA	Water	2540 C-1997	
600-150688-7	SJRP-MW9-07062017	Total/NA	Water	2540 C-1997	
600-150688-8	SJRP-MW9-07062017-2	Total/NA	Water	2540 C-1997	
600-150688-9	SJRP-MW11-07062017	Total/NA	Water	2540 C-1997	
600-150688-10	SJRP-MW12-07062017	Total/NA	Water	2540 C-1997	
600-150688-11	SJRP-MW13-07062017	Total/NA	Water	2540 C-1997	
600-150688-12	SJRP-MW14-07062017	Total/NA	Water	2540 C-1997	
600-150688-13	SJRP-MW16-07062017	Total/NA	Water	2540 C-1997	
MB 600-216851/1	Method Blank	Total/NA	Water	2540 C-1997	
LCS 600-216851/2	Lab Control Sample	Total/NA	Water	2540 C-1997	

Analysis Batch: 216902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150688-1	SJRP-MW2-07062017	Total/NA	Water	2320B-1997	
600-150688-2	SJRP-MW4-07062017	Total/NA	Water	2320B-1997	
600-150688-3	SJRP-MW6-07062017	Total/NA	Water	2320B-1997	
600-150688-7	SJRP-MW9-07062017	Total/NA	Water	2320B-1997	
600-150688-8	SJRP-MW9-07062017-2	Total/NA	Water	2320B-1997	
600-150688-9	SJRP-MW11-07062017	Total/NA	Water	2320B-1997	
600-150688-10	SJRP-MW12-07062017	Total/NA	Water	2320B-1997	
600-150688-11	SJRP-MW13-07062017	Total/NA	Water	2320B-1997	
600-150688-12	SJRP-MW14-07062017	Total/NA	Water	2320B-1997	
600-150688-13	SJRP-MW16-07062017	Total/NA	Water	2320B-1997	
MB 600-216902/2	Method Blank	Total/NA	Water	2320B-1997	
LCS 600-216902/3	Lab Control Sample	Total/NA	Water	2320B-1997	
600-150688-3 MS	SJRP-MW6-07062017-MS	Total/NA	Water	2320B-1997	
600-150688-3 MSD	SJRP-MW6-07062017-MSD	Total/NA	Water	2320B-1997	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

General Chemistry (Continued)

Analysis Batch: 217182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150688-6	SJRP-MW8-07062017	Total/NA	Water	2320B-1997	
MB 600-217182/2	Method Blank	Total/NA	Water	2320B-1997	
LCS 600-217182/3	Lab Control Sample	Total/NA	Water	2320B-1997	
600-150688-6 DU	SJRP-MW8-07062017	Total/NA	Water	2320B-1997	

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Client Sample ID: SJRP-MW2-07062017

Lab Sample ID: 600-150688-1

Date Collected: 07/06/17 08:10

Matrix: Water

Date Received: 07/07/17 09:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	216955	07/12/17 15:29	YX1	TAL HOU
Total/NA	Analysis	300.0		10			216664	07/07/17 18:49	DAW	TAL HOU
Total/NA	Analysis	300.0		10			216665	07/07/17 18:49	DAW	TAL HOU
Total/NA	Analysis	300.0		250			217168	07/14/17 21:49	DAW	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	216811	07/10/17 18:17	JAH	TAL HOU
Dissolved	Analysis	6010B		1			217361	07/18/17 13:04	DCL	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	216811	07/10/17 18:17	JAH	TAL HOU
Dissolved	Analysis	6010B		10			217549	07/20/17 13:24	DCL	TAL HOU
Dissolved	Prep	7470A			40 mL	40 mL	216736	07/10/17 07:07	DDE	TAL HOU
Dissolved	Analysis	7470A		1			216769	07/10/17 10:50	DDE	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	216902	07/11/17 13:20	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	25 mL	100 mL	216851	07/11/17 09:51	EC1	TAL HOU

Client Sample ID: SJRP-MW4-07062017

Lab Sample ID: 600-150688-2

Date Collected: 07/06/17 08:30

Matrix: Water

Date Received: 07/07/17 09:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	216955	07/12/17 14:59	YX1	TAL HOU
Total/NA	Analysis	300.0		10			216664	07/07/17 19:09	DAW	TAL HOU
Total/NA	Analysis	300.0		10			216665	07/07/17 19:09	DAW	TAL HOU
Total/NA	Analysis	300.0		250			217168	07/14/17 22:07	DAW	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	216811	07/10/17 18:17	JAH	TAL HOU
Dissolved	Analysis	6010B		1			217361	07/18/17 13:16	DCL	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	216811	07/10/17 18:17	JAH	TAL HOU
Dissolved	Analysis	6010B		10			217549	07/20/17 12:44	DCL	TAL HOU
Dissolved	Prep	7470A			40 mL	40 mL	216736	07/10/17 07:07	DDE	TAL HOU
Dissolved	Analysis	7470A		1			216769	07/10/17 10:52	DDE	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	216902	07/11/17 13:32	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	25 mL	100 mL	216851	07/11/17 09:51	EC1	TAL HOU

Client Sample ID: SJRP-MW6-07062017

Lab Sample ID: 600-150688-3

Date Collected: 07/06/17 09:00

Matrix: Water

Date Received: 07/07/17 09:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	216901	07/12/17 06:16	YX1	TAL HOU
Total/NA	Analysis	8015C		1	5 mL	5 mL	444616	07/13/17 18:05	GWM	TAL NSH
Total/NA	Prep	3510C			230 mL	1 mL	444610	07/13/17 09:20	KB	TAL NSH
Total/NA	Analysis	8015C		1			444872	07/14/17 12:17	LOJ	TAL NSH
Total/NA	Prep	3510C			230 mL	1 mL	444610	07/13/17 09:20	KB	TAL NSH
Total/NA	Analysis	8015C		1			445166	07/15/17 18:44	GMH	TAL NSH

TestAmerica Houston

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20			216665	07/07/17 19:49	DAW	TAL HOU
Total/NA	Analysis	300.0		1000			217168	07/14/17 22:26	DAW	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	216811	07/10/17 18:17	JAH	TAL HOU
Dissolved	Analysis	6010B		1			217361	07/18/17 13:18	DCL	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	216811	07/10/17 18:17	JAH	TAL HOU
Dissolved	Analysis	6010B		50			217549	07/20/17 12:46	DCL	TAL HOU
Dissolved	Prep	7470A			40 mL	40 mL	216736	07/10/17 07:07	DDE	TAL HOU
Dissolved	Analysis	7470A		1			216769	07/10/17 10:54	DDE	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	216902	07/11/17 12:45	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	10 mL	100 mL	216851	07/11/17 09:51	EC1	TAL HOU

Client Sample ID: SJRP-TB01-07062017

Lab Sample ID: 600-150688-4

Date Collected: 07/06/17 07:00

Matrix: Water

Date Received: 07/07/17 09:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	216861	07/11/17 18:51	YX1	TAL HOU

Client Sample ID: SJRP-TB02-07062017

Lab Sample ID: 600-150688-5

Date Collected: 07/06/17 07:00

Matrix: Water

Date Received: 07/07/17 09:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015C		1	5 mL	5 mL	444616	07/13/17 17:06	GWM	TAL NSH

Client Sample ID: SJRP-MW8-07062017

Lab Sample ID: 600-150688-6

Date Collected: 07/06/17 11:30

Matrix: Water

Date Received: 07/07/17 09:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	216861	07/11/17 19:17	YX1	TAL HOU
Total/NA	Analysis	8015C		1	5 mL	5 mL	444616	07/13/17 20:04	GWM	TAL NSH
Total/NA	Prep	3510C			230 mL	1 mL	444610	07/13/17 09:20	KB	TAL NSH
Total/NA	Analysis	8015C		1			444872	07/14/17 13:03	LOJ	TAL NSH
Total/NA	Analysis	300.0		10			216664	07/07/17 19:29	DAW	TAL HOU
Total/NA	Analysis	300.0		10			216665	07/07/17 19:29	DAW	TAL HOU
Total/NA	Analysis	300.0		250			217168	07/14/17 22:44	DAW	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	216811	07/10/17 18:17	JAH	TAL HOU
Dissolved	Analysis	6010B		1			217361	07/18/17 13:24	DCL	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	216811	07/10/17 18:17	JAH	TAL HOU
Dissolved	Analysis	6010B		20			217549	07/20/17 12:51	DCL	TAL HOU
Dissolved	Prep	7470A			40 mL	40 mL	216736	07/10/17 07:07	DDE	TAL HOU
Dissolved	Analysis	7470A		1			216769	07/10/17 11:01	DDE	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	217182	07/14/17 14:23	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	10 mL	100 mL	216851	07/11/17 09:51	EC1	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Client Sample ID: SJRP-MW9-07062017

Date Collected: 07/06/17 12:00
Date Received: 07/07/17 09:51

Lab Sample ID: 600-150688-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	216861	07/11/17 19:43	YX1	TAL HOU
Total/NA	Analysis	8260B	DL	10	20 mL	20 mL	216955	07/12/17 18:33	YX1	TAL HOU
Total/NA	Analysis	8015C		1	5 mL	5 mL	444616	07/13/17 20:34	GWM	TAL NSH
Total/NA	Prep	3510C			240 mL	1 mL	444610	07/13/17 09:20	KB	TAL NSH
Total/NA	Analysis	8015C		1			444872	07/14/17 13:19	LOJ	TAL NSH
Total/NA	Prep	3510C			240 mL	1 mL	444610	07/13/17 09:20	KB	TAL NSH
Total/NA	Analysis	8015C		1			445166	07/15/17 19:15	GMH	TAL NSH
Total/NA	Analysis	300.0		20			216664	07/07/17 20:49	DAW	TAL HOU
Total/NA	Analysis	300.0		20			216665	07/07/17 20:49	DAW	TAL HOU
Total/NA	Analysis	300.0		1000			217168	07/14/17 23:39	DAW	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	216811	07/10/17 18:17	JAH	TAL HOU
Dissolved	Analysis	6010B		1			217361	07/18/17 13:26	DCL	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	216811	07/10/17 18:17	JAH	TAL HOU
Dissolved	Analysis	6010B		50			217549	07/20/17 12:53	DCL	TAL HOU
Dissolved	Prep	7470A			40 mL	40 mL	216829	07/11/17 07:26	DDE	TAL HOU
Dissolved	Analysis	7470A		1			217076	07/13/17 09:49	DDE	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	216902	07/11/17 14:12	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	10 mL	100 mL	216851	07/11/17 09:51	EC1	TAL HOU

Client Sample ID: SJRP-MW9-07062017-2

Date Collected: 07/06/17 12:00
Date Received: 07/07/17 09:51

Lab Sample ID: 600-150688-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	216861	07/11/17 20:09	YX1	TAL HOU
Total/NA	Analysis	8260B	DL	10	20 mL	20 mL	216955	07/12/17 19:04	YX1	TAL HOU
Total/NA	Analysis	8015C		1	5 mL	5 mL	444616	07/13/17 21:04	GWM	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	444610	07/13/17 09:20	KB	TAL NSH
Total/NA	Analysis	8015C		1			444872	07/14/17 13:35	LOJ	TAL NSH
Total/NA	Prep	3510C			250 mL	1 mL	444610	07/13/17 09:20	KB	TAL NSH
Total/NA	Analysis	8015C		1			445166	07/15/17 19:31	GMH	TAL NSH
Total/NA	Analysis	300.0		20			216664	07/07/17 22:29	DAW	TAL HOU
Total/NA	Analysis	300.0		20			216665	07/07/17 22:29	DAW	TAL HOU
Total/NA	Analysis	300.0		1000			217168	07/14/17 23:58	DAW	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	216811	07/10/17 18:17	JAH	TAL HOU
Dissolved	Analysis	6010B		1			217361	07/18/17 13:28	DCL	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	216811	07/10/17 18:17	JAH	TAL HOU
Dissolved	Analysis	6010B		50			217549	07/20/17 12:55	DCL	TAL HOU
Dissolved	Prep	7470A			40 mL	40 mL	216829	07/11/17 07:26	DDE	TAL HOU
Dissolved	Analysis	7470A		1			217076	07/13/17 09:54	DDE	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	216902	07/11/17 14:15	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	10 mL	100 mL	216851	07/11/17 09:51	EC1	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Client Sample ID: SJRP-MW11-07062017

Lab Sample ID: 600-150688-9

Date Collected: 07/06/17 13:00
Matrix: Water
Date Received: 07/07/17 09:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	216861	07/11/17 20:35	YX1	TAL HOU
Total/NA	Analysis	8015C		1	5 mL	5 mL	444616	07/13/17 21:34	GWM	TAL NSH
Total/NA	Prep	3510C			220 mL	1 mL	444610	07/13/17 09:20	KB	TAL NSH
Total/NA	Analysis	8015C		1			444872	07/14/17 13:50	LOJ	TAL NSH
Total/NA	Prep	3510C			220 mL	1 mL	444610	07/13/17 09:20	KB	TAL NSH
Total/NA	Analysis	8015C		1			445166	07/15/17 19:46	GMH	TAL NSH
Total/NA	Analysis	300.0		10			216664	07/07/17 22:49	DAW	TAL HOU
Total/NA	Analysis	300.0		10			216665	07/07/17 22:49	DAW	TAL HOU
Total/NA	Analysis	300.0		250			217168	07/15/17 00:53	DAW	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	216811	07/10/17 18:17	JAH	TAL HOU
Dissolved	Analysis	6010B		1			217361	07/18/17 13:33	DCL	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	216811	07/10/17 18:17	JAH	TAL HOU
Dissolved	Analysis	6010B		10			217549	07/20/17 12:57	DCL	TAL HOU
Dissolved	Prep	7470A			40 mL	40 mL	216829	07/11/17 07:26	DDE	TAL HOU
Dissolved	Analysis	7470A		1			217076	07/13/17 09:56	DDE	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	216902	07/11/17 14:24	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	25 mL	100 mL	216851	07/11/17 09:51	EC1	TAL HOU

Client Sample ID: SJRP-MW12-07062017

Lab Sample ID: 600-150688-10

Date Collected: 07/06/17 13:30
Matrix: Water
Date Received: 07/07/17 09:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	216861	07/11/17 21:00	YX1	TAL HOU
Total/NA	Analysis	8015C		1	5 mL	5 mL	444616	07/13/17 22:03	GWM	TAL NSH
Total/NA	Prep	3510C			230 mL	1 mL	444610	07/13/17 09:20	KB	TAL NSH
Total/NA	Analysis	8015C		1			444872	07/14/17 14:06	LOJ	TAL NSH
Total/NA	Prep	3510C			230 mL	1 mL	444610	07/13/17 09:20	KB	TAL NSH
Total/NA	Analysis	8015C		1			445166	07/15/17 20:02	GMH	TAL NSH
Total/NA	Analysis	300.0		10			216665	07/07/17 23:09	DAW	TAL HOU
Total/NA	Analysis	300.0		250			217168	07/15/17 01:11	DAW	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	216811	07/10/17 18:17	JAH	TAL HOU
Dissolved	Analysis	6010B		1			217361	07/18/17 13:35	DCL	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	216811	07/10/17 18:17	JAH	TAL HOU
Dissolved	Analysis	6010B		10			217549	07/20/17 12:59	DCL	TAL HOU
Dissolved	Prep	7470A			40 mL	40 mL	216829	07/11/17 07:26	DDE	TAL HOU
Dissolved	Analysis	7470A		1			217076	07/13/17 09:58	DDE	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	216902	07/11/17 14:36	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	25 mL	100 mL	216851	07/11/17 09:51	EC1	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Client Sample ID: SJRP-MW13-07062017

Lab Sample ID: 600-150688-11

Date Collected: 07/06/17 14:00
Matrix: Water
Date Received: 07/07/17 09:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	20 mL	20 mL	216861	07/11/17 21:26	YX1	TAL HOU
Total/NA	Analysis	8260B	DL	250	20 mL	20 mL	216955	07/12/17 19:34	YX1	TAL HOU
Total/NA	Analysis	8015C		25	5 mL	5 mL	444861	07/14/17 23:00	GWM	TAL NSH
Total/NA	Prep	3510C			230 mL	1 mL	444610	07/13/17 09:20	KB	TAL NSH
Total/NA	Analysis	8015C		1			444872	07/14/17 14:21	LOJ	TAL NSH
Total/NA	Analysis	300.0		20			216665	07/07/17 23:29	DAW	TAL HOU
Total/NA	Analysis	300.0		250			217168	07/15/17 01:30	DAW	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	216811	07/10/17 18:17	JAH	TAL HOU
Dissolved	Analysis	6010B		1			217361	07/18/17 13:37	DCL	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	216811	07/10/17 18:17	JAH	TAL HOU
Dissolved	Analysis	6010B		50			217549	07/20/17 13:18	DCL	TAL HOU
Dissolved	Prep	7470A			40 mL	40 mL	216829	07/11/17 07:26	DDE	TAL HOU
Dissolved	Analysis	7470A		1			217076	07/13/17 10:01	DDE	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	216902	07/11/17 15:21	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	10 mL	100 mL	216851	07/11/17 09:51	EC1	TAL HOU

Client Sample ID: SJRP-MW14-07062017

Lab Sample ID: 600-150688-12

Date Collected: 07/06/17 14:50
Matrix: Water
Date Received: 07/07/17 09:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	216861	07/11/17 21:52	YX1	TAL HOU
Total/NA	Analysis	8015C		1	5 mL	5 mL	444861	07/14/17 22:30	GWM	TAL NSH
Total/NA	Prep	3510C			240 mL	1 mL	444610	07/13/17 09:20	KB	TAL NSH
Total/NA	Analysis	8015C		1			444872	07/14/17 14:37	LOJ	TAL NSH
Total/NA	Prep	3510C			240 mL	1 mL	444610	07/13/17 09:20	KB	TAL NSH
Total/NA	Analysis	8015C		1			445166	07/15/17 20:32	GMH	TAL NSH
Total/NA	Analysis	300.0		20			216664	07/07/17 23:49	DAW	TAL HOU
Total/NA	Analysis	300.0		20			216665	07/07/17 23:49	DAW	TAL HOU
Total/NA	Analysis	300.0		1000			217168	07/15/17 01:49	DAW	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	216811	07/10/17 18:17	JAH	TAL HOU
Dissolved	Analysis	6010B		1			217361	07/18/17 13:39	DCL	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	216811	07/10/17 18:17	JAH	TAL HOU
Dissolved	Analysis	6010B		20			217549	07/20/17 13:20	DCL	TAL HOU
Dissolved	Prep	7470A			40 mL	40 mL	216829	07/11/17 07:26	DDE	TAL HOU
Dissolved	Analysis	7470A		1			217076	07/13/17 09:59	DDE	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	216902	07/11/17 15:31	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	10 mL	100 mL	216851	07/11/17 09:51	EC1	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Client Sample ID: SJRP-MW16-07062017 **Lab Sample ID: 600-150688-13**
Date Collected: 07/06/17 15:30 **Matrix: Water**
Date Received: 07/07/17 09:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	216901	07/12/17 05:00	YX1	TAL HOU
Total/NA	Analysis	8260B	DL	100	20 mL	20 mL	216955	07/12/17 20:04	YX1	TAL HOU
Total/NA	Analysis	8015C		10	5 mL	5 mL	444616	07/14/17 00:32	GWM	TAL NSH
Total/NA	Prep	3510C			230 mL	1 mL	444610	07/13/17 09:20	KB	TAL NSH
Total/NA	Analysis	8015C		1			444872	07/14/17 14:52	LOJ	TAL NSH
Total/NA	Prep	3510C			230 mL	1 mL	444610	07/13/17 09:20	KB	TAL NSH
Total/NA	Analysis	8015C		1			445166	07/15/17 20:48	GMH	TAL NSH
Total/NA	Analysis	300.0		20			216665	07/08/17 00:09	DAW	TAL HOU
Total/NA	Analysis	300.0		1000			217168	07/15/17 02:07	DAW	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	216811	07/10/17 18:17	JAH	TAL HOU
Dissolved	Analysis	6010B		1			217361	07/18/17 13:41	DCL	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	216811	07/10/17 18:17	JAH	TAL HOU
Dissolved	Analysis	6010B		50			217549	07/20/17 13:22	DCL	TAL HOU
Dissolved	Prep	7470A			40 mL	40 mL	216829	07/11/17 07:26	DDE	TAL HOU
Dissolved	Analysis	7470A		1			217076	07/13/17 10:07	DDE	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	216902	07/11/17 15:51	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	5 mL	100 mL	216851	07/11/17 09:51	EC1	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Laboratory: TestAmerica Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	16-046-0	08-04-17
Louisiana	NELAP	6	01967	06-30-18
Oklahoma	State Program	6	2015-050	08-31-17
Texas	NELAP	6	T104704223-17-21	10-31-17
USDA	Federal		P330-17-00132	04-20-20

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	A2LA		NA: NELAP & A2LA	12-31-17
A2LA	ISO/IEC 17025		0453.07	12-31-17
Alaska (UST)	State Program	10	UST-087	09-01-17
Arizona	State Program	9	AZ0473	05-05-18
Arkansas DEQ	State Program	6	88-0737	04-25-18
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-17
Florida	NELAP	4	E87358	06-30-18
Georgia	State Program	4	E87358(FL)/453.07(A2LA)	12-31-17
Illinois	NELAP	5	200010	12-09-17
Iowa	State Program	7	131	04-01-18
Kansas	NELAP	7	E-10229	10-31-17
Kentucky (UST)	State Program	4	19	06-30-18
Kentucky (WW)	State Program	4	90038	12-31-17
Louisiana	NELAP	6	30613	06-30-18
Maine	State Program	1	TN00032	11-03-17
Maryland	State Program	3	316	03-31-18
Massachusetts	State Program	1	M-TN032	06-30-18
Minnesota	NELAP	5	047-999-345	12-31-17
Mississippi	State Program	4	N/A	06-30-18
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-17
New Hampshire	NELAP	1	2963	10-09-17
New Jersey	NELAP	2	TN965	06-30-18
New York	NELAP	2	11342	03-31-18
North Carolina (WW/SW)	State Program	4	387	12-31-17
North Dakota	State Program	8	R-146	06-30-17 *
Ohio VAP	State Program	5	CL0033	07-06-19
Oklahoma	State Program	6	9412	08-31-17
Oregon	NELAP	10	TN200001	04-27-18
Pennsylvania	NELAP	3	68-00585	06-30-18
Rhode Island	State Program	1	LAO00268	12-30-17
South Carolina	State Program	4	84009 (001)	02-28-18
South Carolina (Do Not Use - DW)	State Program	4	84009 (002)	12-16-17
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-17
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-17
Virginia	NELAP	3	460152	06-14-18
Washington	State Program	10	C789	07-19-18

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/6/17

TestAmerica Job ID: 600-150688-1

Laboratory: TestAmerica Nashville (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
West Virginia DEP	State Program	3	219	02-28-18
Wisconsin	State Program	5	998020430	08-31-17
Wyoming (UST)	A2LA	8	453.07	12-31-17

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica

Client Information	Sampler: L.Hill	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-53620-15765.1
Client Contact: Aleeca Forsberg	Phone: 205-240-3235	E-Mail: cathy.upton@testamericainc.com		Page: Page 1 of 1
Company: CH2M Hill, Inc.				Job #:
Address: 3721 Rutledge Road NE Suite B-1	Due Date Requested:			
City: Albuquerque	TAT Requested (days): Std			
State, Zip: NM, 87109				
Phone: 505-855-5239	PO #: WD285077			
Email: Aleeca.Forsberg@CH2M.com	WO #: WD285077			
Project Name: Kinder Morgan Bloomfield, NM San Juan	Project #: 60005961			
Site: San Juan Waters	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
Other:

600-150688 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - BTEX	300.1_PDS - Nitrate, Nitrite, as N - DF	6010B/7470A - NMWQCC Dissolved Metals	2320B - Alkalinity	2540C_Calcd - TDS	300_ORGFM_28D Chloride, Sulfate	8015B - GRO Range (C6-C10)	8015B - DRO/ORO Range	SM4500_S2_D - Sulfide - DF	Total Number of containers	Special Ins
Preservation Code:							A	S	D	N	N	N	A	N	CB		
SJRP-MW2-07062017	7/6/17	0810	G	Water	Y	N	X		X	X	X	X					
SJRP-MW4-07062017	7/6/17	0830	G	Water	Y	N	X		X	X	X	X					
SJRP-MW6-07062017	7/6/17	0900	G	Water	Y	N	X		X	X	X	X	X	X			
SJRP-MW6-07062017-MS	7/6/17	0900	G	Water	Y	Y	X		X	X	X	X	X	X			
SJRP-MW6-07062017-MSD	7/6/17	0900	G	Water	Y	Y	X		X	X	X	X	X	X			
SJRP-TB01-07062017	7/6/17	0700	G	Water	N	N	X										Trip Blank
SJRP-TB02-07062017	7/6/17	0700	G	Water	N	N							X				Trip Blank
SJRP-MW8-07062017	7/6/17	1130	G	Water	Y	N	X		X	X	X	X	X	X			
SJRP-MW9-07062017	7/6/17	1200	G	Water	Y	N	X		X	X	X	X	X	X			
SJRP-MW9-07062017-2	7/6/17	1200	G	Water	Y	N	X		X	X	X	X	X	X			
SJRP-MW11-07062017	7/6/17	1300	G	Water	Y	N	X		X	X	X	X	X	X			

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, (V) Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
L.Hill L.Hill	7/6/17 1700	CH2M	[signature]	7-7-17 951	TN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: L. Hill	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-53620-15765.1
Client Contact: Aleeca Forsberg	Phone: 205-240-3235	E-Mail: cathy.upton@testamericainc.com		Page: Page 1 of 1
Company: CH2M Hill, Inc.				Job #:
Address: 3721 Rutledge Road NE Suite B-1	Due Date Requested:			
City: Albuquerque	TAT Requested (days): Std.			
State, Zip: NM, 87109				
Phone: 505-855-5239	PO #: WD285077			
Email: Aleeca.Forsberg@CH2M.com	WO #: WD285077			
Project Name: Kinder Morgan Bloomfield, NM San Juan	Project #: 60005961			
Site: San Juan Waters	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - BTEX	~~9056_Pres - Nitrate Nitrite as N~~	6010B/7470A - NMWQCC Dissolved Metals	2320B - Alkalinity	2540C_Calcd - TDS	300_ORGFM_28D Chloride, Sulfate, ~~Nitrate, Nitrite~~	8015B - GRO Range (C6-C10)	8015B - DRO/ORO Range	~~SM4500_S2_D - Sulfide~~					Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	A	S	D	N	N	N	A	N	CB					X	
SJRP-MW12-07062017	7/6/17	1330	G	Water	Y	N	X		X	X	X	X	X	X							
SJRP-MW13-07062017	7/6/17	1400	G	Water	Y	N	X		X	X	X	X	X	X							40mL VOAs effervescence
SJRP-MW14-07062017	7/6/17	1450	G	Water	Y	N	X		X	X	X	X	X	X							
SJRP-MW16-07062017	7/6/17	1530	G	Water	Y	N	X		X	X	X	X	X	X							
			G	Water																	
			G	Water																	
			G	Water																	
			G	Water																	
			G	Water																	
			G	Water																	
			G	Water																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Deliverable Requested: I, II, III, (IV), Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
L. Hill	7/6/17 1700	CH2M		7-7-17 951	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston

Loc: 600
150688

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Re list

Date/Time Received: 17 JUL 7 9:54

JOB NUMBER: _____

CLIENT: CH2M

UNPACKED BY: JCH

CARRIER/DRIVER: Fed-Ex

Custody Seal Present: ☑ YES ☐ NO

Number of Coolers Received: ~~2~~ 3

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Them CF	Corrected Temp (°C)
RW	(Y) / N	Y / (N)	5.8	676	0.0	5.8
RW	Y / N	Y / N	5.7	676	0.0	5.7
RW	Y / N	Y / N	5.2	676	0.0	5.2
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				JCH
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☑ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☒ YES ☐ NO

pH paper Lot #_____

VOA headspace acceptable (5-6mm): ☒ YES ☐ NO ☐ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?		

COMMENTS: 7332 7229 9875
7332 7229 9864
7332 7229 9853

HS-SA-WI-013 Rev. 3; 07/01/2014

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

600-150688 Chain of Custody

Cooler Received/Opened On 7/12/2017 @ 1010

Time Samples Removed From Cooler_____ Time Samples Placed In Storage_____ (2 Hour Window)

1. Tracking # 8252 (last 4 digits, FedEx) Courier: _FedEx_

IR Gun ID 160656838 pH Strip Lot_____ Chlorine Strip Lot_____

2. Temperature of rep. sample or temp blank when opened: 0.4 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..(NA)

4. Were custody seals on outside of cooler? YES...(NO)...NA

If yes, how many and where: NONE

5. Were the seals intact, signed, and dated correctly? YES...NO...(NA)

6. Were custody papers inside cooler? YES...(NO)...NA

I certify that I opened the cooler and answered questions 1-6 (initial) J.J.

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (initial) _____

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) _____

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) _____

I certify that I attached a label with the unique LIMS number to each container (initial) _____

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

Page 926 of 1581

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

600-150688

TestAmerica — LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Upton, Cathy L		o: 7392.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: cathy.upton@testamericainc.com	State of Origin: New Mexico	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):		Job #: 600-150688-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 7/19/2017			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: San Juan Waters	Project #: 60005961			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO/3510C_LVI DRO/ORO	8015C_GRO/5030B GRO Range (C6-C10)	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
SJRP-MW6-07062017 (600-150688-3)	7/6/17	09:00 Mountain		Water			X	X	4	
SJRP-MW6-07062017-MS (600-150688-3MS)	7/6/17	09:00 Mountain	MS	Water			X	X	4	
SJRP-MW6-07062017-MSD (600-150688-3MSD)	7/6/17	09:00 Mountain	MSD	Water			X	X	4	
SJRP-TB02-07062017 (600-150688-5)	7/6/17	07:00 Mountain		Water				X	3	
SJRP-MW8-07062017 (600-150688-6)	7/6/17	11:30 Mountain		Water			X	X	4	
SJRP-MW9-07062017 (600-150688-7)	7/6/17	12:00 Mountain		Water			X	X	4	
SJRP-MW9-07062017-2 (600-150688-8)	7/6/17	12:00 Mountain		Water			X	X	4	
SJRP-MW11-07062017 (600-150688-9)	7/6/17	13:00 Mountain		Water			X	X	4	
SJRP-MW12-07062017 (600-150688-10)	7/6/17	13:30 Mountain		Water			X	X	4	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 7-11-17 1720	Company	Received by:	Date/Time: 7-12-17 10:10	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.5

Received by OCD: 11/13/2025 11:14:36 AM

12/9/2020 (Rev. 1)

Released to Imaging: 11/14/2025 9:30:04 AM

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TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Upton, Cathy L	Carrier Tracking No(s):	COC No: 600-27392.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: cathy.upton@testamericainc.com	State of Origin: New Mexico	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):		Job #: 600-150688-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 7/19/2017			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: San Juan Waters	Project #: 60005961			
Site:	SSOW#:			

Analysis Requested

Loc: 600
150688

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO/3510C_LVI DRO/ORO	8015C_GRO/5030B GRO Range (C6-C10)	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
SJRP-MW13-07062017 (600-150688-11)	7/6/17	14:00 Mountain		Water			X	X	4	
SJRP-MW14-07062017 (600-150688-12)	7/6/17	14:50 Mountain		Water			X	X	4	
SJRP-MW16-07062017 (600-150688-13)	7/6/17	15:30 Mountain		Water			X	X	4	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		7-11-17 1200			7-12-17 1020	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.5

Received by OCD: 11/13/2025 11:14:36 AM
Page 62 of 65
12/9/2020 (Rev. 1)
Released to Imaging: 11/14/2025 9:30:04 AM

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc. Job Number: 600-150688-1

Login Number: 150688 **List Source: TestAmerica Houston**
List Number: 1
Creator: Crafton, Tommie S

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.8 5.7 5.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-150688-1

Login Number: 150688
List Number: 2
Creator: Stewart, Eric S

List Source: TestAmerica Nashville
List Creation: 07/12/17 02:56 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-150688-1

Login Number: 150688
List Number: 3
Creator: Stewart, Eric S

List Source: TestAmerica Nashville
List Creation: 07/12/17 03:01 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-150702-1
Client Project/Site: San Juan Waters 7/7/17
Revision: 1

For:
CH2M Hill Constructors, Inc.
14701 St. Mary's Lane
Suite 300
Houston, Texas 77079-2923

Attn: Mr. John Ynfante

Bethany McDaniel

Authorized for release by:
12/9/2020 8:23:38 PM
Bethany McDaniel, Senior Project Manager
(713)358-2005
Bethany.McDaniel@Eurofinset.com

Designee for

Cathy Upton, Project Manager I
(713)690-4444
cathy.upton@testamericainc.com

LINKS
Review your project results through TotalAccess
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

Job ID: 600-150702-1

Job ID: 600-150702-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-150702-1

Comments

This report was revised to a Level 2 deliverable per client's request.

The report was revised on 8/9/17 to update the job narrative and to add the IC forms, replacing the final report generated on 7/25/17.

Receipt
The samples were received on 7/8/2017 10:43 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.4º C.

Receipt Exceptions

One or more containers for the following sample was received broken or leaking: SJRP-MW15-07072017-2 (600-150702-4).600-150702-I-4. Only one container was broken; therefore, there was still enough volume remaining for analysis.

GC/MS VOA
Method(s) 8260B: The following samples was diluted to bring the concentration of target analytes within the calibration range: SJRP-MW15-07072017 (600-150702-3), SJRP-MW15-07072017-2 (600-150702-4) and SJRP-PMW2-07072017 (600-150702-6). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA
Method(s) 8015C, 8015D: The following sample(s) was analyzed with headspace in the sample vial: SJRP-TB04-07072017 (600-150702-2).

Method(s) 8015C: The following sample(s) were collected in properly preserved vials for analysis of volatile organic compounds (VOCs): SJRP-PMW2-07072017 (600-150702-6). However, the pH was outside the required criteria when verified by the laboratory and corrective action was not possible.

Method(s) 8015C, 8015D: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 490-445148.

Method(s) 8015C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 490-445287.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method(s) 6010B: The method blank for Prep Batch 217264 contained Dissolved Barium, Dissolved Calcium, Dissolved Iron, Dissolved Potassium, Dissolved Manganese and Dissolved Lead above the method detection limit. These target analyte concentrations were less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 6010B: The method blank for Prep Batch 217264 in analytical batch 217549 contained Dissolved Sodium above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 6010B: Due to the high concentration of target analytes, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 600-217264 and analytical batches 600-217363 and 600-217549 could not be evaluated for accuracy. The associated laboratory control

Case Narrative

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

Job ID: 600-150702-1

Job ID: 600-150702-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

sample (LCS) met acceptance criteria.

Method(s) 6010B: The sample duplicate (DUP) precision for preparation batch 600-217264 and analytical batch 600-217363 was outside control limits for Dissolved Cadmium, Dissolved Molybdenum and Dissolved Nickel.

Method(s) 6010B: The post digestion spike recoveries for Manganese (72%) and Zinc (133%) associated with batch 217363 were outside of control limits.

Method(s) 6010B: The serial dilution performed for the following sample associated with batch 217363 was outside control limits for Boron at 24% recovery and Barium at 18% recovery: (600-150702-B-3-B SD).

Method(s) 6010B: The following samples was diluted to bring the concentration of target analytes within the calibration range: SJRP-PMW1-07072017 (600-150702-5), SJRP-PMW2-07072017 (600-150702-6) and SJRP-PMW4-07072017 (600-150702-7). Elevated reporting limits (RLs) are provided.

Method(s) 7470A: The matrix spike (MS) recovery for analytical batch 600-217076 was outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
Method(s) 300.0: The following samples was diluted due to the nature of the sample matrix: SJRP-MW15-07072017 (600-150702-3), SJRP-MW15-07072017-2 (600-150702-4), SJRP-PMW1-07072017 (600-150702-5), SJRP-PMW2-07072017 (600-150702-6) and SJRP-PMW4-07072017 (600-150702-7). High Sulfate in sample. Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Industrial Hygiene
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Method Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL NSH
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL NSH
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2320B-1997	Alkalinity, Total - SM Online, 2011	SM-Online	TAL HOU
2540 C-1997	Total Dissolved Solids (Dried at 180 °C)	SM	TAL HOU

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SM-Online = Standard Methods Online

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-150702-1	SJRP-TB03-07072017	Water	07/07/17 07:30	07/08/17 10:43
600-150702-2	SJRP-TB04-07072017	Water	07/07/17 07:30	07/08/17 10:43
600-150702-3	SJRP-MW15-07072017	Water	07/07/17 08:00	07/08/17 10:43
600-150702-4	SJRP-MW15-07072017-2	Water	07/07/17 08:00	07/08/17 10:43
600-150702-5	SJRP-PMW1-07072017	Water	07/07/17 09:30	07/08/17 10:43
600-150702-6	SJRP-PMW2-07072017	Water	07/07/17 11:00	07/08/17 10:43
600-150702-7	SJRP-PMW4-07072017	Water	07/07/17 11:30	07/08/17 10:43

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Client Sample ID: SJRP-TB03-07072017

Lab Sample ID: 600-150702-1
Date Collected: 07/07/17 07:30
Matrix: Water
Date Received: 07/08/17 10:43

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			07/12/17 07:32	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			07/12/17 07:32	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			07/12/17 07:32	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			07/12/17 07:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*78*		*50 - 134*		*07/12/17 07:32*	*1*
Dibromofluoromethane	*87*		*62 - 130*		*07/12/17 07:32*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*07/12/17 07:32*	*1*
4-Bromofluorobenzene	*102*		*67 - 139*		*07/12/17 07:32*	*1*

Client Sample ID: SJRP-TB04-07072017

Lab Sample ID: 600-150702-2
Date Collected: 07/07/17 07:30
Matrix: Water
Date Received: 07/08/17 10:43

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			07/15/17 11:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*94*		*50 - 150*		*07/15/17 11:59*	*1*

Client Sample ID: SJRP-MW15-07072017

Lab Sample ID: 600-150702-3
Date Collected: 07/07/17 08:00
Matrix: Water
Date Received: 07/08/17 10:43

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	**0.00158**		0.00100	0.000198	mg/L			07/12/17 07:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*50 - 134*		*07/12/17 07:58*	*1*
Dibromofluoromethane	*96*		*62 - 130*		*07/12/17 07:58*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*07/12/17 07:58*	*1*
4-Bromofluorobenzene	*120*		*67 - 139*		*07/12/17 07:58*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**4.23**		0.250	0.0440	mg/L			07/13/17 14:08	250
Ethylbenzene	**0.159**		0.0500	0.0106	mg/L			07/12/17 21:33	50
Xylenes, Total	**2.17**		0.100	0.0183	mg/L			07/12/17 21:33	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*50 - 134*		*07/12/17 21:33*	*50*
1,2-Dichloroethane-d4 (Surr)	*93*		*50 - 134*		*07/13/17 14:08*	*250*
Dibromofluoromethane	*97*		*62 - 130*		*07/12/17 21:33*	*50*
Dibromofluoromethane	*94*		*62 - 130*		*07/13/17 14:08*	*250*
Toluene-d8 (Surr)	*94*		*70 - 130*		*07/12/17 21:33*	*50*
Toluene-d8 (Surr)	*93*		*70 - 130*		*07/13/17 14:08*	*250*
4-Bromofluorobenzene	*94*		*67 - 139*		*07/12/17 21:33*	*50*

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Client Sample ID: SJRP-MW15-07072017
Date Collected: 07/07/17 08:00
Date Received: 07/08/17 10:43

Lab Sample ID: 600-150702-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	*93*		*67 - 139*		*07/13/17 14:08*	*250*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	**19.1**		1.00	0.500	mg/L			07/18/17 08:06	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	*95*		*50 - 150*		*07/18/17 08:06*	*10*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**0.339**		0.109	0.0989	mg/L		07/13/17 09:20	07/14/17 15:08	1
ORO C24-C40	0.0989	U	0.109	0.0989	mg/L		07/13/17 09:20	07/15/17 21:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	*87*		*50 - 150*	*07/13/17 09:20*	*07/14/17 15:08*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.502	U	4.00	0.502	mg/L			07/08/17 13:16	20
Chloride	**2590**		400	53.4	mg/L			07/17/17 20:17	1000
Nitrate Nitrite as N	0.502	U	4.00	0.502	mg/L			07/08/17 13:16	20
Nitrite as N	0.594	U	4.00	0.594	mg/L			07/08/17 13:16	20
Sulfate	**11000**		500	95.7	mg/L			07/17/17 20:17	1000

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Aluminum	0.0926	U	0.500	0.0926	mg/L		07/17/17 13:47	07/18/17 14:49	1
Dissolved Arsenic	**0.00300**	**J**	0.0100	0.00285	mg/L		07/17/17 13:47	07/18/17 14:49	1
Dissolved Barium	**0.0287**	**B**	0.0200	0.000530	mg/L		07/17/17 13:47	07/18/17 14:49	1
Dissolved Boron	**0.673**		0.200	0.0116	mg/L		07/17/17 13:47	07/18/17 14:49	1
Dissolved Cadmium	**0.000300**	**J**	0.00500	0.000280	mg/L		07/17/17 13:47	07/18/17 14:49	1
Dissolved Calcium	**460**	**B**	1.00	0.0240	mg/L		07/17/17 13:47	07/18/17 14:49	1
Dissolved Chromium	**0.00180**	**J**	0.0100	0.00159	mg/L		07/17/17 13:47	07/18/17 14:49	1
Dissolved Cobalt	**0.00840**	**J**	0.0100	0.000310	mg/L		07/17/17 13:47	07/18/17 14:49	1
Dissolved Iron	**4.83**	**B**	0.400	0.0270	mg/L		07/17/17 13:47	07/18/17 14:49	1
Dissolved Lead	0.00219	U	0.0100	0.00219	mg/L		07/17/17 13:47	07/18/17 14:49	1
Dissolved Magnesium	**99.1**		1.00	0.0555	mg/L		07/17/17 13:47	07/18/17 14:49	1
Dissolved Manganese	**3.14**	**F1 B**	0.0100	0.000360	mg/L		07/17/17 13:47	07/18/17 14:49	1
Dissolved Molybdenum	**0.00430**	**J**	0.0100	0.000540	mg/L		07/17/17 13:47	07/18/17 14:49	1
Dissolved Nickel	**0.0100**		0.0100	0.000800	mg/L		07/17/17 13:47	07/18/17 14:49	1
Dissolved Potassium	**17.1**	**B**	1.00	0.0374	mg/L		07/17/17 13:47	07/18/17 14:49	1
Dissolved Selenium	0.00287	U F1	0.0400	0.00287	mg/L		07/17/17 13:47	07/18/17 14:49	1
Dissolved Sodium	**6540**	**B**	50.0	1.07	mg/L		07/17/17 13:47	07/20/17 14:07	50

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury (Dissolved)	0.0000820	U	0.000200	0.0000820	mg/L		07/11/17 07:26	07/13/17 10:12	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Client Sample ID: SJRP-MW15-07072017

Lab Sample ID: 600-150702-3
Date Collected: 07/07/17 08:00
Matrix: Water
Date Received: 07/08/17 10:43

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**987**		20.0	20.0	mg/L			07/11/17 16:05	1
Bicarbonate Alkalinity as CaCO3	**987**		20.0	20.0	mg/L			07/11/17 16:05	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			07/11/17 16:05	1
Total Dissolved Solids	**22200**		200	200	mg/L			07/11/17 09:51	1

Client Sample ID: SJRP-MW15-07072017-2

Lab Sample ID: 600-150702-4
Date Collected: 07/07/17 08:00
Matrix: Water
Date Received: 07/08/17 10:43

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	**0.00162**		0.00100	0.000198	mg/L			07/12/17 08:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*50 - 134*		*07/12/17 08:24*	*1*
Dibromofluoromethane	*93*		*62 - 130*		*07/12/17 08:24*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*07/12/17 08:24*	*1*
4-Bromofluorobenzene	*119*		*67 - 139*		*07/12/17 08:24*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**4.37**		0.250	0.0440	mg/L			07/13/17 14:38	250
Ethylbenzene	**0.159**		0.0500	0.0106	mg/L			07/12/17 22:02	50
Xylenes, Total	**2.16**		0.100	0.0183	mg/L			07/12/17 22:02	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*50 - 134*		*07/12/17 22:02*	*50*
1,2-Dichloroethane-d4 (Surr)	*95*		*50 - 134*		*07/13/17 14:38*	*250*
Dibromofluoromethane	*96*		*62 - 130*		*07/12/17 22:02*	*50*
Dibromofluoromethane	*95*		*62 - 130*		*07/13/17 14:38*	*250*
Toluene-d8 (Surr)	*94*		*70 - 130*		*07/12/17 22:02*	*50*
Toluene-d8 (Surr)	*94*		*70 - 130*		*07/13/17 14:38*	*250*
4-Bromofluorobenzene	*93*		*67 - 139*		*07/12/17 22:02*	*50*
4-Bromofluorobenzene	*93*		*67 - 139*		*07/13/17 14:38*	*250*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	**10.3**		1.00	0.500	mg/L			07/18/17 07:37	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*50 - 150*		*07/18/17 07:37*	*10*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**0.419**		0.109	0.0989	mg/L		07/13/17 09:20	07/14/17 15:23	1
ORO C24-C40	0.0989	U	0.109	0.0989	mg/L		07/13/17 09:20	07/15/17 21:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*95*		*50 - 150*	*07/13/17 09:20*	*07/14/17 15:23*	*1*

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Client Sample ID: SJRP-MW15-07072017-2

Lab Sample ID: 600-150702-4
Date Collected: 07/07/17 08:00
Matrix: Water
Date Received: 07/08/17 10:43

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.502	U	4.00	0.502	mg/L			07/08/17 14:16	20
Chloride	**2760**		400	53.4	mg/L			07/17/17 20:35	1000
Nitrate Nitrite as N	0.502	U	4.00	0.502	mg/L			07/08/17 14:16	20
Nitrite as N	0.594	U	4.00	0.594	mg/L			07/08/17 14:16	20
Sulfate	**11600**		500	95.7	mg/L			07/17/17 20:35	1000

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Aluminum	0.0926	U	0.500	0.0926	mg/L		07/17/17 13:47	07/18/17 14:57	1
Dissolved Arsenic	0.00285	U	0.0100	0.00285	mg/L		07/17/17 13:47	07/18/17 14:57	1
Dissolved Barium	**0.0288**	**B**	0.0200	0.000530	mg/L		07/17/17 13:47	07/18/17 14:57	1
Dissolved Boron	**0.702**		0.200	0.0116	mg/L		07/17/17 13:47	07/18/17 14:57	1
Dissolved Cadmium	**0.00120**	**J**	0.00500	0.000280	mg/L		07/17/17 13:47	07/18/17 14:57	1
Dissolved Calcium	**468**	**B**	1.00	0.0240	mg/L		07/17/17 13:47	07/18/17 14:57	1
Dissolved Chromium	**0.00250**	**J**	0.0100	0.00159	mg/L		07/17/17 13:47	07/18/17 14:57	1
Dissolved Cobalt	**0.0108**		0.0100	0.000310	mg/L		07/17/17 13:47	07/18/17 14:57	1
Dissolved Iron	**4.88**	**B**	0.400	0.0270	mg/L		07/17/17 13:47	07/18/17 14:57	1
Dissolved Lead	0.00219	U	0.0100	0.00219	mg/L		07/17/17 13:47	07/18/17 14:57	1
Dissolved Magnesium	**99.9**		1.00	0.0555	mg/L		07/17/17 13:47	07/18/17 14:57	1
Dissolved Manganese	**3.16**	**B**	0.0100	0.000360	mg/L		07/17/17 13:47	07/18/17 14:57	1
Dissolved Molybdenum	**0.0100**		0.0100	0.000540	mg/L		07/17/17 13:47	07/18/17 14:57	1
Dissolved Nickel	**0.00970**	**J**	0.0100	0.000800	mg/L		07/17/17 13:47	07/18/17 14:57	1
Dissolved Potassium	**17.8**	**B**	1.00	0.0374	mg/L		07/17/17 13:47	07/18/17 14:57	1
Dissolved Selenium	0.00287	U	0.0400	0.00287	mg/L		07/17/17 13:47	07/18/17 14:57	1
Dissolved Sodium	**6540**	**B**	50.0	1.07	mg/L		07/17/17 13:47	07/20/17 14:14	50

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury (Dissolved)	0.0000820	U	0.000200	0.0000820	mg/L		07/11/17 07:26	07/13/17 10:14	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**1000**		20.0	20.0	mg/L			07/11/17 16:20	1
Bicarbonate Alkalinity as CaCO3	**1000**		20.0	20.0	mg/L			07/11/17 16:20	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			07/11/17 16:20	1
Total Dissolved Solids	**21600**		200	200	mg/L			07/11/17 09:51	1

Client Sample ID: SJRP-PMW1-07072017

Lab Sample ID: 600-150702-5
Date Collected: 07/07/17 09:30
Matrix: Water
Date Received: 07/08/17 10:43

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			07/12/17 20:34	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			07/12/17 20:34	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			07/12/17 20:34	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			07/12/17 20:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*50 - 134*		*07/12/17 20:34*	*1*
Dibromofluoromethane	*96*		*62 - 130*		*07/12/17 20:34*	*1*

TestAmerica Houston

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Client Sample ID: SJRP-PMW1-07072017
Date Collected: 07/07/17 09:30
Date Received: 07/08/17 10:43

Lab Sample ID: 600-150702-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*70 - 130*		*07/12/17 20:34*	*1*
4-Bromofluorobenzene	*93*		*67 - 139*		*07/12/17 20:34*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			07/15/17 13:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*93*		*50 - 150*		*07/15/17 13:31*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**0.376**		0.0980	0.0892	mg/L		07/13/17 09:20	07/14/17 15:39	1
ORO C24-C40	**0.194**		0.0980	0.0892	mg/L		07/13/17 09:20	07/15/17 21:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*112*		*50 - 150*	*07/13/17 09:20*	*07/14/17 15:39*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**3.10**	**J**	4.00	0.502	mg/L			07/08/17 14:36	20
Chloride	**864**		200	26.7	mg/L			07/17/17 21:30	500
Nitrate Nitrite as N	**3.10**	**J**	4.00	0.502	mg/L			07/08/17 14:36	20
Nitrite as N	0.594	U	4.00	0.594	mg/L			07/08/17 14:36	20
Sulfate	**5770**		250	47.9	mg/L			07/17/17 21:30	500

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Aluminum	0.0926	U	0.500	0.0926	mg/L		07/17/17 13:47	07/18/17 14:59	1
Dissolved Arsenic	**0.00630**	**J**	0.0100	0.00285	mg/L		07/17/17 13:47	07/18/17 14:59	1
Dissolved Barium	**0.0170**	**J B**	0.0200	0.000530	mg/L		07/17/17 13:47	07/18/17 14:59	1
Dissolved Boron	**0.475**		0.200	0.0116	mg/L		07/17/17 13:47	07/18/17 14:59	1
Dissolved Cadmium	0.000280	U	0.00500	0.000280	mg/L		07/17/17 13:47	07/18/17 14:59	1
Dissolved Calcium	**156**	**B**	1.00	0.0240	mg/L		07/17/17 13:47	07/18/17 14:59	1
Dissolved Chromium	0.00159	U	0.0100	0.00159	mg/L		07/17/17 13:47	07/18/17 14:59	1
Dissolved Cobalt	**0.000600**	**J**	0.0100	0.000310	mg/L		07/17/17 13:47	07/18/17 14:59	1
Dissolved Iron	**0.0655**	**J B**	0.400	0.0270	mg/L		07/17/17 13:47	07/18/17 14:59	1
Dissolved Lead	0.00219	U	0.0100	0.00219	mg/L		07/17/17 13:47	07/18/17 14:59	1
Dissolved Magnesium	**15.4**		1.00	0.0555	mg/L		07/17/17 13:47	07/18/17 14:59	1
Dissolved Manganese	**0.139**	**B**	0.0100	0.000360	mg/L		07/17/17 13:47	07/18/17 14:59	1
Dissolved Molybdenum	**0.00730**	**J**	0.0100	0.000540	mg/L		07/17/17 13:47	07/18/17 14:59	1
Dissolved Nickel	**0.00170**	**J**	0.0100	0.000800	mg/L		07/17/17 13:47	07/18/17 14:59	1
Dissolved Potassium	**7.43**	**B**	1.00	0.0374	mg/L		07/17/17 13:47	07/18/17 14:59	1
Dissolved Selenium	**0.00470**	**J**	0.0400	0.00287	mg/L		07/17/17 13:47	07/18/17 14:59	1
Dissolved Sodium	**3070**		20.0	0.428	mg/L		07/17/17 13:47	07/19/17 18:04	20

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury (Dissolved)	0.0000820	U F1	0.000200	0.0000820	mg/L		07/11/17 07:26	07/13/17 10:16	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Client Sample ID: SJRP-PMW1-07072017

Lab Sample ID: 600-150702-5
Date Collected: 07/07/17 09:30
Matrix: Water
Date Received: 07/08/17 10:43

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	167		20.0	20.0	mg/L			07/11/17 16:27	1
Bicarbonate Alkalinity as CaCO3	167		20.0	20.0	mg/L			07/11/17 16:27	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			07/11/17 16:27	1
Total Dissolved Solids	9960		100	100	mg/L			07/11/17 09:51	1

Client Sample ID: SJRP-PMW2-07072017

Lab Sample ID: 600-150702-6
Date Collected: 07/07/17 11:00
Matrix: Water
Date Received: 07/08/17 10:43

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	0.0318		0.00100	0.000212	mg/L			07/12/17 09:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*50 - 134*		*07/12/17 09:15*	*1*
Dibromofluoromethane	*91*		*62 - 130*		*07/12/17 09:15*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*07/12/17 09:15*	*1*
4-Bromofluorobenzene	*116*		*67 - 139*		*07/12/17 09:15*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2.15		0.0500	0.00880	mg/L			07/12/17 22:31	50
Toluene	2.81		0.200	0.0396	mg/L			07/13/17 15:09	200
Xylenes, Total	1.64		0.100	0.0183	mg/L			07/12/17 22:31	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*50 - 134*		*07/12/17 22:31*	*50*
1,2-Dichloroethane-d4 (Surr)	*94*		*50 - 134*		*07/13/17 15:09*	*200*
Dibromofluoromethane	*95*		*62 - 130*		*07/12/17 22:31*	*50*
Dibromofluoromethane	*95*		*62 - 130*		*07/13/17 15:09*	*200*
Toluene-d8 (Surr)	*93*		*70 - 130*		*07/12/17 22:31*	*50*
Toluene-d8 (Surr)	*95*		*70 - 130*		*07/13/17 15:09*	*200*
4-Bromofluorobenzene	*91*		*67 - 139*		*07/12/17 22:31*	*50*
4-Bromofluorobenzene	*93*		*67 - 139*		*07/13/17 15:09*	*200*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	17.6		1.00	0.500	mg/L			07/15/17 16:04	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*50 - 150*		*07/15/17 16:04*	*10*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1.24		0.0943	0.0858	mg/L		07/13/17 09:20	07/14/17 15:54	1
ORO C24-C40	0.190		0.0943	0.0858	mg/L		07/13/17 09:20	07/15/17 21:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*91*		*50 - 150*	*07/13/17 09:20*	*07/14/17 15:54*	*1*

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Client Sample ID: SJRP-PMW2-07072017

Lab Sample ID: 600-150702-6
Date Collected: 07/07/17 11:00
Matrix: Water
Date Received: 07/08/17 10:43

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.251	U	2.00	0.251	mg/L			07/08/17 14:56	10
Chloride	**1100**		40.0	5.34	mg/L			07/17/17 21:49	100
Nitrate Nitrite as N	0.251	U	2.00	0.251	mg/L			07/08/17 14:56	10
Nitrite as N	0.297	U	2.00	0.297	mg/L			07/08/17 14:56	10
Sulfate	**1300**		50.0	9.57	mg/L			07/17/17 21:49	100

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Aluminum	0.0926	U	0.500	0.0926	mg/L		07/17/17 13:47	07/18/17 15:06	1
Dissolved Arsenic	0.0570	U	0.200	0.0570	mg/L		07/17/17 13:47	07/19/17 18:06	20
Dissolved Barium	**0.118**	**B**	0.0200	0.000530	mg/L		07/17/17 13:47	07/18/17 15:06	1
Dissolved Boron	**0.892**		0.200	0.0116	mg/L		07/17/17 13:47	07/18/17 15:06	1
Dissolved Cadmium	**0.000500**	**J**	0.00500	0.000280	mg/L		07/17/17 13:47	07/18/17 15:06	1
Dissolved Calcium	**62.1**	**B**	1.00	0.0240	mg/L		07/17/17 13:47	07/18/17 15:06	1
Dissolved Chromium	0.00159	U	0.0100	0.00159	mg/L		07/17/17 13:47	07/18/17 15:06	1
Dissolved Cobalt	**0.00120**	**J**	0.0100	0.000310	mg/L		07/17/17 13:47	07/18/17 15:06	1
Dissolved Iron	**0.0795**	**J B**	0.400	0.0270	mg/L		07/17/17 13:47	07/18/17 15:06	1
Dissolved Lead	0.00219	U	0.0100	0.00219	mg/L		07/17/17 13:47	07/18/17 15:06	1
Dissolved Magnesium	**8.70**		1.00	0.0555	mg/L		07/17/17 13:47	07/18/17 15:06	1
Dissolved Manganese	**0.337**	**B**	0.0100	0.000360	mg/L		07/17/17 13:47	07/18/17 15:06	1
Dissolved Molybdenum	0.000540	U	0.0100	0.000540	mg/L		07/17/17 13:47	07/18/17 15:06	1
Dissolved Nickel	**0.00130**	**J**	0.0100	0.000800	mg/L		07/17/17 13:47	07/18/17 15:06	1
Dissolved Potassium	**6.06**	**B**	1.00	0.0374	mg/L		07/17/17 13:47	07/18/17 15:06	1
Dissolved Selenium	0.00287	U	0.0400	0.00287	mg/L		07/17/17 13:47	07/18/17 15:06	1
Dissolved Sodium	**2210**		20.0	0.428	mg/L		07/17/17 13:47	07/19/17 18:06	20

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury (Dissolved)	0.0000820	U	0.000200	0.0000820	mg/L		07/11/17 07:26	07/13/17 10:21	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**1860**		20.0	20.0	mg/L			07/11/17 16:48	1
Bicarbonate Alkalinity as CaCO3	**1860**		20.0	20.0	mg/L			07/11/17 16:48	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			07/11/17 16:48	1
Total Dissolved Solids	**6540**		40.0	40.0	mg/L			07/11/17 09:51	1

Client Sample ID: SJRP-PMW4-07072017

Lab Sample ID: 600-150702-7
Date Collected: 07/07/17 11:30
Matrix: Water
Date Received: 07/08/17 10:43

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			07/12/17 21:03	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			07/12/17 21:03	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			07/12/17 21:03	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			07/12/17 21:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*50 - 134*		*07/12/17 21:03*	*1*
Dibromofluoromethane	*97*		*62 - 130*		*07/12/17 21:03*	*1*

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Client Sample ID: SJRP-PMW4-07072017
Date Collected: 07/07/17 11:30
Date Received: 07/08/17 10:43

Lab Sample ID: 600-150702-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*70 - 130*		*07/12/17 21:03*	*1*
4-Bromofluorobenzene	*94*		*67 - 139*		*07/12/17 21:03*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			07/15/17 14:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*94*		*50 - 150*		*07/15/17 14:01*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**0.391**		0.104	0.0948	mg/L		07/13/17 09:20	07/14/17 16:10	1
ORO C24-C40	**0.283**		0.104	0.0948	mg/L		07/13/17 09:20	07/15/17 22:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*93*		*50 - 150*	*07/13/17 09:20*	*07/14/17 16:10*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**2.96**	**J**	4.00	0.502	mg/L			07/08/17 15:16	20
Chloride	**2690**		200	26.7	mg/L			07/17/17 22:07	500
Nitrate Nitrite as N	**2.96**	**J**	4.00	0.502	mg/L			07/08/17 15:16	20
Nitrite as N	0.594	U	4.00	0.594	mg/L			07/08/17 15:16	20
Sulfate	**5200**		250	47.9	mg/L			07/17/17 22:07	500

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Aluminum	**0.260**	**J**	0.500	0.0926	mg/L		07/17/17 13:47	07/18/17 15:08	1
Dissolved Arsenic	0.00285	U L	0.0100	0.00285	mg/L		07/17/17 13:47	07/18/17 15:08	1
Dissolved Barium	**0.0167**	**J B**	0.0200	0.000530	mg/L		07/17/17 13:47	07/18/17 15:08	1
Dissolved Boron	**0.622**		0.200	0.0116	mg/L		07/17/17 13:47	07/18/17 15:08	1
Dissolved Cadmium	0.000280	U	0.00500	0.000280	mg/L		07/17/17 13:47	07/18/17 15:08	1
Dissolved Calcium	**253**	**B**	1.00	0.0240	mg/L		07/17/17 13:47	07/18/17 15:08	1
Dissolved Chromium	0.00159	U	0.0100	0.00159	mg/L		07/17/17 13:47	07/18/17 15:08	1
Dissolved Cobalt	**0.00520**	**J**	0.0100	0.000310	mg/L		07/17/17 13:47	07/18/17 15:08	1
Dissolved Iron	0.0270	U	0.400	0.0270	mg/L		07/17/17 13:47	07/18/17 15:08	1
Dissolved Lead	0.00219	U	0.0100	0.00219	mg/L		07/17/17 13:47	07/18/17 15:08	1
Dissolved Magnesium	**23.9**		1.00	0.0555	mg/L		07/17/17 13:47	07/18/17 15:08	1
Dissolved Manganese	**0.698**	**B**	0.0100	0.000360	mg/L		07/17/17 13:47	07/18/17 15:08	1
Dissolved Molybdenum	**0.00500**	**J**	0.0100	0.000540	mg/L		07/17/17 13:47	07/18/17 15:08	1
Dissolved Nickel	**0.00760**	**J**	0.0100	0.000800	mg/L		07/17/17 13:47	07/18/17 15:08	1
Dissolved Potassium	**9.34**	**B**	1.00	0.0374	mg/L		07/17/17 13:47	07/18/17 15:08	1
Dissolved Selenium	0.00287	U	0.0400	0.00287	mg/L		07/17/17 13:47	07/18/17 15:08	1
Dissolved Sodium	**3980**		20.0	0.428	mg/L		07/17/17 13:47	07/19/17 18:13	20

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury (Dissolved)	0.0000820	U	0.000200	0.0000820	mg/L		07/11/17 07:26	07/13/17 10:23	1

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Client Sample ID: SJRP-PMW4-07072017
Date Collected: 07/07/17 11:30
Date Received: 07/08/17 10:43

Lab Sample ID: 600-150702-7
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**712**		20.0	20.0	mg/L			07/11/17 17:00	1
Bicarbonate Alkalinity as CaCO3	**712**		20.0	20.0	mg/L			07/11/17 17:00	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			07/11/17 17:00	1
Total Dissolved Solids	**12200**		100	100	mg/L			07/11/17 09:51	1

Definitions/Glossary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
L	A negative instrument reading had an absolute value greater than the reporting limit

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control

Definitions/Glossary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(50-134)	(62-130)	(70-130)	(67-139)
600-150702-1	SJRP-TB03-07072017	78	87	96	102
600-150702-3	SJRP-MW15-07072017	93	96	93	120
600-150702-3 - DL	SJRP-MW15-07072017	95	97	94	94
600-150702-3 - DL	SJRP-MW15-07072017	93	94	93	93
600-150702-4	SJRP-MW15-07072017-2	91	93	93	119
600-150702-4 - DL	SJRP-MW15-07072017-2	95	96	94	93
600-150702-4 - DL	SJRP-MW15-07072017-2	95	95	94	93
600-150702-5	SJRP-PMW1-07072017	96	96	94	93
600-150702-6	SJRP-PMW2-07072017	85	91	97	116
600-150702-6 - DL	SJRP-PMW2-07072017	94	95	93	91
600-150702-6 - DL	SJRP-PMW2-07072017	94	95	95	93
600-150702-7	SJRP-PMW4-07072017	97	97	94	94
LCS 600-216901/3	Lab Control Sample	77	93	95	103
LCS 600-216955/3	Lab Control Sample	86	88	88	89
LCS 600-217034/3	Lab Control Sample	86	95	92	93
LCSD 600-216901/4	Lab Control Sample Dup	85	93	95	102
LCSD 600-216955/4	Lab Control Sample Dup	79	86	82	82
LCSD 600-217034/4	Lab Control Sample Dup	98	98	93	93
MB 600-216901/6	Method Blank	82	89	98	102
MB 600-216955/6	Method Blank	83	85	86	85
MB 600-217034/6	Method Blank	93	94	94	92

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(50-150)
600-150702-2	SJRP-TB04-07072017	94
600-150702-3	SJRP-MW15-07072017	95
600-150702-4	SJRP-MW15-07072017-2	97
600-150702-5	SJRP-PMW1-07072017	93
600-150702-6	SJRP-PMW2-07072017	96
600-150702-7	SJRP-PMW4-07072017	94
LCS 490-445148/4	Lab Control Sample	94
LCS 490-445287/4	Lab Control Sample	97
LCSD 490-445148/5	Lab Control Sample Dup	95
LCSD 490-445287/5	Lab Control Sample Dup	97
MB 490-445148/7	Method Blank	96
MB 490-445287/10	Method Blank	97

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	OTPH1 (50-150)								
600-150702-3	SJRP-MW15-07072017	87								
600-150702-4	SJRP-MW15-07072017-2	95								
600-150702-5	SJRP-PMW1-07072017	112								
600-150702-6	SJRP-PMW2-07072017	91								
600-150702-7	SJRP-PMW4-07072017	93								
LCS 490-444610/2-A	Lab Control Sample	117								
MB 490-444610/1-A	Method Blank	114								

Surrogate Legend

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-216901/6
Matrix: Water
Analysis Batch: 216901

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			07/12/17 00:45	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			07/12/17 00:45	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			07/12/17 00:45	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			07/12/17 00:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*50 - 134*		*07/12/17 00:45*	*1*
Dibromofluoromethane	*89*		*62 - 130*		*07/12/17 00:45*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*07/12/17 00:45*	*1*
4-Bromofluorobenzene	*102*		*67 - 139*		*07/12/17 00:45*	*1*

Lab Sample ID: LCS 600-216901/3
Matrix: Water
Analysis Batch: 216901

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0100	0.009991		mg/L		100	70 - 130		
Ethylbenzene			0.0100	0.01050		mg/L		105	70 - 130		
Toluene			0.0100	0.01031		mg/L		103	70 - 130		
Xylenes, Total			0.0200	0.02045		mg/L		102	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*77*		*50 - 134*
Dibromofluoromethane	*93*		*62 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*
4-Bromofluorobenzene	*103*		*67 - 139*

Lab Sample ID: LCSD 600-216901/4
Matrix: Water
Analysis Batch: 216901

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0100	0.009573		mg/L		96	70 - 130	4	20
Ethylbenzene			0.0100	0.01010		mg/L		101	70 - 130	4	20
Toluene			0.0100	0.009925		mg/L		99	70 - 130	4	20
Xylenes, Total			0.0200	0.01970		mg/L		98	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*50 - 134*
Dibromofluoromethane	*93*		*62 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*
4-Bromofluorobenzene	*102*		*67 - 139*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-216955/6
Matrix: Water
Analysis Batch: 216955

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			07/12/17 14:29	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			07/12/17 14:29	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			07/12/17 14:29	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			07/12/17 14:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*50 - 134*		*07/12/17 14:29*	*1*
Dibromofluoromethane	*85*		*62 - 130*		*07/12/17 14:29*	*1*
Toluene-d8 (Surr)	*86*		*70 - 130*		*07/12/17 14:29*	*1*
4-Bromofluorobenzene	*85*		*67 - 139*		*07/12/17 14:29*	*1*

Lab Sample ID: LCS 600-216955/3
Matrix: Water
Analysis Batch: 216955

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0100	0.009516		mg/L		95	70 - 130		
Ethylbenzene			0.0100	0.009746		mg/L		97	70 - 130		
Toluene			0.0100	0.009683		mg/L		97	70 - 130		
Xylenes, Total			0.0200	0.01939		mg/L		97	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*50 - 134*
Dibromofluoromethane	*88*		*62 - 130*
Toluene-d8 (Surr)	*88*		*70 - 130*
4-Bromofluorobenzene	*89*		*67 - 139*

Lab Sample ID: LCSD 600-216955/4
Matrix: Water
Analysis Batch: 216955

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0100	0.009133		mg/L		91	70 - 130	4	20
Ethylbenzene			0.0100	0.009151		mg/L		92	70 - 130	6	20
Toluene			0.0100	0.008997		mg/L		90	70 - 130	7	20
Xylenes, Total			0.0200	0.01825		mg/L		91	70 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*79*		*50 - 134*
Dibromofluoromethane	*86*		*62 - 130*
Toluene-d8 (Surr)	*82*		*70 - 130*
4-Bromofluorobenzene	*82*		*67 - 139*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-217034/6
Matrix: Water
Analysis Batch: 217034

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			07/13/17 12:04	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			07/13/17 12:04	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			07/13/17 12:04	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			07/13/17 12:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*50 - 134*		*07/13/17 12:04*	*1*
Dibromofluoromethane	*94*		*62 - 130*		*07/13/17 12:04*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*07/13/17 12:04*	*1*
4-Bromofluorobenzene	*92*		*67 - 139*		*07/13/17 12:04*	*1*

Lab Sample ID: LCS 600-217034/3
Matrix: Water
Analysis Batch: 217034

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0100	0.01039		mg/L		104	70 - 130
Ethylbenzene	0.0100	0.01060		mg/L		106	70 - 130
Toluene	0.0100	0.01043		mg/L		104	70 - 130
Xylenes, Total	0.0200	0.02099		mg/L		105	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*50 - 134*
Dibromofluoromethane	*95*		*62 - 130*
Toluene-d8 (Surr)	*92*		*70 - 130*
4-Bromofluorobenzene	*93*		*67 - 139*

Lab Sample ID: LCSD 600-217034/4
Matrix: Water
Analysis Batch: 217034

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0100	0.009770		mg/L		98	70 - 130	6	20
Ethylbenzene	0.0100	0.009717		mg/L		97	70 - 130	9	20
Toluene	0.0100	0.009582		mg/L		96	70 - 130	9	20
Xylenes, Total	0.0200	0.01925		mg/L		96	70 - 130	9	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*50 - 134*
Dibromofluoromethane	*98*		*62 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*
4-Bromofluorobenzene	*93*		*67 - 139*

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 490-445148/7
Matrix: Water
Analysis Batch: 445148

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			07/15/17 11:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*50 - 150*		*07/15/17 11:28*	*1*

Lab Sample ID: LCS 490-445148/4
Matrix: Water
Analysis Batch: 445148

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	1.00	1.075		mg/L		107	66 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*94*		*50 - 150*

Lab Sample ID: LCSD 490-445148/5
Matrix: Water
Analysis Batch: 445148

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	1.00	1.057		mg/L		106	66 - 140	2	42

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*95*		*50 - 150*

Lab Sample ID: MB 490-445287/10
Matrix: Water
Analysis Batch: 445287

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			07/17/17 12:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*50 - 150*		*07/17/17 12:19*	*1*

Lab Sample ID: LCS 490-445287/4
Matrix: Water
Analysis Batch: 445287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	1.00	0.9613		mg/L		96	66 - 140

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: LCS 490-445287/4
Matrix: Water
Analysis Batch: 445287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	*97*		*50 - 150*

Lab Sample ID: LCSD 490-445287/5
Matrix: Water
Analysis Batch: 445287

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10			1.00	0.9277		mg/L		93	66 - 140	4	42

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	*97*		*50 - 150*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Lab Sample ID: MB 490-444610/1-A
Matrix: Water
Analysis Batch: 444872

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 444610

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0910	U	0.100	0.0910	mg/L		07/13/17 09:20	07/14/17 10:35	1
ORO C24-C40	0.0910	U	0.100	0.0910	mg/L		07/13/17 09:20	07/14/17 10:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	*114*		*50 - 150*	*07/13/17 09:20*	*07/14/17 10:35*	*1*

Lab Sample ID: LCS 490-444610/2-A
Matrix: Water
Analysis Batch: 444872

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 444610

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]			0.800	0.7959		mg/L		99	46 - 132

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	*117*		*50 - 150*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-216716/4
Matrix: Water
Analysis Batch: 216716

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.0251	U	0.200	0.0251	mg/L			07/08/17 12:26	1
Nitrate Nitrite as N	0.0251	U	0.200	0.0251	mg/L			07/08/17 12:26	1

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 600-216716/4
Matrix: Water
Analysis Batch: 216716

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	0.0297	U	0.200	0.0297	mg/L			07/08/17 12:26	1

Lab Sample ID: LCS 600-216716/5
Matrix: Water
Analysis Batch: 216716

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	10.0	9.424		mg/L		94	90 - 110
Nitrate Nitrite as N	20.0	18.79		mg/L		94	90 - 110
Nitrite as N	10.0	9.369		mg/L		94	90 - 110

Lab Sample ID: 600-150702-3 MS
Matrix: Water
Analysis Batch: 216716

Client Sample ID: SJRP-MW15-07072017
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.502	U	40.0	38.48		mg/L		96	80 - 120
Nitrate Nitrite as N	0.502	U	80.0	75.04		mg/L		94	80 - 120
Nitrite as N	0.594	U	40.0	36.56		mg/L		91	80 - 120

Lab Sample ID: 600-150702-3 MSD
Matrix: Water
Analysis Batch: 216716

Client Sample ID: SJRP-MW15-07072017
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	0.502	U	40.0	38.39		mg/L		96	80 - 120	0	20
Nitrate Nitrite as N	0.502	U	80.0	75.18		mg/L		94	80 - 120	0	20
Nitrite as N	0.594	U	40.0	36.79		mg/L		92	80 - 120	1	20

Lab Sample ID: MB 600-217221/4
Matrix: Water
Analysis Batch: 217221

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.0534	U	0.400	0.0534	mg/L			07/17/17 13:58	1
Sulfate	0.0957	U	0.500	0.0957	mg/L			07/17/17 13:58	1

Lab Sample ID: LCS 600-217221/5
Matrix: Water
Analysis Batch: 217221

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	20.0	18.76		mg/L		94	90 - 110
Sulfate	20.0	19.64		mg/L		98	90 - 110

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-217264/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 217363 — **Prep Batch: 217264**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Aluminum	0.0926	U	0.500	0.0926	mg/L		07/17/17 13:47	07/18/17 14:43	1
Dissolved Arsenic	0.00285	U L	0.0100	0.00285	mg/L		07/17/17 13:47	07/18/17 14:43	1
Dissolved Barium	0.001100	J	0.0200	0.000530	mg/L		07/17/17 13:47	07/18/17 14:43	1
Dissolved Boron	0.0116	U	0.200	0.0116	mg/L		07/17/17 13:47	07/18/17 14:43	1
Dissolved Cadmium	0.000280	U	0.00500	0.000280	mg/L		07/17/17 13:47	07/18/17 14:43	1
Dissolved Calcium	0.1438	J	1.00	0.0240	mg/L		07/17/17 13:47	07/18/17 14:43	1
Dissolved Chromium	0.00159	U	0.0100	0.00159	mg/L		07/17/17 13:47	07/18/17 14:43	1
Dissolved Cobalt	0.000310	U	0.0100	0.000310	mg/L		07/17/17 13:47	07/18/17 14:43	1
Dissolved Iron	0.1097	J	0.400	0.0270	mg/L		07/17/17 13:47	07/18/17 14:43	1
Dissolved Lead	0.004000	J	0.0100	0.00219	mg/L		07/17/17 13:47	07/18/17 14:43	1
Dissolved Magnesium	0.0555	U	1.00	0.0555	mg/L		07/17/17 13:47	07/18/17 14:43	1
Dissolved Manganese	0.001000	J	0.0100	0.000360	mg/L		07/17/17 13:47	07/18/17 14:43	1
Dissolved Molybdenum	0.000540	U	0.0100	0.000540	mg/L		07/17/17 13:47	07/18/17 14:43	1
Dissolved Nickel	0.000800	U	0.0100	0.000800	mg/L		07/17/17 13:47	07/18/17 14:43	1
Dissolved Potassium	0.1009	J	1.00	0.0374	mg/L		07/17/17 13:47	07/18/17 14:43	1
Dissolved Selenium	0.00287	U	0.0400	0.00287	mg/L		07/17/17 13:47	07/18/17 14:43	1

Lab Sample ID: MB 600-217264/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 217438 — **Prep Batch: 217264**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Sodium	0.0214	U	1.00	0.0214	mg/L		07/17/17 13:47	07/19/17 17:49	1

Lab Sample ID: MB 600-217264/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 217549 — **Prep Batch: 217264**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Sodium	0.1054	J	1.00	0.0214	mg/L		07/17/17 13:47	07/20/17 13:57	1

Lab Sample ID: LCS 600-217264/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 217363 — **Prep Batch: 217264**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Aluminum	10.0	10.15		mg/L		102	80 - 120
Dissolved Arsenic	1.00	1.051		mg/L		105	80 - 120
Dissolved Barium	1.00	1.021		mg/L		102	80 - 120
Dissolved Boron	1.00	1.041		mg/L		104	80 - 120
Dissolved Cadmium	0.500	0.5128		mg/L		103	80 - 120
Dissolved Calcium	10.0	10.11		mg/L		101	80 - 120
Dissolved Chromium	1.00	1.028		mg/L		103	80 - 120
Dissolved Cobalt	1.00	1.010		mg/L		101	80 - 120
Dissolved Iron	10.0	10.48		mg/L		105	80 - 120
Dissolved Lead	1.00	1.007		mg/L		101	80 - 120
Dissolved Magnesium	10.0	10.36		mg/L		104	80 - 120
Dissolved Manganese	1.00	1.026		mg/L		103	80 - 120
Dissolved Molybdenum	1.00	1.029		mg/L		103	80 - 120

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCS 600-217264/2-A
Matrix: Water
Analysis Batch: 217363

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 217264

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Nickel	1.00	1.010		mg/L		101	80 - 120
Dissolved Potassium	10.0	10.56		mg/L		106	80 - 120
Dissolved Selenium	1.00	1.038		mg/L		104	80 - 120

Lab Sample ID: LCS 600-217264/2-A
Matrix: Water
Analysis Batch: 217438

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 217264

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Sodium	10.0	9.716		mg/L		97	80 - 120

Lab Sample ID: LCS 600-217264/2-A
Matrix: Water
Analysis Batch: 217549

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 217264

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Sodium	10.0	10.27		mg/L		103	80 - 120

Lab Sample ID: 600-150702-3 MS
Matrix: Water
Analysis Batch: 217363

Client Sample ID: SJRP-MW15-07072017
Prep Type: Dissolved
Prep Batch: 217264

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Aluminum	0.0926	U	10.0	10.20		mg/L		102	75 - 125
Dissolved Arsenic	0.00300	J	1.00	1.221		mg/L		122	75 - 125
Dissolved Barium	0.0287	B	1.00	0.9737		mg/L		95	75 - 125
Dissolved Boron	0.673		1.00	1.662		mg/L		99	75 - 125
Dissolved Cadmium	0.000300	J	0.500	0.5919		mg/L		118	75 - 125
Dissolved Calcium	460	B	10.0	450.1	4	mg/L		-102	75 - 125
Dissolved Chromium	0.00180	J	1.00	0.9222		mg/L		92	75 - 125
Dissolved Cobalt	0.00840	J	1.00	1.091		mg/L		108	75 - 125
Dissolved Iron	4.83	B	10.0	14.87		mg/L		100	75 - 125
Dissolved Lead	0.00219	U	1.00	1.042		mg/L		104	75 - 125
Dissolved Magnesium	99.1		10.0	103.2	4	mg/L		41	75 - 125
Dissolved Manganese	3.14	F1 B	1.00	3.821	F1	mg/L		68	75 - 125
Dissolved Molybdenum	0.00430	J	1.00	0.9455		mg/L		94	75 - 125
Dissolved Nickel	0.0100		1.00	1.079		mg/L		107	75 - 125
Dissolved Potassium	17.1	B	10.0	27.19		mg/L		101	75 - 125
Dissolved Selenium	0.00287	U F1	1.00	1.410	F1	mg/L		141	75 - 125

Lab Sample ID: 600-150702-3 MS
Matrix: Water
Analysis Batch: 217549

Client Sample ID: SJRP-MW15-07072017
Prep Type: Dissolved
Prep Batch: 217264

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Sodium	6540	B	10.0	6235	4	mg/L		-3000	75 - 125

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-150702-3 MSD — **Client Sample ID: SJRP-MW15-07072017**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 217363 — **Prep Batch: 217264**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dissolved Aluminum	0.0926	U	10.0	11.00		mg/L		110	75 - 125	8	20
Dissolved Arsenic	0.00300	J	1.00	1.234		mg/L		123	75 - 125	1	20
Dissolved Barium	0.0287	B	1.00	0.9802		mg/L		95	75 - 125	1	20
Dissolved Boron	0.673		1.00	1.688		mg/L		102	75 - 125	2	20
Dissolved Cadmium	0.000300	J	0.500	0.6032		mg/L		121	75 - 125	2	20
Dissolved Calcium	460	B	10.0	475.7	4	mg/L		154	75 - 125	6	20
Dissolved Chromium	0.00180	J	1.00	0.9249		mg/L		92	75 - 125	0	20
Dissolved Cobalt	0.00840	J	1.00	1.100		mg/L		109	75 - 125	1	20
Dissolved Iron	4.83	B	10.0	15.49		mg/L		107	75 - 125	4	20
Dissolved Lead	0.00219	U	1.00	1.047		mg/L		105	75 - 125	0	20
Dissolved Magnesium	99.1		10.0	106.2	4	mg/L		71	75 - 125	3	20
Dissolved Manganese	3.14	F1 B	1.00	3.878	F1	mg/L		74	75 - 125	1	20
Dissolved Molybdenum	0.00430	J	1.00	0.9642		mg/L		96	75 - 125	2	20
Dissolved Nickel	0.0100		1.00	1.088		mg/L		108	75 - 125	1	20
Dissolved Potassium	17.1	B	10.0	28.10		mg/L		110	75 - 125	3	20
Dissolved Selenium	0.00287	U F1	1.00	1.423	F1	mg/L		142	75 - 125	1	20

Lab Sample ID: 600-150702-3 MSD — **Client Sample ID: SJRP-MW15-07072017**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 217549 — **Prep Batch: 217264**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dissolved Sodium	6540	B	10.0	6440	4	mg/L		-950	75 - 125	3	20

Lab Sample ID: 600-150702-3 DU — **Client Sample ID: SJRP-MW15-07072017**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 217363 — **Prep Batch: 217264**

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Dissolved Aluminum	0.0926	U		0.0926	U	mg/L				NC	20
Dissolved Arsenic	0.00300	J		0.00285	U	mg/L				NC	20
Dissolved Barium	0.0287	B		0.02610		mg/L				9	20
Dissolved Boron	0.673			0.6475		mg/L				4	20
Dissolved Cadmium	0.000300	J		0.0007000	J F5	mg/L				80	20
Dissolved Calcium	460	B		444.7		mg/L				3	20
Dissolved Chromium	0.00180	J		0.001900	J	mg/L				5	20
Dissolved Cobalt	0.00840	J		0.008200	J	mg/L				2	20
Dissolved Iron	4.83	B		4.708		mg/L				3	20
Dissolved Lead	0.00219	U		0.00219	U	mg/L				NC	20
Dissolved Magnesium	99.1			94.63		mg/L				5	20
Dissolved Manganese	3.14	F1 B		3.027		mg/L				4	20
Dissolved Molybdenum	0.00430	J		0.003200	J F5	mg/L				29	20
Dissolved Nickel	0.0100			0.006700	J F5	mg/L				40	20
Dissolved Potassium	17.1	B		16.52		mg/L				4	20
Dissolved Selenium	0.00287	U F1		0.00287	U	mg/L				NC	20

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-150702-3 DU — **Client Sample ID: SJRP-MW15-07072017**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 217549 — **Prep Batch: 217264**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Dissolved Sodium	6540	B	6300		mg/L		4	20

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-216829/7-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 217076 — **Prep Batch: 216829**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury (Dissolved)	0.0000820	U	0.000200	0.0000820	mg/L		07/11/17 07:26	07/13/17 09:45	1

Lab Sample ID: LCS 600-216829/8-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 217076 — **Prep Batch: 216829**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury (Dissolved)	0.00300	0.002573		mg/L		86	70 - 130

Lab Sample ID: 600-150702-5 MS — **Client Sample ID: SJRP-PMW1-07072017**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 217076 — **Prep Batch: 216829**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury (Dissolved)	0.0000820	U F1	0.00300	0.002176	F1	mg/L		73	75 - 125

Lab Sample ID: 600-150702-5 DU — **Client Sample ID: SJRP-PMW1-07072017**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 217076 — **Prep Batch: 216829**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury (Dissolved)	0.0000820	U F1	0.0000820	U	mg/L		NC	20

Method: 2320B-1997 - Alkalinity, Total - SM Online, 2011

Lab Sample ID: MB 600-216902/2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 216902

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	20.0	U	20.0	20.0	mg/L			07/11/17 12:32	1
Bicarbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			07/11/17 12:32	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			07/11/17 12:32	1

Lab Sample ID: LCS 600-216902/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 216902

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	100	96.82		mg/L		97	90 - 110

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Method: 2540 C-1997 - Total Dissolved Solids (Dried at 180 °C)

Lab Sample ID: MB 600-216851/1
Matrix: Water
Analysis Batch: 216851

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10.0	U	10.0	10.0	mg/L			07/11/17 09:51	1

Lab Sample ID: LCS 600-216851/2
Matrix: Water
Analysis Batch: 216851

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			1800	1767		mg/L		98	90 - 110		

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

GC/MS VOA

Analysis Batch: 216901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150702-1	SJRP-TB03-07072017	Total/NA	Water	8260B	
600-150702-3	SJRP-MW15-07072017	Total/NA	Water	8260B	
600-150702-4	SJRP-MW15-07072017-2	Total/NA	Water	8260B	
600-150702-6	SJRP-PMW2-07072017	Total/NA	Water	8260B	
MB 600-216901/6	Method Blank	Total/NA	Water	8260B	
LCS 600-216901/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-216901/4	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 216955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150702-3 - DL	SJRP-MW15-07072017	Total/NA	Water	8260B	
600-150702-4 - DL	SJRP-MW15-07072017-2	Total/NA	Water	8260B	
600-150702-5	SJRP-PMW1-07072017	Total/NA	Water	8260B	
600-150702-6 - DL	SJRP-PMW2-07072017	Total/NA	Water	8260B	
600-150702-7	SJRP-PMW4-07072017	Total/NA	Water	8260B	
MB 600-216955/6	Method Blank	Total/NA	Water	8260B	
LCS 600-216955/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-216955/4	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 217034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150702-3 - DL	SJRP-MW15-07072017	Total/NA	Water	8260B	
600-150702-4 - DL	SJRP-MW15-07072017-2	Total/NA	Water	8260B	
600-150702-6 - DL	SJRP-PMW2-07072017	Total/NA	Water	8260B	
MB 600-217034/6	Method Blank	Total/NA	Water	8260B	
LCS 600-217034/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-217034/4	Lab Control Sample Dup	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 445148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150702-2	SJRP-TB04-07072017	Total/NA	Water	8015C	
600-150702-5	SJRP-PMW1-07072017	Total/NA	Water	8015C	
600-150702-6	SJRP-PMW2-07072017	Total/NA	Water	8015C	
600-150702-7	SJRP-PMW4-07072017	Total/NA	Water	8015C	
MB 490-445148/7	Method Blank	Total/NA	Water	8015C	
LCS 490-445148/4	Lab Control Sample	Total/NA	Water	8015C	
LCSD 490-445148/5	Lab Control Sample Dup	Total/NA	Water	8015C	

Analysis Batch: 445287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150702-3	SJRP-MW15-07072017	Total/NA	Water	8015C	
600-150702-4	SJRP-MW15-07072017-2	Total/NA	Water	8015C	
MB 490-445287/10	Method Blank	Total/NA	Water	8015C	
LCS 490-445287/4	Lab Control Sample	Total/NA	Water	8015C	
LCSD 490-445287/5	Lab Control Sample Dup	Total/NA	Water	8015C	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

GC Semi VOA

Prep Batch: 444610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150702-3	SJRP-MW15-07072017	Total/NA	Water	3510C	
600-150702-4	SJRP-MW15-07072017-2	Total/NA	Water	3510C	
600-150702-5	SJRP-PMW1-07072017	Total/NA	Water	3510C	
600-150702-6	SJRP-PMW2-07072017	Total/NA	Water	3510C	
600-150702-7	SJRP-PMW4-07072017	Total/NA	Water	3510C	
MB 490-444610/1-A	Method Blank	Total/NA	Water	3510C	
LCS 490-444610/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 444872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150702-3	SJRP-MW15-07072017	Total/NA	Water	8015C	444610
600-150702-4	SJRP-MW15-07072017-2	Total/NA	Water	8015C	444610
600-150702-5	SJRP-PMW1-07072017	Total/NA	Water	8015C	444610
600-150702-6	SJRP-PMW2-07072017	Total/NA	Water	8015C	444610
600-150702-7	SJRP-PMW4-07072017	Total/NA	Water	8015C	444610
MB 490-444610/1-A	Method Blank	Total/NA	Water	8015C	444610
LCS 490-444610/2-A	Lab Control Sample	Total/NA	Water	8015C	444610

Analysis Batch: 445166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150702-3	SJRP-MW15-07072017	Total/NA	Water	8015C	444610
600-150702-4	SJRP-MW15-07072017-2	Total/NA	Water	8015C	444610
600-150702-5	SJRP-PMW1-07072017	Total/NA	Water	8015C	444610
600-150702-6	SJRP-PMW2-07072017	Total/NA	Water	8015C	444610
600-150702-7	SJRP-PMW4-07072017	Total/NA	Water	8015C	444610

HPLC/IC

Analysis Batch: 216716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150702-3	SJRP-MW15-07072017	Total/NA	Water	300.0	
600-150702-4	SJRP-MW15-07072017-2	Total/NA	Water	300.0	
600-150702-5	SJRP-PMW1-07072017	Total/NA	Water	300.0	
600-150702-6	SJRP-PMW2-07072017	Total/NA	Water	300.0	
600-150702-7	SJRP-PMW4-07072017	Total/NA	Water	300.0	
MB 600-216716/4	Method Blank	Total/NA	Water	300.0	
LCS 600-216716/5	Lab Control Sample	Total/NA	Water	300.0	
600-150702-3 MS	SJRP-MW15-07072017	Total/NA	Water	300.0	
600-150702-3 MSD	SJRP-MW15-07072017	Total/NA	Water	300.0	

Analysis Batch: 217221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150702-3	SJRP-MW15-07072017	Total/NA	Water	300.0	
600-150702-4	SJRP-MW15-07072017-2	Total/NA	Water	300.0	
600-150702-5	SJRP-PMW1-07072017	Total/NA	Water	300.0	
600-150702-6	SJRP-PMW2-07072017	Total/NA	Water	300.0	
600-150702-7	SJRP-PMW4-07072017	Total/NA	Water	300.0	
MB 600-217221/4	Method Blank	Total/NA	Water	300.0	
LCS 600-217221/5	Lab Control Sample	Total/NA	Water	300.0	

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Metals

Prep Batch: 216829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150702-3	SJRP-MW15-07072017	Dissolved	Water	7470A	
600-150702-4	SJRP-MW15-07072017-2	Dissolved	Water	7470A	
600-150702-5	SJRP-PMW1-07072017	Dissolved	Water	7470A	
600-150702-6	SJRP-PMW2-07072017	Dissolved	Water	7470A	
600-150702-7	SJRP-PMW4-07072017	Dissolved	Water	7470A	
MB 600-216829/7-A	Method Blank	Total/NA	Water	7470A	
LCS 600-216829/8-A	Lab Control Sample	Total/NA	Water	7470A	
600-150702-5 MS	SJRP-PMW1-07072017	Dissolved	Water	7470A	
600-150702-5 DU	SJRP-PMW1-07072017	Dissolved	Water	7470A	

Analysis Batch: 217076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150702-3	SJRP-MW15-07072017	Dissolved	Water	7470A	216829
600-150702-4	SJRP-MW15-07072017-2	Dissolved	Water	7470A	216829
600-150702-5	SJRP-PMW1-07072017	Dissolved	Water	7470A	216829
600-150702-6	SJRP-PMW2-07072017	Dissolved	Water	7470A	216829
600-150702-7	SJRP-PMW4-07072017	Dissolved	Water	7470A	216829
MB 600-216829/7-A	Method Blank	Total/NA	Water	7470A	216829
LCS 600-216829/8-A	Lab Control Sample	Total/NA	Water	7470A	216829
600-150702-5 MS	SJRP-PMW1-07072017	Dissolved	Water	7470A	216829
600-150702-5 DU	SJRP-PMW1-07072017	Dissolved	Water	7470A	216829

Prep Batch: 217264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150702-3	SJRP-MW15-07072017	Dissolved	Water	3010A	
600-150702-4	SJRP-MW15-07072017-2	Dissolved	Water	3010A	
600-150702-5	SJRP-PMW1-07072017	Dissolved	Water	3010A	
600-150702-6	SJRP-PMW2-07072017	Dissolved	Water	3010A	
600-150702-7	SJRP-PMW4-07072017	Dissolved	Water	3010A	
MB 600-217264/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-217264/2-A	Lab Control Sample	Total/NA	Water	3010A	
600-150702-3 MS	SJRP-MW15-07072017	Dissolved	Water	3010A	
600-150702-3 MSD	SJRP-MW15-07072017	Dissolved	Water	3010A	
600-150702-3 DU	SJRP-MW15-07072017	Dissolved	Water	3010A	

Analysis Batch: 217363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150702-3	SJRP-MW15-07072017	Dissolved	Water	6010B	217264
600-150702-4	SJRP-MW15-07072017-2	Dissolved	Water	6010B	217264
600-150702-5	SJRP-PMW1-07072017	Dissolved	Water	6010B	217264
600-150702-6	SJRP-PMW2-07072017	Dissolved	Water	6010B	217264
600-150702-7	SJRP-PMW4-07072017	Dissolved	Water	6010B	217264
MB 600-217264/1-A	Method Blank	Total/NA	Water	6010B	217264
LCS 600-217264/2-A	Lab Control Sample	Total/NA	Water	6010B	217264
600-150702-3 MS	SJRP-MW15-07072017	Dissolved	Water	6010B	217264
600-150702-3 MSD	SJRP-MW15-07072017	Dissolved	Water	6010B	217264
600-150702-3 DU	SJRP-MW15-07072017	Dissolved	Water	6010B	217264

Analysis Batch: 217438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150702-5	SJRP-PMW1-07072017	Dissolved	Water	6010B	217264

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Metals (Continued)

Analysis Batch: 217438 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150702-6	SJRP-PMW2-07072017	Dissolved	Water	6010B	217264
600-150702-7	SJRP-PMW4-07072017	Dissolved	Water	6010B	217264
MB 600-217264/1-A	Method Blank	Total/NA	Water	6010B	217264
LCS 600-217264/2-A	Lab Control Sample	Total/NA	Water	6010B	217264

Analysis Batch: 217549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150702-3	SJRP-MW15-07072017	Dissolved	Water	6010B	217264
600-150702-4	SJRP-MW15-07072017-2	Dissolved	Water	6010B	217264
MB 600-217264/1-A	Method Blank	Total/NA	Water	6010B	217264
LCS 600-217264/2-A	Lab Control Sample	Total/NA	Water	6010B	217264
600-150702-3 MS	SJRP-MW15-07072017	Dissolved	Water	6010B	217264
600-150702-3 MSD	SJRP-MW15-07072017	Dissolved	Water	6010B	217264
600-150702-3 DU	SJRP-MW15-07072017	Dissolved	Water	6010B	217264

General Chemistry

Analysis Batch: 216851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150702-3	SJRP-MW15-07072017	Total/NA	Water	2540 C-1997	
600-150702-4	SJRP-MW15-07072017-2	Total/NA	Water	2540 C-1997	
600-150702-5	SJRP-PMW1-07072017	Total/NA	Water	2540 C-1997	
600-150702-6	SJRP-PMW2-07072017	Total/NA	Water	2540 C-1997	
600-150702-7	SJRP-PMW4-07072017	Total/NA	Water	2540 C-1997	
MB 600-216851/1	Method Blank	Total/NA	Water	2540 C-1997	
LCS 600-216851/2	Lab Control Sample	Total/NA	Water	2540 C-1997	

Analysis Batch: 216902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-150702-3	SJRP-MW15-07072017	Total/NA	Water	2320B-1997	
600-150702-4	SJRP-MW15-07072017-2	Total/NA	Water	2320B-1997	
600-150702-5	SJRP-PMW1-07072017	Total/NA	Water	2320B-1997	
600-150702-6	SJRP-PMW2-07072017	Total/NA	Water	2320B-1997	
600-150702-7	SJRP-PMW4-07072017	Total/NA	Water	2320B-1997	
MB 600-216902/2	Method Blank	Total/NA	Water	2320B-1997	
LCS 600-216902/3	Lab Control Sample	Total/NA	Water	2320B-1997	

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Client Sample ID: SJRP-TB03-07072017 — Lab Sample ID: 600-150702-1

Date Collected: 07/07/17 07:30 — **Matrix: Water**
Date Received: 07/08/17 10:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	216901	07/12/17 07:32	YX1	TAL HOU

Client Sample ID: SJRP-TB04-07072017 — Lab Sample ID: 600-150702-2

Date Collected: 07/07/17 07:30 — **Matrix: Water**
Date Received: 07/08/17 10:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015C		1	5 mL	5 mL	445148	07/15/17 11:59	GWM	TAL NSH

Client Sample ID: SJRP-MW15-07072017 — Lab Sample ID: 600-150702-3

Date Collected: 07/07/17 08:00 — **Matrix: Water**
Date Received: 07/08/17 10:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	216901	07/12/17 07:58	YX1	TAL HOU
Total/NA	Analysis	8260B	DL	50	20 mL	20 mL	216955	07/12/17 21:33	YX1	TAL HOU
Total/NA	Analysis	8260B	DL	250	20 mL	20 mL	217034	07/13/17 14:08	YX1	TAL HOU
Total/NA	Analysis	8015C		10	5 mL	5 mL	445287	07/18/17 08:06	GWM	TAL NSH
Total/NA	Prep	3510C			230 mL	1 mL	444610	07/13/17 09:20	KB	TAL NSH
Total/NA	Analysis	8015C		1			444872	07/14/17 15:08	LOJ	TAL NSH
Total/NA	Prep	3510C			230 mL	1 mL	444610	07/13/17 09:20	KB	TAL NSH
Total/NA	Analysis	8015C		1			445166	07/15/17 21:03	GMH	TAL NSH
Total/NA	Analysis	300.0		20			216716	07/08/17 13:16	DAW	TAL HOU
Total/NA	Analysis	300.0		1000			217221	07/17/17 20:17	DAW	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	217264	07/17/17 13:47	JAH	TAL HOU
Dissolved	Analysis	6010B		1			217363	07/18/17 14:49	DCL	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	217264	07/17/17 13:47	JAH	TAL HOU
Dissolved	Analysis	6010B		50			217549	07/20/17 14:07	DCL	TAL HOU
Dissolved	Prep	7470A			40 mL	40 mL	216829	07/11/17 07:26	DDE	TAL HOU
Dissolved	Analysis	7470A		1			217076	07/13/17 10:12	DDE	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	216902	07/11/17 16:05	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	5 mL	100 mL	216851	07/11/17 09:51	EC1	TAL HOU

Client Sample ID: SJRP-MW15-07072017-2 — Lab Sample ID: 600-150702-4

Date Collected: 07/07/17 08:00 — **Matrix: Water**
Date Received: 07/08/17 10:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	216901	07/12/17 08:24	YX1	TAL HOU
Total/NA	Analysis	8260B	DL	50	20 mL	20 mL	216955	07/12/17 22:02	YX1	TAL HOU
Total/NA	Analysis	8260B	DL	250	20 mL	20 mL	217034	07/13/17 14:38	YX1	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Client Sample ID: SJRP-MW15-07072017-2

Lab Sample ID: 600-150702-4

Date Collected: 07/07/17 08:00
Matrix: Water
Date Received: 07/08/17 10:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015C		10	5 mL	5 mL	445287	07/18/17 07:37	GWM	TAL NSH
Total/NA	Prep	3510C			230 mL	1 mL	444610	07/13/17 09:20	KB	TAL NSH
Total/NA	Analysis	8015C		1			444872	07/14/17 15:23	LOJ	TAL NSH
Total/NA	Prep	3510C			230 mL	1 mL	444610	07/13/17 09:20	KB	TAL NSH
Total/NA	Analysis	8015C		1			445166	07/15/17 21:19	GMH	TAL NSH
Total/NA	Analysis	300.0		20			216716	07/08/17 14:16	DAW	TAL HOU
Total/NA	Analysis	300.0		1000			217221	07/17/17 20:35	DAW	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	217264	07/17/17 13:47	JAH	TAL HOU
Dissolved	Analysis	6010B		1			217363	07/18/17 14:57	DCL	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	217264	07/17/17 13:47	JAH	TAL HOU
Dissolved	Analysis	6010B		50			217549	07/20/17 14:14	DCL	TAL HOU
Dissolved	Prep	7470A			40 mL	40 mL	216829	07/11/17 07:26	DDE	TAL HOU
Dissolved	Analysis	7470A		1			217076	07/13/17 10:14	DDE	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	216902	07/11/17 16:20	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	5 mL	100 mL	216851	07/11/17 09:51	EC1	TAL HOU

Client Sample ID: SJRP-PMW1-07072017

Lab Sample ID: 600-150702-5

Date Collected: 07/07/17 09:30
Matrix: Water
Date Received: 07/08/17 10:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	216955	07/12/17 20:34	YX1	TAL HOU
Total/NA	Analysis	8015C		1	5 mL	5 mL	445148	07/15/17 13:31	GWM	TAL NSH
Total/NA	Prep	3510C			255 mL	1 mL	444610	07/13/17 09:20	KB	TAL NSH
Total/NA	Analysis	8015C		1			444872	07/14/17 15:39	LOJ	TAL NSH
Total/NA	Prep	3510C			255 mL	1 mL	444610	07/13/17 09:20	KB	TAL NSH
Total/NA	Analysis	8015C		1			445166	07/15/17 21:34	GMH	TAL NSH
Total/NA	Analysis	300.0		20			216716	07/08/17 14:36	DAW	TAL HOU
Total/NA	Analysis	300.0		500			217221	07/17/17 21:30	DAW	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	217264	07/17/17 13:47	JAH	TAL HOU
Dissolved	Analysis	6010B		20			217438	07/19/17 18:04	DCL	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	217264	07/17/17 13:47	JAH	TAL HOU
Dissolved	Analysis	6010B		1			217363	07/18/17 14:59	DCL	TAL HOU
Dissolved	Prep	7470A			40 mL	40 mL	216829	07/11/17 07:26	DDE	TAL HOU
Dissolved	Analysis	7470A		1			217076	07/13/17 10:16	DDE	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	216902	07/11/17 16:27	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	10 mL	100 mL	216851	07/11/17 09:51	EC1	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Client Sample ID: SJRP-PMW2-07072017

Lab Sample ID: 600-150702-6

Date Collected: 07/07/17 11:00
Matrix: Water
Date Received: 07/08/17 10:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	216901	07/12/17 09:15	YX1	TAL HOU
Total/NA	Analysis	8260B	DL	50	20 mL	20 mL	216955	07/12/17 22:31	YX1	TAL HOU
Total/NA	Analysis	8260B	DL	200	20 mL	20 mL	217034	07/13/17 15:09	YX1	TAL HOU
Total/NA	Analysis	8015C		10	5 mL	5 mL	445148	07/15/17 16:04	GWM	TAL NSH
Total/NA	Prep	3510C			265 mL	1 mL	444610	07/13/17 09:20	KB	TAL NSH
Total/NA	Analysis	8015C		1			444872	07/14/17 15:54	LOJ	TAL NSH
Total/NA	Prep	3510C			265 mL	1 mL	444610	07/13/17 09:20	KB	TAL NSH
Total/NA	Analysis	8015C		1			445166	07/15/17 21:50	GMH	TAL NSH
Total/NA	Analysis	300.0		10			216716	07/08/17 14:56	DAW	TAL HOU
Total/NA	Analysis	300.0		100			217221	07/17/17 21:49	DAW	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	217264	07/17/17 13:47	JAH	TAL HOU
Dissolved	Analysis	6010B		20			217438	07/19/17 18:06	DCL	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	217264	07/17/17 13:47	JAH	TAL HOU
Dissolved	Analysis	6010B		1			217363	07/18/17 15:06	DCL	TAL HOU
Dissolved	Prep	7470A			40 mL	40 mL	216829	07/11/17 07:26	DDE	TAL HOU
Dissolved	Analysis	7470A		1			217076	07/13/17 10:21	DDE	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	216902	07/11/17 16:48	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	25 mL	100 mL	216851	07/11/17 09:51	EC1	TAL HOU

Client Sample ID: SJRP-PMW4-07072017

Lab Sample ID: 600-150702-7

Date Collected: 07/07/17 11:30
Matrix: Water
Date Received: 07/08/17 10:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	216955	07/12/17 21:03	YX1	TAL HOU
Total/NA	Analysis	8015C		1	5 mL	5 mL	445148	07/15/17 14:01	GWM	TAL NSH
Total/NA	Prep	3510C			240 mL	1 mL	444610	07/13/17 09:20	KB	TAL NSH
Total/NA	Analysis	8015C		1			444872	07/14/17 16:10	LOJ	TAL NSH
Total/NA	Prep	3510C			240 mL	1 mL	444610	07/13/17 09:20	KB	TAL NSH
Total/NA	Analysis	8015C		1			445166	07/15/17 22:05	GMH	TAL NSH
Total/NA	Analysis	300.0		20			216716	07/08/17 15:16	DAW	TAL HOU
Total/NA	Analysis	300.0		500			217221	07/17/17 22:07	DAW	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	217264	07/17/17 13:47	JAH	TAL HOU
Dissolved	Analysis	6010B		20			217438	07/19/17 18:13	DCL	TAL HOU
Dissolved	Prep	3010A			50 mL	50 mL	217264	07/17/17 13:47	JAH	TAL HOU
Dissolved	Analysis	6010B		1			217363	07/18/17 15:08	DCL	TAL HOU
Dissolved	Prep	7470A			40 mL	40 mL	216829	07/11/17 07:26	DDE	TAL HOU
Dissolved	Analysis	7470A		1			217076	07/13/17 10:23	DDE	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	216902	07/11/17 17:00	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	10 mL	100 mL	216851	07/11/17 09:51	EC1	TAL HOU

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Laboratory: TestAmerica Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	16-046-0	08-04-17
Louisiana	NELAP	6	01967	06-30-18
Oklahoma	State Program	6	2015-050	08-31-17
Texas	NELAP	6	T104704223-17-21	10-31-17
USDA	Federal		P330-17-00132	04-20-20

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	A2LA		NA: NELAP & A2LA	12-31-17
A2LA	ISO/IEC 17025		0453.07	12-31-17
Alaska (UST)	State Program	10	UST-087	09-01-17
Arizona	State Program	9	AZ0473	05-05-18
Arkansas DEQ	State Program	6	88-0737	04-25-18
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-17
Florida	NELAP	4	E87358	06-30-18
Georgia	State Program	4	E87358(FL)/453.07(A2LA)	12-31-17
Illinois	NELAP	5	200010	12-09-17
Iowa	State Program	7	131	04-01-18
Kansas	NELAP	7	E-10229	10-31-17
Kentucky (UST)	State Program	4	19	06-30-18
Kentucky (WW)	State Program	4	90038	12-31-17
Louisiana	NELAP	6	30613	06-30-18
Maine	State Program	1	TN00032	11-03-17
Maryland	State Program	3	316	03-31-18
Massachusetts	State Program	1	M-TN032	06-30-18
Minnesota	NELAP	5	047-999-345	12-31-17
Mississippi	State Program	4	N/A	06-30-18
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-17
New Hampshire	NELAP	1	2963	10-09-17
New Jersey	NELAP	2	TN965	06-30-18
New York	NELAP	2	11342	03-31-18
North Carolina (WW/SW)	State Program	4	387	12-31-17
North Dakota	State Program	8	R-146	06-30-17 *
Ohio VAP	State Program	5	CL0033	07-06-19
Oklahoma	State Program	6	9412	08-31-17
Oregon	NELAP	10	TN200001	04-27-18
Pennsylvania	NELAP	3	68-00585	06-30-18
Rhode Island	State Program	1	LAO00268	12-30-17
South Carolina	State Program	4	84009 (001)	02-28-18
South Carolina (Do Not Use - DW)	State Program	4	84009 (002)	12-16-17
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-17
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-17
Virginia	NELAP	3	460152	06-14-18
Washington	State Program	10	C789	07-19-18

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: San Juan Waters 7/7/17

TestAmerica Job ID: 600-150702-1

Laboratory: TestAmerica Nashville (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
West Virginia DEP	State Program	3	219	02-28-18
Wisconsin	State Program	5	998020430	08-31-17
Wyoming (UST)	A2LA	8	453.07	12-31-17

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

600-150702 Chain of Custody

Client Information

Client Contact: Aleeca Forsberg
Company: CH2M Hill, Inc.
Address: 3721 Rutledge Road NE Suite B-1
City: Albuquerque
State, Zip: NM, 87109
Phone: 505-855-5239
Email: Aleeca.Forsberg@CH2M.com
Project Name: Kinder Morgan Bloomfield, NM San Juan
Site: San Juan Waters

Sampler: L. Hill
Phone: 205-240-3235
Due Date Requested:
TAT Requested (days): Std.
PO #: WD285077
WO #: WD285077
Project #: 60005961
SSOW#:

Lab PM: Upton, Cathy L
E-Mail: cathy.upton@testamericainc.com

COC No: 600-53620-15765.1
Page: Page 1 of 1
Job #:

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - Di Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - BTEX	~~353.2_Prep - Nitrate Nitrite as N~~	6010B/7470A - NM/WQCC Dissolved Metals	2320B - Alkalinity	2540C_Calcd - TDS	300_ORGFM_28D Chloride, Sulfate, Nitrate, Nitrite	8015B - GRO Range (C6-C10)	8015B - DRO/ORO Range	~~SM4500_S2_D - Sulfide~~					Total Number of containers	Special Instructions/Note:
Preservation Code:					X	X	A	S	D	N	N	N	A	N	CB					X	
SJRP-TB03-07072017	7/7/17	0730	G	Water	N	N	X														Trip Blank
SJRP-TB04-07072017	7/7/17	0730	G	Water	N	N							X								Trip Blank
SJRP-MW15-07072017	7/7/17	0800	G	Water	Y	N	X		X	X	X	X	X	X							
SJRP-MW15-07072017-2	7/7/17	0800	G	Water	Y	N	X		X	X	X	X	X	X							
SJRP-PMW1-07072017	7/7/17	0930	G	Water	Y	N	X		X	X	X	X	X	X							
SJRP-PMW2-07072017	7/7/17	1100	G	Water	Y	N	X		X	X	X	X	X	X							
SJRP-PMW4-07072017	7/7/17	1130	G	Water	Y	N	X		X	X	X	X	X	X							
			G	Water																	
			G	Water																	
			G	Water																	
			G	Water																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, (IV) Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: L. Hill	Date/Time: 7/7/17 1700	Company: CH2M	Received by:	Date/Time: 7-8-17 643	Company: TA
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

Loc: 600
150702

TestAmerica Houston

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Re list

Date/Time Received: _____

JOB NUMBER: _____ CLIENT: CHZM

UNPACKED BY: _____ CARRIER/DRIVER: FE Saul

Custody Seal Present: ☒ YES ☐ NO Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Them CF	Corrected Temp (°C)
Blue	Y / N	Y / N	3.4	6760	0.0	3.4
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☒ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☒ YES ☐ NO

pH paper Lot #_____

VOA headspace acceptable (5-6mm): ☒ YES ☐ NO ☐ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	☒	☐

COMMENTS:

FedEx
TRK# 0221 7332 7229 9886
XO LKSA
SATURDAY 12:00P
PRIORITY OVERNIGHT
77040
TX-US IAH

HS-SA-WI-013

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

600-150702 Chain of Custody

Cooler Received/Opened On 7/12/2017 @ 1010

Time Samples Removed From Cooler_____ Time Samples Placed In Storage_____ (2 Hour Window)

1. Tracking # 8241 (last 4 digits, FedEx) Courier: _FedEx_

IR Gun ID 17610176 pH Strip Lot_____ Chlorine Strip Lot_____

2. Temperature of rep. sample or temp blank when opened: 1.6 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..NA

4. Were custody seals on outside of cooler? YES..NO..NA

If yes, how many and where:_____

5. Were the seals intact, signed, and dated correctly? YES...NO..NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) _____

7. Were custody seals on containers: YES NO and Intact YES...NO..NA

Were these signed and dated correctly? YES...NO..NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES..NO..NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (initial) _____

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) _____

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) _____

I certify that I attached a label with the unique LIMS number to each container (initial) _____

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 12/15/15

Page 974 of 1581

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

600-150702

TestAmerica
LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Upton, Cathy L	Lo: 7392.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: cathy.upton@testamericainc.com	State of Origin: New Mexico
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):	Page: Page 1 of 1
Address: 2960 Foster Creighton Drive,	Due Date Requested: 7/20/2017		Job #: 600-150702-1
City: Nashville	TAT Requested (days):		
State, Zip: TN, 37204	PO #:		
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	WO #:		
Email:			
Project Name: San Juan Waters	Project #: 60005961		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_GRO/5030B GRO Range (C6-C10)	8015C_DRO/3510C_LVI DRO/ORO										Total Number of containers	Special Instructions/Note:
			Preservation Code:																
SJRP-TB04-07072017 (600-150702-2)	7/7/17	07:30 Central		Water			X											3	
SJRP-MW15-07072017 (600-150702-3)	7/7/17	08:00 Central		Water			X	X										4	
SJRP-MW15-07072017-2 (600-150702-4)	7/7/17	08:00 Central		Water			X	X										4	
SJRP-PMW1-07072017 (600-150702-5)	7/7/17	09:30 Central		Water			X	X										4	
SJRP-PMW2-07072017 (600-150702-6)	7/7/17	11:00 Central		Water			X	X										4	
SJRP-PMW4-07072017 (600-150702-7)	7/7/17	11:30 Central		Water			X	X										4	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		7-11-17 1700			7-12-17 1010	
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.5

Received by OCD: 11/13/2025 11:14:36 AM

Released to Imaging: 11/14/2025 9:30:04 AM

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc. Job Number: 600-150702-1

Login Number: 150702 **List Source: TestAmerica Houston**
List Number: 1
Creator: Crafton, Tommie S

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-150702-1

Login Number: 150702
List Number: 2
Creator: Stewart, Eric S

List Source: TestAmerica Nashville
List Creation: 07/12/17 02:56 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-150702-1

Login Number: 150702
List Number: 3
Creator: Stewart, Eric S

List Source: TestAmerica Nashville
List Creation: 07/12/17 03:05 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-179817-1
Client Project/Site: San Juan Kinder Morgan Bloomfield, NM
Revision: 1

For:
CH2M Hill, Inc.
3721 Rutledge Rd. NE
Suite B-1
Albuquerque, New Mexico 87109

Attn: Aleeca Forsberg

Steve A Stepanski

Authorized for release by:
12/7/2020 4:54:09 PM
Steve Stepanski, Project Mgmt. Assistant
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Designee for

Bethany McDaniel, Senior Project Manager
(713)358-2005
bethany.mcdaniel@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: CH2M Hill, Inc. Job ID: 600-179817-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Job ID: 600-179817-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-179817-1

Comments
This report was revised to a Level 2 deliverable per client's request.

No additional comments.

Receipt
The samples were received on 1/29/2019 10:12 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.1° C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC VOA
Method(s) 8015C: The matrix spike duplicate (MSD) precision for preparation batch 490-573005 and analytical batch 490-573402 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8015C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 490-573293 and analytical batch 490-573473 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8015C: Surrogate recovery for the following sample was outside control limits: SJRP-MW17-00-01-01282019 (600-179817-4). Evidence of matrix interference is present; therefore, re-extraction and/ re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 6010B: The method blank for Prep Batch 257875 contained Boron and Barium above the method detection limit. These target analyte concentrations were less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 6010B: The serial dilution performed for the following sample associated with batch 257988 was outside control limits for Chromium at 12% recovery: (600-179401-A-42-A SD ^5)

Method(s) 6010B: The following sample was diluted to bring the concentration of target analytes within the calibration range: SJRP-MW22-00-01-01282019 (600-179817-5). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Method Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179817-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL NSH
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL NSH
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU
3050B	Acid Digestion of Sediments, Sludges, and Soils	SW846	TAL HOU
3550C	Ultrasonic Extraction	SW846	TAL NSH
5030B	Purge and Trap	SW846	TAL HOU
5030B	Purge and Trap	SW846	TAL NSH
5035	Closed System Purge & Trap/Laboratory Preservation	SW846	TAL HOU
7471A	Mercury in Solid or Semi-Solid Waste (Manual Cold Vapor Technique)/Preparation	SW846	TAL HOU

Protocol References:

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179817-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-179817-1	SJRP-MW18-00-01-01282019	Solid	01/28/19 12:30	01/29/19 10:12
600-179817-2	SJRP-MW18-10-11-01282019	Solid	01/28/19 14:30	01/29/19 10:12
600-179817-3	SJRP-MW18-19-20-01282019	Solid	01/28/19 15:30	01/29/19 10:12
600-179817-4	SJRP-MW17-00-01-01282019	Solid	01/28/19 14:25	01/29/19 10:12
600-179817-5	SJRP-MW22-00-01-01282019	Solid	01/28/19 15:25	01/29/19 10:12
600-179817-6	SJRP-TB01-01282019	Water	01/28/19 16:20	01/29/19 10:12

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179817-1

Client Sample ID: SJRP-MW18-00-01-01282019
Date Collected: 01/28/19 12:30
Date Received: 01/29/19 10:12

Lab Sample ID: 600-179817-1
Matrix: Solid
Percent Solids: 85.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000960	U	0.00762	0.000960	mg/Kg	☼	01/29/19 11:30	01/29/19 13:39	1
Ethylbenzene	0.00155	U	0.00762	0.00155	mg/Kg	☼	01/29/19 11:30	01/29/19 13:39	1
Toluene	0.00210	U	0.00762	0.00210	mg/Kg	☼	01/29/19 11:30	01/29/19 13:39	1
Xylenes, Total	0.00172	U	0.00762	0.00172	mg/Kg	☼	01/29/19 11:30	01/29/19 13:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*61 - 130*	*01/29/19 11:30*	*01/29/19 13:39*	*1*
Dibromofluoromethane	*95*		*68 - 140*	*01/29/19 11:30*	*01/29/19 13:39*	*1*
Toluene-d8 (Surr)	*75*		*50 - 130*	*01/29/19 11:30*	*01/29/19 13:39*	*1*
4-Bromofluorobenzene	*90*		*57 - 140*	*01/29/19 11:30*	*01/29/19 13:39*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.15	U	6.30	3.15	mg/Kg	☼	02/01/19 10:04	02/04/19 20:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*89*		*50 - 150*	*02/01/19 10:04*	*02/04/19 20:41*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.93	U	5.86	2.93	mg/Kg	☼	02/02/19 14:02	02/04/19 23:31	1
ORO C24-C40	**5.43**	**J**	5.86	2.93	mg/Kg	☼	02/02/19 14:02	02/04/19 23:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*116*		*50 - 150*	*02/02/19 14:02*	*02/04/19 23:31*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**15700**		28.6	0.343	mg/Kg	☼	02/06/19 11:57	02/07/19 13:33	1
Arsenic	**4.75**		1.14	0.249	mg/Kg	☼	02/06/19 11:57	02/07/19 13:33	1
Barium	**176**	**B**	1.14	0.0343	mg/Kg	☼	02/06/19 11:57	02/07/19 13:33	1
Boron	**2.54**	**J B**	22.8	0.441	mg/Kg	☼	02/06/19 11:57	02/07/19 13:33	1
Cadmium	**0.360**		0.286	0.0292	mg/Kg	☼	02/06/19 11:57	02/07/19 13:33	1
Chromium	**7.28**		0.571	0.0578	mg/Kg	☼	02/06/19 11:57	02/07/19 13:33	1
Cobalt	**9.76**		0.571	0.0772	mg/Kg	☼	02/06/19 11:57	02/07/19 13:33	1
Iron	**17800**		22.8	2.89	mg/Kg	☼	02/06/19 11:57	02/07/19 13:33	1
Lead	**15.2**		0.571	0.120	mg/Kg	☼	02/06/19 11:57	02/07/19 13:33	1
Manganese	**446**		1.71	0.0435	mg/Kg	☼	02/06/19 11:57	02/07/19 13:33	1
Molybdenum	**0.971**		0.571	0.155	mg/Kg	☼	02/06/19 11:57	02/07/19 13:33	1
Nickel	**10.6**		1.14	0.134	mg/Kg	☼	02/06/19 11:57	02/07/19 13:33	1
Selenium	0.296	U	2.28	0.296	mg/Kg	☼	02/06/19 11:57	02/07/19 13:33	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0115**	**J**	0.0197	0.00414	mg/Kg	☼	01/31/19 08:46	01/31/19 12:42	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**15.0**		1.0	1.0	%			01/30/19 10:51	1
Percent Solids	**85.0**		1.0	1.0	%			01/30/19 10:51	1

TestAmerica Houston

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179817-1

Client Sample ID: SJRP-MW18-10-11-01282019
Date Collected: 01/28/19 14:30
Date Received: 01/29/19 10:12

Lab Sample ID: 600-179817-2
Matrix: Solid
Percent Solids: 84.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000836	U	0.00664	0.000836	mg/Kg	☼	01/29/19 11:30	01/29/19 14:03	1
Ethylbenzene	0.00135	U	0.00664	0.00135	mg/Kg	☼	01/29/19 11:30	01/29/19 14:03	1
Toluene	0.00183	U	0.00664	0.00183	mg/Kg	☼	01/29/19 11:30	01/29/19 14:03	1
Xylenes, Total	0.00150	U	0.00664	0.00150	mg/Kg	☼	01/29/19 11:30	01/29/19 14:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*61 - 130*	*01/29/19 11:30*	*01/29/19 14:03*	*1*
Dibromofluoromethane	*97*		*68 - 140*	*01/29/19 11:30*	*01/29/19 14:03*	*1*
Toluene-d8 (Surr)	*75*		*50 - 130*	*01/29/19 11:30*	*01/29/19 14:03*	*1*
4-Bromofluorobenzene	*104*		*57 - 140*	*01/29/19 11:30*	*01/29/19 14:03*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.31	U	6.62	3.31	mg/Kg	☼	02/01/19 10:04	02/04/19 21:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*91*		*50 - 150*	*02/01/19 10:04*	*02/04/19 21:16*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.92	U	5.85	2.92	mg/Kg	☼	02/02/19 14:02	02/04/19 23:50	1
ORO C24-C40	**3.82**	**J**	5.85	2.92	mg/Kg	☼	02/02/19 14:02	02/04/19 23:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*116*		*50 - 150*	*02/02/19 14:02*	*02/04/19 23:50*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**13500**		28.2	0.338	mg/Kg	☼	02/06/19 11:57	02/07/19 13:35	1
Arsenic	**9.34**		1.13	0.246	mg/Kg	☼	02/06/19 11:57	02/07/19 13:35	1
Barium	**89.3**	**B**	1.13	0.0338	mg/Kg	☼	02/06/19 11:57	02/07/19 13:35	1
Boron	**1.73**	**J B**	22.5	0.435	mg/Kg	☼	02/06/19 11:57	02/07/19 13:35	1
Cadmium	**0.389**		0.282	0.0289	mg/Kg	☼	02/06/19 11:57	02/07/19 13:35	1
Chromium	**8.84**		0.564	0.0570	mg/Kg	☼	02/06/19 11:57	02/07/19 13:35	1
Cobalt	**31.9**		0.564	0.0762	mg/Kg	☼	02/06/19 11:57	02/07/19 13:35	1
Iron	**30000**		22.5	2.85	mg/Kg	☼	02/06/19 11:57	02/07/19 13:35	1
Lead	**19.2**		0.564	0.118	mg/Kg	☼	02/06/19 11:57	02/07/19 13:35	1
Manganese	**261**		1.69	0.0430	mg/Kg	☼	02/06/19 11:57	02/07/19 13:35	1
Molybdenum	**3.07**		0.564	0.153	mg/Kg	☼	02/06/19 11:57	02/07/19 13:35	1
Nickel	**11.4**		1.13	0.132	mg/Kg	☼	02/06/19 11:57	02/07/19 13:35	1
Selenium	0.292	U	2.25	0.292	mg/Kg	☼	02/06/19 11:57	02/07/19 13:35	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0846**		0.0192	0.00404	mg/Kg	☼	01/31/19 08:46	01/31/19 12:44	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**15.5**		1.0	1.0	%			01/30/19 10:51	1
Percent Solids	**84.5**		1.0	1.0	%			01/30/19 10:51	1

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179817-1

Client Sample ID: SJRP-MW18-19-20-01282019
Date Collected: 01/28/19 15:30
Date Received: 01/29/19 10:12

Lab Sample ID: 600-179817-3
Matrix: Solid
Percent Solids: 86.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000748	U	0.00593	0.000748	mg/Kg	☼	01/29/19 11:30	01/29/19 14:27	1
Ethylbenzene	0.00121	U	0.00593	0.00121	mg/Kg	☼	01/29/19 11:30	01/29/19 14:27	1
Toluene	0.00164	U	0.00593	0.00164	mg/Kg	☼	01/29/19 11:30	01/29/19 14:27	1
Xylenes, Total	0.00134	U	0.00593	0.00134	mg/Kg	☼	01/29/19 11:30	01/29/19 14:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*61 - 130*	*01/29/19 11:30*	*01/29/19 14:27*	*1*
Dibromofluoromethane	*96*		*68 - 140*	*01/29/19 11:30*	*01/29/19 14:27*	*1*
Toluene-d8 (Surr)	*76*		*50 - 130*	*01/29/19 11:30*	*01/29/19 14:27*	*1*
4-Bromofluorobenzene	*90*		*57 - 140*	*01/29/19 11:30*	*01/29/19 14:27*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.06	U	6.12	3.06	mg/Kg	☼	02/01/19 10:04	02/04/19 21:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*93*		*50 - 150*	*02/01/19 10:04*	*02/04/19 21:50*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**3.13**	**J**	5.72	2.86	mg/Kg	☼	02/02/19 14:02	02/05/19 00:08	1
ORO C24-C40	**4.48**	**J**	5.72	2.86	mg/Kg	☼	02/02/19 14:02	02/05/19 00:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*105*		*50 - 150*	*02/02/19 14:02*	*02/05/19 00:08*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**13000**		27.6	0.332	mg/Kg	☼	02/06/19 12:03	02/07/19 13:37	1
Arsenic	**5.50**		1.11	0.241	mg/Kg	☼	02/06/19 12:03	02/07/19 13:37	1
Barium	**24.6**	**B**	1.11	0.0332	mg/Kg	☼	02/06/19 12:03	02/07/19 13:37	1
Boron	**1.69**	**J B**	22.1	0.427	mg/Kg	☼	02/06/19 12:03	02/07/19 13:37	1
Cadmium	**0.310**		0.276	0.0283	mg/Kg	☼	02/06/19 12:03	02/07/19 13:37	1
Chromium	**8.68**		0.553	0.0559	mg/Kg	☼	02/06/19 12:03	02/07/19 13:37	1
Cobalt	**11.5**		0.553	0.0747	mg/Kg	☼	02/06/19 12:03	02/07/19 13:37	1
Iron	**22900**		22.1	2.80	mg/Kg	☼	02/06/19 12:03	02/07/19 13:37	1
Lead	**12.4**		0.553	0.116	mg/Kg	☼	02/06/19 12:03	02/07/19 13:37	1
Manganese	**132**		1.66	0.0421	mg/Kg	☼	02/06/19 12:03	02/07/19 13:37	1
Molybdenum	**1.28**		0.553	0.150	mg/Kg	☼	02/06/19 12:03	02/07/19 13:37	1
Nickel	**16.2**		1.11	0.129	mg/Kg	☼	02/06/19 12:03	02/07/19 13:37	1
Selenium	0.286	U	2.21	0.286	mg/Kg	☼	02/06/19 12:03	02/07/19 13:37	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0342**		0.0194	0.00409	mg/Kg	☼	01/31/19 08:46	01/31/19 12:46	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**13.9**		1.0	1.0	%			01/30/19 10:51	1
Percent Solids	**86.1**		1.0	1.0	%			01/30/19 10:51	1

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179817-1

Client Sample ID: SJRP-MW17-00-01-01282019 **Lab Sample ID: 600-179817-4**
Date Collected: 01/28/19 14:25 **Matrix: Solid**
Date Received: 01/29/19 10:12 **Percent Solids: 86.8**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00107	U	0.00850	0.00107	mg/Kg	☼	01/29/19 11:30	01/29/19 14:51	1
Ethylbenzene	0.00173	U	0.00850	0.00173	mg/Kg	☼	01/29/19 11:30	01/29/19 14:51	1
Toluene	0.00235	U	0.00850	0.00235	mg/Kg	☼	01/29/19 11:30	01/29/19 14:51	1
Xylenes, Total	0.00192	U	0.00850	0.00192	mg/Kg	☼	01/29/19 11:30	01/29/19 14:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*61 - 130*	*01/29/19 11:30*	*01/29/19 14:51*	*1*
Dibromofluoromethane	*98*		*68 - 140*	*01/29/19 11:30*	*01/29/19 14:51*	*1*
Toluene-d8 (Surr)	*76*		*50 - 130*	*01/29/19 11:30*	*01/29/19 14:51*	*1*
4-Bromofluorobenzene	*107*		*57 - 140*	*01/29/19 11:30*	*01/29/19 14:51*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.22	U	6.44	3.22	mg/Kg	☼	02/01/19 10:04	02/04/19 22:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*87*		*50 - 150*	*02/01/19 10:04*	*02/04/19 22:58*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**76.9**	**F1**	5.64	2.82	mg/Kg	☼	02/02/19 14:02	02/05/19 00:26	1
ORO C24-C40	**81.2**		5.64	2.82	mg/Kg	☼	02/02/19 14:02	02/05/19 00:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*172*	*X*	*50 - 150*	*02/02/19 14:02*	*02/05/19 00:26*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**11600**		28.3	0.339	mg/Kg	☼	02/06/19 12:03	02/07/19 13:48	1
Arsenic	**4.54**		1.13	0.246	mg/Kg	☼	02/06/19 12:03	02/07/19 13:48	1
Barium	**155**	**F1 B**	1.13	0.0339	mg/Kg	☼	02/06/19 12:03	02/07/19 13:48	1
Boron	**2.80**	**J F1 B**	22.6	0.436	mg/Kg	☼	02/06/19 12:03	02/07/19 13:48	1
Cadmium	**0.384**		0.283	0.0289	mg/Kg	☼	02/06/19 12:03	02/07/19 13:48	1
Chromium	**6.53**		0.565	0.0572	mg/Kg	☼	02/06/19 12:03	02/07/19 13:48	1
Cobalt	**10.9**		0.565	0.0764	mg/Kg	☼	02/06/19 12:03	02/07/19 13:48	1
Iron	**16300**		22.6	2.86	mg/Kg	☼	02/06/19 12:03	02/07/19 13:48	1
Lead	**11.5**		0.565	0.119	mg/Kg	☼	02/06/19 12:03	02/07/19 13:48	1
Manganese	**442**		1.70	0.0431	mg/Kg	☼	02/06/19 12:03	02/07/19 13:48	1
Molybdenum	**0.978**		0.565	0.154	mg/Kg	☼	02/06/19 12:03	02/07/19 13:48	1
Nickel	**9.40**		1.13	0.132	mg/Kg	☼	02/06/19 12:03	02/07/19 13:48	1
Selenium	0.293	U	2.26	0.293	mg/Kg	☼	02/06/19 12:03	02/07/19 13:48	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00387	U	0.0184	0.00387	mg/Kg	☼	01/31/19 08:46	01/31/19 12:35	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**13.2**		1.0	1.0	%			01/30/19 10:51	1
Percent Solids	**86.8**		1.0	1.0	%			01/30/19 10:51	1

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179817-1

Client Sample ID: SJRP-MW22-00-01-01282019
Date Collected: 01/28/19 15:25
Date Received: 01/29/19 10:12

Lab Sample ID: 600-179817-5
Matrix: Solid
Percent Solids: 83.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000699	U	0.00555	0.000699	mg/Kg	☼	01/29/19 11:30	01/29/19 16:03	1
Ethylbenzene	0.00113	U	0.00555	0.00113	mg/Kg	☼	01/29/19 11:30	01/29/19 16:03	1
Toluene	0.00153	U	0.00555	0.00153	mg/Kg	☼	01/29/19 11:30	01/29/19 16:03	1
Xylenes, Total	0.00125	U	0.00555	0.00125	mg/Kg	☼	01/29/19 11:30	01/29/19 16:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*61 - 130*	*01/29/19 11:30*	*01/29/19 16:03*	*1*
Dibromofluoromethane	*101*		*68 - 140*	*01/29/19 11:30*	*01/29/19 16:03*	*1*
Toluene-d8 (Surr)	*76*		*50 - 130*	*01/29/19 11:30*	*01/29/19 16:03*	*1*
4-Bromofluorobenzene	*87*		*57 - 140*	*01/29/19 11:30*	*01/29/19 16:03*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.32	U	6.65	3.32	mg/Kg	☼	02/01/19 10:04	02/04/19 22:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*89*		*50 - 150*	*02/01/19 10:04*	*02/04/19 22:24*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3.00	U	6.00	3.00	mg/Kg	☼	02/02/19 14:02	02/05/19 01:21	1
ORO C24-C40	**4.80**	**J**	6.00	3.00	mg/Kg	☼	02/02/19 14:02	02/05/19 01:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*111*		*50 - 150*	*02/02/19 14:02*	*02/05/19 01:21*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**10100**		29.0	0.348	mg/Kg	☼	02/06/19 12:03	02/07/19 13:39	1
Arsenic	**3.79**		1.16	0.253	mg/Kg	☼	02/06/19 12:03	02/07/19 13:39	1
Barium	**155**	**B**	1.16	0.0348	mg/Kg	☼	02/06/19 12:03	02/07/19 13:39	1
Boron	**1.51**	**J B**	23.2	0.447	mg/Kg	☼	02/06/19 12:03	02/07/19 13:39	1
Cadmium	**0.284**	**J**	0.290	0.0297	mg/Kg	☼	02/06/19 12:03	02/07/19 13:39	1
Chromium	**5.68**		0.579	0.0586	mg/Kg	☼	02/06/19 12:03	02/07/19 13:39	1
Cobalt	**9.16**		0.579	0.0783	mg/Kg	☼	02/06/19 12:03	02/07/19 13:39	1
Iron	**16400**		23.2	2.93	mg/Kg	☼	02/06/19 12:03	02/07/19 13:39	1
Lead	**10.6**		0.579	0.122	mg/Kg	☼	02/06/19 12:03	02/07/19 13:39	1
Manganese	**2260**		8.69	0.221	mg/Kg	☼	02/06/19 12:03	02/07/19 15:09	5
Molybdenum	**0.829**		0.579	0.158	mg/Kg	☼	02/06/19 12:03	02/07/19 13:39	1
Nickel	**9.73**		1.16	0.136	mg/Kg	☼	02/06/19 12:03	02/07/19 13:39	1
Selenium	0.300	U	2.32	0.300	mg/Kg	☼	02/06/19 12:03	02/07/19 13:39	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00424	U	0.0202	0.00424	mg/Kg	☼	01/31/19 08:46	01/31/19 12:48	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**17.0**		1.0	1.0	%			01/30/19 10:51	1
Percent Solids	**83.0**		1.0	1.0	%			01/30/19 10:51	1

TestAmerica Houston

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179817-1

Client Sample ID: SJRP-TB01-01282019
Date Collected: 01/28/19 16:20
Date Received: 01/29/19 10:12

Lab Sample ID: 600-179817-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			01/30/19 15:04	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			01/30/19 15:04	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			01/30/19 15:04	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			01/30/19 15:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*50 - 134*		*01/30/19 15:04*	*1*
Dibromofluoromethane	*82*		*62 - 130*		*01/30/19 15:04*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*01/30/19 15:04*	*1*
4-Bromofluorobenzene	*105*		*67 - 139*		*01/30/19 15:04*	*1*

Definitions/Glossary

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-179817-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F2	MS/MSD RPD exceeds control limits

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Surrogate Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179817-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(61-130)	(68-140)	(50-130)	(57-140)
600-179817-1	SJRP-MW18-00-01-01282019	102	95	75	90
600-179817-2	SJRP-MW18-10-11-01282019	96	97	75	104
600-179817-3	SJRP-MW18-19-20-01282019	96	96	76	90
600-179817-4	SJRP-MW17-00-01-01282019	99	98	76	107
600-179817-4 MS	SJRP-MW17-00-01-01282019	96	100	78	120
600-179817-4 MSD	SJRP-MW17-00-01-01282019	101	99	78	110
600-179817-5	SJRP-MW22-00-01-01282019	99	101	76	87
LCS 600-257223/3	Lab Control Sample	94	101	83	84
LCSD 600-257223/4	Lab Control Sample Dup	95	97	81	97
MB 600-257223/6	Method Blank	108	102	78	91

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(50-134)	(62-130)	(70-130)	(67-139)
600-179817-6	SJRP-TB01-01282019	80	82	93	105
LCS 600-257389/4	Lab Control Sample	78	82	98	109
LCSD 600-257389/5	Lab Control Sample Dup	78	81	93	104
MB 600-257389/7	Method Blank	83	84	95	107

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(50-150)
600-179817-1	SJRP-MW18-00-01-01282019	89
600-179817-2	SJRP-MW18-10-11-01282019	91
600-179817-3	SJRP-MW18-19-20-01282019	93
600-179817-4	SJRP-MW17-00-01-01282019	87
600-179817-4 MS	SJRP-MW17-00-01-01282019	95
600-179817-4 MSD	SJRP-MW17-00-01-01282019	103
600-179817-5	SJRP-MW22-00-01-01282019	89
LCS 490-573005/2-A	Lab Control Sample	108
LCSD 490-573005/3-A	Lab Control Sample Dup	106
MB 490-573005/1-A	Method Blank	91

Surrogate Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179817-1

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	OTPH1 (50-150)							
600-179817-1	SJRP-MW18-00-01-01282019	116							
600-179817-2	SJRP-MW18-10-11-01282019	116							
600-179817-3	SJRP-MW18-19-20-01282019	105							
600-179817-4	SJRP-MW17-00-01-01282019	172 X							
600-179817-4 MS	SJRP-MW17-00-01-01282019	123							
600-179817-4 MSD	SJRP-MW17-00-01-01282019	122							
600-179817-5	SJRP-MW22-00-01-01282019	111							
LCS 490-573293/2-A	Lab Control Sample	94							
MB 490-573293/1-A	Method Blank	112							

Surrogate Legend

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179817-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-257223/6
Matrix: Solid
Analysis Batch: 257223

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			01/29/19 09:59	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			01/29/19 09:59	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			01/29/19 09:59	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			01/29/19 09:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*61 - 130*		*01/29/19 09:59*	*1*
Dibromofluoromethane	*102*		*68 - 140*		*01/29/19 09:59*	*1*
Toluene-d8 (Surr)	*78*		*50 - 130*		*01/29/19 09:59*	*1*
4-Bromofluorobenzene	*91*		*57 - 140*		*01/29/19 09:59*	*1*

Lab Sample ID: LCS 600-257223/3
Matrix: Solid
Analysis Batch: 257223

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.04695		mg/Kg		94	70 - 131		
Ethylbenzene			0.0500	0.03912		mg/Kg		78	66 - 130		
Toluene			0.0500	0.04807		mg/Kg		96	67 - 130		
Xylenes, Total			0.100	0.07432		mg/Kg		74	63 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*61 - 130*
Dibromofluoromethane	*101*		*68 - 140*
Toluene-d8 (Surr)	*83*		*50 - 130*
4-Bromofluorobenzene	*84*		*57 - 140*

Lab Sample ID: LCSD 600-257223/4
Matrix: Solid
Analysis Batch: 257223

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.05101		mg/Kg		102	70 - 131	8	30
Ethylbenzene			0.0500	0.04849		mg/Kg		97	66 - 130	21	30
Toluene			0.0500	0.04732		mg/Kg		95	67 - 130	2	30
Xylenes, Total			0.100	0.09673		mg/Kg		97	63 - 130	26	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*61 - 130*
Dibromofluoromethane	*97*		*68 - 140*
Toluene-d8 (Surr)	*81*		*50 - 130*
4-Bromofluorobenzene	*97*		*57 - 140*

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179817-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 600-179817-4 MS
Matrix: Solid
Analysis Batch: 257347

Client Sample ID: SJRP-MW17-00-01-01282019
Prep Type: Total/NA
Prep Batch: 257289

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.00107	U	0.0711	0.06525		mg/Kg	☼	92	70 - 131
Ethylbenzene	0.00173	U	0.0711	0.06515		mg/Kg	☼	92	66 - 130
Toluene	0.00235	U	0.0711	0.06067		mg/Kg	☼	85	67 - 130
Xylenes, Total	0.00192	U	0.142	0.1282		mg/Kg	☼	90	63 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*61 - 130*
Dibromofluoromethane	*100*		*68 - 140*
Toluene-d8 (Surr)	*78*		*50 - 130*
4-Bromofluorobenzene	*120*		*57 - 140*

Lab Sample ID: 600-179817-4 MSD
Matrix: Solid
Analysis Batch: 257223

Client Sample ID: SJRP-MW17-00-01-01282019
Prep Type: Total/NA
Prep Batch: 257289

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.00107	U	0.0930	0.06835		mg/Kg	☼	73	70 - 131	3	30
Ethylbenzene	0.00173	U	0.0930	0.06582		mg/Kg	☼	71	66 - 130	4	30
Toluene	0.00235	U	0.0930	0.06439		mg/Kg	☼	69	67 - 130	7	30
Xylenes, Total	0.00192	U	0.186	0.1350		mg/Kg	☼	73	63 - 130	2	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*61 - 130*
Dibromofluoromethane	*99*		*68 - 140*
Toluene-d8 (Surr)	*78*		*50 - 130*
4-Bromofluorobenzene	*110*		*57 - 140*

Lab Sample ID: MB 600-257389/7
Matrix: Water
Analysis Batch: 257389

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			01/30/19 14:36	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			01/30/19 14:36	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			01/30/19 14:36	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			01/30/19 14:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*50 - 134*		*01/30/19 14:36*	*1*
Dibromofluoromethane	*84*		*62 - 130*		*01/30/19 14:36*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*01/30/19 14:36*	*1*
4-Bromofluorobenzene	*107*		*67 - 139*		*01/30/19 14:36*	*1*

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179817-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-257389/4
Matrix: Water
Analysis Batch: 257389

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0100	0.01108		mg/L		111	70 - 130
Ethylbenzene	0.0100	0.01068		mg/L		107	70 - 130
Toluene	0.0100	0.01150		mg/L		115	70 - 130
Xylenes, Total	0.0200	0.02164		mg/L		108	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*78*		*50 - 134*
Dibromofluoromethane	*82*		*62 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*
4-Bromofluorobenzene	*109*		*67 - 139*

Lab Sample ID: LCSD 600-257389/5
Matrix: Water
Analysis Batch: 257389

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0100	0.009378		mg/L		94	70 - 130	17	20
Ethylbenzene	0.0100	0.009129		mg/L		91	70 - 130	16	20
Toluene	0.0100	0.009751		mg/L		98	70 - 130	16	20
Xylenes, Total	0.0200	0.01848		mg/L		92	70 - 130	16	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*78*		*50 - 134*
Dibromofluoromethane	*81*		*62 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*
4-Bromofluorobenzene	*104*		*67 - 139*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 490-573005/1-A
Matrix: Solid
Analysis Batch: 573402

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 573005

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		02/01/19 09:00	02/04/19 14:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*91*		*50 - 150*	*02/01/19 09:00*	*02/04/19 14:26*	*1*

Lab Sample ID: LCS 490-573005/2-A
Matrix: Solid
Analysis Batch: 573402

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 573005

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	500	576.1		mg/Kg		115	70 - 130

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179817-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: LCS 490-573005/2-A
Matrix: Solid
Analysis Batch: 573402

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 573005

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	*108*		*50 - 150*

Lab Sample ID: LCSD 490-573005/3-A
Matrix: Solid
Analysis Batch: 573402

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 573005

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10			500	560.9		mg/Kg		112	70 - 130	3	21

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	*106*		*50 - 150*

Lab Sample ID: 600-179817-4 MS
Matrix: Solid
Analysis Batch: 573402

Client Sample ID: SJRP-MW17-00-01-01282019
Prep Type: Total/NA
Prep Batch: 573005

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C6-C10	3.22	U	650	506.0		mg/Kg	☼	78	56 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene	*95*		*50 - 150*

Lab Sample ID: 600-179817-4 MSD
Matrix: Solid
Analysis Batch: 573402

Client Sample ID: SJRP-MW17-00-01-01282019
Prep Type: Total/NA
Prep Batch: 573005

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	3.22	U	654	684.3	F2	mg/Kg	☼	105	56 - 130	30	21

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene	*103*		*50 - 150*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Lab Sample ID: MB 490-573293/1-A
Matrix: Solid
Analysis Batch: 573473

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 573293

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.50	U	5.00	2.50	mg/Kg		02/02/19 14:01	02/04/19 19:33	1
ORO C24-C40	2.50	U	5.00	2.50	mg/Kg		02/02/19 14:01	02/04/19 19:33	1

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179817-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Lab Sample ID: MB 490-573293/1-A
Matrix: Solid
Analysis Batch: 573473

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 573293

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	112		50 - 150	02/02/19 14:01	02/04/19 19:33	1

Lab Sample ID: LCS 490-573293/2-A
Matrix: Solid
Analysis Batch: 573473

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 573293

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			40.0	37.31		mg/Kg		93	54 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	94		50 - 150

Lab Sample ID: 600-179817-4 MS
Matrix: Solid
Analysis Batch: 573473

Client Sample ID: SJRP-MW17-00-01-01282019
Prep Type: Total/NA
Prep Batch: 573293

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]	76.9	F1	45.5	80.56	F1	mg/Kg	☼	8	10 - 142		

Surrogate	MS %Recovery	MS Qualifier	Limits
o-Terphenyl (Surr)	123		50 - 150

Lab Sample ID: 600-179817-4 MSD
Matrix: Solid
Analysis Batch: 573473

Client Sample ID: SJRP-MW17-00-01-01282019
Prep Type: Total/NA
Prep Batch: 573293

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	76.9	F1	46.1	71.64	F1	mg/Kg	☼	-11	10 - 142	12	47

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl (Surr)	122		50 - 150

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-257875/1-A
Matrix: Solid
Analysis Batch: 257988

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 257875

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.300	U	25.0	0.300	mg/Kg		02/06/19 11:57	02/07/19 11:27	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		02/06/19 11:57	02/07/19 11:27	1
Barium	0.2250	J	1.00	0.0300	mg/Kg		02/06/19 11:57	02/07/19 11:27	1
Boron	0.5600	J	20.0	0.386	mg/Kg		02/06/19 11:57	02/07/19 11:27	1

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179817-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: MB 600-257875/1-A | **Client Sample ID: Method Blank**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 257988 | **Prep Batch: 257875**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		02/06/19 11:57	02/07/19 11:27	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		02/06/19 11:57	02/07/19 11:27	1
Cobalt	0.0676	U	0.500	0.0676	mg/Kg		02/06/19 11:57	02/07/19 11:27	1
Iron	2.53	U	20.0	2.53	mg/Kg		02/06/19 11:57	02/07/19 11:27	1
Lead	0.105	U	0.500	0.105	mg/Kg		02/06/19 11:57	02/07/19 11:27	1
Manganese	0.0381	U	1.50	0.0381	mg/Kg		02/06/19 11:57	02/07/19 11:27	1
Molybdenum	0.136	U	0.500	0.136	mg/Kg		02/06/19 11:57	02/07/19 11:27	1
Nickel	0.117	U	1.00	0.117	mg/Kg		02/06/19 11:57	02/07/19 11:27	1
Selenium	0.259	U	2.00	0.259	mg/Kg		02/06/19 11:57	02/07/19 11:27	1

Lab Sample ID: LCS 600-257875/2-A | **Client Sample ID: Lab Control Sample**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 257988 | **Prep Batch: 257875**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	500	527.0		mg/Kg		105	42 - 158
Arsenic	50.0	50.90		mg/Kg		102	78 - 122
Barium	50.0	52.35		mg/Kg		105	80 - 120
Boron	50.0	52.05		mg/Kg		104	68 - 133
Cadmium	25.0	25.71		mg/Kg		103	81 - 119
Chromium	50.0	51.40		mg/Kg		103	81 - 119
Cobalt	50.0	52.35		mg/Kg		105	82 - 118
Iron	500	530.0		mg/Kg		106	51 - 149
Lead	50.0	50.90		mg/Kg		102	79 - 121
Manganese	50.0	51.40		mg/Kg		103	81 - 119
Molybdenum	50.0	57.30		mg/Kg		115	75 - 125
Nickel	50.0	51.45		mg/Kg		103	81 - 119
Selenium	50.0	50.15		mg/Kg		100	80 - 120

Lab Sample ID: 600-179817-4 MS | **Client Sample ID: SJRP-MW17-00-01-01282019**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 257988 | **Prep Batch: 257875**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	11600		567	14430	4	mg/Kg	☼	503	75 - 125
Arsenic	4.54		56.7	64.16		mg/Kg	☼	105	75 - 125
Barium	155	F1 B	56.7	193.2	F1	mg/Kg	☼	67	75 - 125
Boron	2.80	J F1 B	56.7	36.84	F1	mg/Kg	☼	60	75 - 125
Cadmium	0.384		28.4	30.85		mg/Kg	☼	107	75 - 125
Chromium	6.53		56.7	66.31		mg/Kg	☼	105	75 - 125
Cobalt	10.9		56.7	73.12		mg/Kg	☼	110	75 - 125
Iron	16300		567	17300	4	mg/Kg	☼	171	75 - 125
Lead	11.5		56.7	70.80		mg/Kg	☼	105	75 - 125
Manganese	442		56.7	391.9	4	mg/Kg	☼	-88	75 - 125
Molybdenum	0.978		56.7	47.86		mg/Kg	☼	83	75 - 125
Nickel	9.40		56.7	71.25		mg/Kg	☼	109	75 - 125
Selenium	0.293	U	56.7	59.85		mg/Kg	☼	105	75 - 125

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179817-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-179817-4 MSD — **Client Sample ID: SJRP-MW17-00-01-01282019**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 257988 — **Prep Batch: 257875**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	11600		553	15410	4	mg/Kg	☼	693	75 - 125	7	20
Arsenic	4.54		55.3	62.08		mg/Kg	☼	104	75 - 125	3	20
Barium	155	F1 B	55.3	204.6		mg/Kg	☼	90	75 - 125	6	20
Boron	2.80	J F1 B	55.3	36.03	F1	mg/Kg	☼	60	75 - 125	2	20
Cadmium	0.384		27.6	30.07		mg/Kg	☼	107	75 - 125	3	20
Chromium	6.53		55.3	65.28		mg/Kg	☼	106	75 - 125	2	20
Cobalt	10.9		55.3	72.30		mg/Kg	☼	111	75 - 125	1	20
Iron	16300		553	18240	4	mg/Kg	☼	346	75 - 125	5	20
Lead	11.5		55.3	69.71		mg/Kg	☼	105	75 - 125	2	20
Manganese	442		55.3	389.4	4	mg/Kg	☼	-95	75 - 125	1	20
Molybdenum	0.978		55.3	46.59		mg/Kg	☼	83	75 - 125	3	20
Nickel	9.40		55.3	70.37		mg/Kg	☼	110	75 - 125	1	20
Selenium	0.293	U	55.3	57.21		mg/Kg	☼	103	75 - 125	5	20

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-257447/7-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 257521 — **Prep Batch: 257447**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00321	U	0.0152	0.00321	mg/Kg		01/31/19 08:46	01/31/19 12:31	1

Lab Sample ID: LCSSRM 600-257447/8-A ^100 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 257521 — **Prep Batch: 257447**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	29.0	25.69		mg/Kg		88.6	59.7 - 115.2

Lab Sample ID: 600-179817-4 MS — **Client Sample ID: SJRP-MW17-00-01-01282019**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 257521 — **Prep Batch: 257447**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00387	U	0.271	0.2968		mg/Kg	☼	109	75 - 125

Lab Sample ID: 600-179817-4 MSD — **Client Sample ID: SJRP-MW17-00-01-01282019**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 257521 — **Prep Batch: 257447**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00387	U	0.272	0.2902		mg/Kg	☼	107	75 - 125	2	20

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179817-1

Method: 2540B - Percent Moisture

Lab Sample ID: 600-179817-1 DU
Matrix: Solid
Analysis Batch: 257378

Client Sample ID: SJRP-MW18-00-01-01282019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	15.0			17.8		%				17	20
Percent Solids	85.0			82.2		%				3	20

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179817-1

GC/MS VOA

Analysis Batch: 257223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179817-1	SJRP-MW18-00-01-01282019	Total/NA	Solid	8260B	257289
600-179817-2	SJRP-MW18-10-11-01282019	Total/NA	Solid	8260B	257289
600-179817-3	SJRP-MW18-19-20-01282019	Total/NA	Solid	8260B	257289
600-179817-4	SJRP-MW17-00-01-01282019	Total/NA	Solid	8260B	257289
600-179817-5	SJRP-MW22-00-01-01282019	Total/NA	Solid	8260B	257289
MB 600-257223/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-257223/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-257223/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
600-179817-4 MSD	SJRP-MW17-00-01-01282019	Total/NA	Solid	8260B	257289

Prep Batch: 257289

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179817-1	SJRP-MW18-00-01-01282019	Total/NA	Solid	5035	
600-179817-2	SJRP-MW18-10-11-01282019	Total/NA	Solid	5035	
600-179817-3	SJRP-MW18-19-20-01282019	Total/NA	Solid	5035	
600-179817-4	SJRP-MW17-00-01-01282019	Total/NA	Solid	5035	
600-179817-5	SJRP-MW22-00-01-01282019	Total/NA	Solid	5035	
600-179817-4 MS	SJRP-MW17-00-01-01282019	Total/NA	Solid	5035	
600-179817-4 MSD	SJRP-MW17-00-01-01282019	Total/NA	Solid	5035	

Analysis Batch: 257347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179817-4 MS	SJRP-MW17-00-01-01282019	Total/NA	Solid	8260B	257289

Analysis Batch: 257389

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179817-6	SJRP-TB01-01282019	Total/NA	Water	8260B	
MB 600-257389/7	Method Blank	Total/NA	Water	8260B	
LCS 600-257389/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-257389/5	Lab Control Sample Dup	Total/NA	Water	8260B	

GC VOA

Prep Batch: 573005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179817-1	SJRP-MW18-00-01-01282019	Total/NA	Solid	5030B	
600-179817-2	SJRP-MW18-10-11-01282019	Total/NA	Solid	5030B	
600-179817-3	SJRP-MW18-19-20-01282019	Total/NA	Solid	5030B	
600-179817-4	SJRP-MW17-00-01-01282019	Total/NA	Solid	5030B	
600-179817-5	SJRP-MW22-00-01-01282019	Total/NA	Solid	5030B	
MB 490-573005/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 490-573005/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 490-573005/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
600-179817-4 MS	SJRP-MW17-00-01-01282019	Total/NA	Solid	5030B	
600-179817-4 MSD	SJRP-MW17-00-01-01282019	Total/NA	Solid	5030B	

Analysis Batch: 573402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179817-1	SJRP-MW18-00-01-01282019	Total/NA	Solid	8015C	573005
600-179817-2	SJRP-MW18-10-11-01282019	Total/NA	Solid	8015C	573005

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179817-1

GC VOA (Continued)

Analysis Batch: 573402 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179817-3	SJRP-MW18-19-20-01282019	Total/NA	Solid	8015C	573005
600-179817-4	SJRP-MW17-00-01-01282019	Total/NA	Solid	8015C	573005
600-179817-5	SJRP-MW22-00-01-01282019	Total/NA	Solid	8015C	573005
MB 490-573005/1-A	Method Blank	Total/NA	Solid	8015C	573005
LCS 490-573005/2-A	Lab Control Sample	Total/NA	Solid	8015C	573005
LCSD 490-573005/3-A	Lab Control Sample Dup	Total/NA	Solid	8015C	573005
600-179817-4 MS	SJRP-MW17-00-01-01282019	Total/NA	Solid	8015C	573005
600-179817-4 MSD	SJRP-MW17-00-01-01282019	Total/NA	Solid	8015C	573005

GC Semi VOA

Prep Batch: 573293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179817-1	SJRP-MW18-00-01-01282019	Total/NA	Solid	3550C	
600-179817-2	SJRP-MW18-10-11-01282019	Total/NA	Solid	3550C	
600-179817-3	SJRP-MW18-19-20-01282019	Total/NA	Solid	3550C	
600-179817-4	SJRP-MW17-00-01-01282019	Total/NA	Solid	3550C	
600-179817-5	SJRP-MW22-00-01-01282019	Total/NA	Solid	3550C	
MB 490-573293/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-573293/2-A	Lab Control Sample	Total/NA	Solid	3550C	
600-179817-4 MS	SJRP-MW17-00-01-01282019	Total/NA	Solid	3550C	
600-179817-4 MSD	SJRP-MW17-00-01-01282019	Total/NA	Solid	3550C	

Analysis Batch: 573473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179817-1	SJRP-MW18-00-01-01282019	Total/NA	Solid	8015C	573293
600-179817-2	SJRP-MW18-10-11-01282019	Total/NA	Solid	8015C	573293
600-179817-3	SJRP-MW18-19-20-01282019	Total/NA	Solid	8015C	573293
600-179817-4	SJRP-MW17-00-01-01282019	Total/NA	Solid	8015C	573293
600-179817-5	SJRP-MW22-00-01-01282019	Total/NA	Solid	8015C	573293
MB 490-573293/1-A	Method Blank	Total/NA	Solid	8015C	573293
LCS 490-573293/2-A	Lab Control Sample	Total/NA	Solid	8015C	573293
600-179817-4 MS	SJRP-MW17-00-01-01282019	Total/NA	Solid	8015C	573293
600-179817-4 MSD	SJRP-MW17-00-01-01282019	Total/NA	Solid	8015C	573293

Metals

Prep Batch: 257447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179817-1	SJRP-MW18-00-01-01282019	Total/NA	Solid	7471A	
600-179817-2	SJRP-MW18-10-11-01282019	Total/NA	Solid	7471A	
600-179817-3	SJRP-MW18-19-20-01282019	Total/NA	Solid	7471A	
600-179817-4	SJRP-MW17-00-01-01282019	Total/NA	Solid	7471A	
600-179817-5	SJRP-MW22-00-01-01282019	Total/NA	Solid	7471A	
MB 600-257447/7-A	Method Blank	Total/NA	Solid	7471A	
LCSSRM 600-257447/8-A ^100	Lab Control Sample	Total/NA	Solid	7471A	
600-179817-4 MS	SJRP-MW17-00-01-01282019	Total/NA	Solid	7471A	
600-179817-4 MSD	SJRP-MW17-00-01-01282019	Total/NA	Solid	7471A	

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179817-1

Metals (Continued)

Analysis Batch: 257521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179817-1	SJRP-MW18-00-01-01282019	Total/NA	Solid	7471A	257447
600-179817-2	SJRP-MW18-10-11-01282019	Total/NA	Solid	7471A	257447
600-179817-3	SJRP-MW18-19-20-01282019	Total/NA	Solid	7471A	257447
600-179817-4	SJRP-MW17-00-01-01282019	Total/NA	Solid	7471A	257447
600-179817-5	SJRP-MW22-00-01-01282019	Total/NA	Solid	7471A	257447
MB 600-257447/7-A	Method Blank	Total/NA	Solid	7471A	257447
LCSSRM 600-257447/8-A ^100	Lab Control Sample	Total/NA	Solid	7471A	257447
600-179817-4 MS	SJRP-MW17-00-01-01282019	Total/NA	Solid	7471A	257447
600-179817-4 MSD	SJRP-MW17-00-01-01282019	Total/NA	Solid	7471A	257447

Prep Batch: 257875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179817-1	SJRP-MW18-00-01-01282019	Total/NA	Solid	3050B	
600-179817-2	SJRP-MW18-10-11-01282019	Total/NA	Solid	3050B	
600-179817-3	SJRP-MW18-19-20-01282019	Total/NA	Solid	3050B	
600-179817-4	SJRP-MW17-00-01-01282019	Total/NA	Solid	3050B	
600-179817-5	SJRP-MW22-00-01-01282019	Total/NA	Solid	3050B	
MB 600-257875/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 600-257875/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-179817-4 MS	SJRP-MW17-00-01-01282019	Total/NA	Solid	3050B	
600-179817-4 MSD	SJRP-MW17-00-01-01282019	Total/NA	Solid	3050B	

Analysis Batch: 257988

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179817-1	SJRP-MW18-00-01-01282019	Total/NA	Solid	6010B	257875
600-179817-2	SJRP-MW18-10-11-01282019	Total/NA	Solid	6010B	257875
600-179817-3	SJRP-MW18-19-20-01282019	Total/NA	Solid	6010B	257875
600-179817-4	SJRP-MW17-00-01-01282019	Total/NA	Solid	6010B	257875
600-179817-5	SJRP-MW22-00-01-01282019	Total/NA	Solid	6010B	257875
600-179817-5	SJRP-MW22-00-01-01282019	Total/NA	Solid	6010B	257875
MB 600-257875/1-A	Method Blank	Total/NA	Solid	6010B	257875
LCS 600-257875/2-A	Lab Control Sample	Total/NA	Solid	6010B	257875
600-179817-4 MS	SJRP-MW17-00-01-01282019	Total/NA	Solid	6010B	257875
600-179817-4 MSD	SJRP-MW17-00-01-01282019	Total/NA	Solid	6010B	257875

General Chemistry

Analysis Batch: 257378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179817-1	SJRP-MW18-00-01-01282019	Total/NA	Solid	2540B	
600-179817-2	SJRP-MW18-10-11-01282019	Total/NA	Solid	2540B	
600-179817-3	SJRP-MW18-19-20-01282019	Total/NA	Solid	2540B	
600-179817-4	SJRP-MW17-00-01-01282019	Total/NA	Solid	2540B	
600-179817-5	SJRP-MW22-00-01-01282019	Total/NA	Solid	2540B	
600-179817-4 MS	SJRP-MW17-00-01-01282019	Total/NA	Solid	2540B	
600-179817-4 MSD	SJRP-MW17-00-01-01282019	Total/NA	Solid	2540B	
600-179817-1 DU	SJRP-MW18-00-01-01282019	Total/NA	Solid	2540B	

Lab Chronicle

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179817-1

Client Sample ID: SJRP-MW18-00-01-01282019 — **Lab Sample ID: 600-179817-1**
Date Collected: 01/28/19 12:30 — **Matrix: Solid**
Date Received: 01/29/19 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			257378	01/30/19 10:51	DTN	TAL HOU

Client Sample ID: SJRP-MW18-00-01-01282019 — **Lab Sample ID: 600-179817-1**
Date Collected: 01/28/19 12:30 — **Matrix: Solid**
Date Received: 01/29/19 10:12 — **Percent Solids: 85.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3.86 g	5 mL	257289	01/29/19 11:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	257223	01/29/19 13:39	WS1	TAL HOU
Total/NA	Prep	5030B			5.43 g	5.0 mL	573005	02/01/19 10:04	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	573402	02/04/19 20:41	S1S	TAL NSH
Total/NA	Prep	3550C			25.09 g	1 mL	573293	02/02/19 14:02	AMD	TAL NSH
Total/NA	Analysis	8015C		1			573473	02/04/19 23:31	S1S	TAL NSH
Total/NA	Prep	3050B			1.03 g	50.0 mL	257875	02/06/19 11:57	AML	TAL HOU
Total/NA	Analysis	6010B		1			257988	02/07/19 13:33	DCL	TAL HOU
Total/NA	Prep	7471A			0.61 g	50 mL	257447	01/31/19 08:46	SOT	TAL HOU
Total/NA	Analysis	7471A		1			257521	01/31/19 12:42	SOT	TAL HOU

Client Sample ID: SJRP-MW18-10-11-01282019 — **Lab Sample ID: 600-179817-2**
Date Collected: 01/28/19 14:30 — **Matrix: Solid**
Date Received: 01/29/19 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			257378	01/30/19 10:51	DTN	TAL HOU

Client Sample ID: SJRP-MW18-10-11-01282019 — **Lab Sample ID: 600-179817-2**
Date Collected: 01/28/19 14:30 — **Matrix: Solid**
Date Received: 01/29/19 10:12 — **Percent Solids: 84.5**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.46 g	5 mL	257289	01/29/19 11:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	257223	01/29/19 14:03	WS1	TAL HOU
Total/NA	Prep	5030B			5.19 g	5.0 mL	573005	02/01/19 10:04	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	573402	02/04/19 21:16	S1S	TAL NSH
Total/NA	Prep	3550C			25.31 g	1 mL	573293	02/02/19 14:02	AMD	TAL NSH
Total/NA	Analysis	8015C		1			573473	02/04/19 23:50	S1S	TAL NSH
Total/NA	Prep	3050B			1.05 g	50.0 mL	257875	02/06/19 11:57	AML	TAL HOU
Total/NA	Analysis	6010B		1			257988	02/07/19 13:35	DCL	TAL HOU
Total/NA	Prep	7471A			0.63 g	50 mL	257447	01/31/19 08:46	SOT	TAL HOU
Total/NA	Analysis	7471A		1			257521	01/31/19 12:44	SOT	TAL HOU

Lab Chronicle

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179817-1

Client Sample ID: SJRP-MW18-19-20-01282019 — **Lab Sample ID: 600-179817-3**
Date Collected: 01/28/19 15:30 — **Matrix: Solid**
Date Received: 01/29/19 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			257378	01/30/19 10:51	DTN	TAL HOU

Client Sample ID: SJRP-MW18-19-20-01282019 — **Lab Sample ID: 600-179817-3**
Date Collected: 01/28/19 15:30 — **Matrix: Solid**
Date Received: 01/29/19 10:12 — **Percent Solids: 86.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.89 g	5 mL	257289	01/29/19 11:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	257223	01/29/19 14:27	WS1	TAL HOU
Total/NA	Prep	5030B			5.46 g	5.0 mL	573005	02/01/19 10:04	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	573402	02/04/19 21:50	S1S	TAL NSH
Total/NA	Prep	3550C			25.38 g	1 mL	573293	02/02/19 14:02	AMD	TAL NSH
Total/NA	Analysis	8015C		1			573473	02/05/19 00:08	S1S	TAL NSH
Total/NA	Prep	3050B			1.05 g	50.0 mL	257875	02/06/19 12:03	AML	TAL HOU
Total/NA	Analysis	6010B		1			257988	02/07/19 13:37	DCL	TAL HOU
Total/NA	Prep	7471A			0.61 g	50 mL	257447	01/31/19 08:46	SOT	TAL HOU
Total/NA	Analysis	7471A		1			257521	01/31/19 12:46	SOT	TAL HOU

Client Sample ID: SJRP-MW17-00-01-01282019 — **Lab Sample ID: 600-179817-4**
Date Collected: 01/28/19 14:25 — **Matrix: Solid**
Date Received: 01/29/19 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			257378	01/30/19 10:51	DTN	TAL HOU

Client Sample ID: SJRP-MW17-00-01-01282019 — **Lab Sample ID: 600-179817-4**
Date Collected: 01/28/19 14:25 — **Matrix: Solid**
Date Received: 01/29/19 10:12 — **Percent Solids: 86.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3.39 g	5 mL	257289	01/29/19 11:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	257223	01/29/19 14:51	WS1	TAL HOU
Total/NA	Prep	5030B			5.08 g	5.0 mL	573005	02/01/19 10:04	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	573402	02/04/19 22:58	S1S	TAL NSH
Total/NA	Prep	3550C			25.54 g	1 mL	573293	02/02/19 14:02	AMD	TAL NSH
Total/NA	Analysis	8015C		1			573473	02/05/19 00:26	S1S	TAL NSH
Total/NA	Prep	3050B			1.02 g	50.0 mL	257875	02/06/19 12:03	AML	TAL HOU
Total/NA	Analysis	6010B		1			257988	02/07/19 13:48	DCL	TAL HOU
Total/NA	Prep	7471A			0.64 g	50 mL	257447	01/31/19 08:46	SOT	TAL HOU
Total/NA	Analysis	7471A		1			257521	01/31/19 12:35	SOT	TAL HOU

Lab Chronicle

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179817-1

Client Sample ID: SJRP-MW22-00-01-01282019 — **Lab Sample ID: 600-179817-5**
Date Collected: 01/28/19 15:25 — **Matrix: Solid**
Date Received: 01/29/19 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			257378	01/30/19 10:51	DTN	TAL HOU

Client Sample ID: SJRP-MW22-00-01-01282019 — **Lab Sample ID: 600-179817-5**
Date Collected: 01/28/19 15:25 — **Matrix: Solid**
Date Received: 01/29/19 10:12 — **Percent Solids: 83.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.43 g	5 mL	257289	01/29/19 11:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	257223	01/29/19 16:03	WS1	TAL HOU
Total/NA	Prep	5030B			5.36 g	5.0 mL	573005	02/01/19 10:04	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	573402	02/04/19 22:24	S1S	TAL NSH
Total/NA	Prep	3550C			25.12 g	1 mL	573293	02/02/19 14:02	AMD	TAL NSH
Total/NA	Analysis	8015C		1			573473	02/05/19 01:21	S1S	TAL NSH
Total/NA	Prep	3050B			1.04 g	50.0 mL	257875	02/06/19 12:03	AML	TAL HOU
Total/NA	Analysis	6010B		1			257988	02/07/19 13:39	DCL	TAL HOU
Total/NA	Prep	3050B			1.04 g	50.0 mL	257875	02/06/19 12:03	AML	TAL HOU
Total/NA	Analysis	6010B		5			257988	02/07/19 15:09	DCL	TAL HOU
Total/NA	Prep	7471A			0.61 g	50 mL	257447	01/31/19 08:46	SOT	TAL HOU
Total/NA	Analysis	7471A		1			257521	01/31/19 12:48	SOT	TAL HOU

Client Sample ID: SJRP-TB01-01282019 — **Lab Sample ID: 600-179817-6**
Date Collected: 01/28/19 16:20 — **Matrix: Water**
Date Received: 01/29/19 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	257389	01/30/19 15:04	KLV	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-179817-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Laboratory: TestAmerica Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	18-061-0	08-04-19
Louisiana	NELAP	6	01967	06-30-19
Oklahoma	State Program	6	2018-052	08-31-19
Texas	NELAP	6	T104704223-18-23	10-31-19
USDA	Federal		P330-18-00130	04-30-21

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-19
Alaska (UST)	State Program	10	UST-087	06-30-19
Arizona	State Program	9	AZ0473	05-05-19
Arkansas DEQ	State Program	6	88-0737	04-25-19
California	State Program	9	2938	06-30-19 *
Connecticut	State Program	1	PH-0220	12-31-19
Florida	NELAP	4	E87358	06-30-19
Georgia	State Program	4	NA: NELAP & A2LA	12-31-19
Illinois	NELAP	5	200010	12-09-18 *
Iowa	State Program	7	131	04-01-20
Kansas	NELAP	7	E-10229	10-31-19
Kentucky (UST)	State Program	4	19	06-30-19
Kentucky (WW)	State Program	4	90038	12-31-19
Louisiana	NELAP	6	30613	06-30-19
Maine	State Program	1	TN00032	11-03-19
Maryland	State Program	3	316	03-31-19
Massachusetts	State Program	1	M-TN032	06-30-19
Minnesota	NELAP	5	047-999-345	12-31-19
Mississippi	State Program	4	N/A	06-30-19
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-19
New Hampshire	NELAP	1	2963	10-09-19
New Jersey	NELAP	2	TN965	06-30-19
New York	NELAP	2	11342	03-31-19
North Carolina (WW/SW)	State Program	4	387	12-31-19
North Dakota	State Program	8	R-146	06-30-19
Ohio VAP	State Program	5	CL0033	07-06-19
Oklahoma	State Program	6	9412	08-31-19
Oregon	NELAP	10	TN200001	04-26-19
Pennsylvania	NELAP	3	68-00585	07-31-19
Rhode Island	State Program	1	LAO00268	12-30-19
South Carolina	State Program	4	84009 (001)	02-28-19
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-19
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-19
Virginia	NELAP	3	460152	06-14-19
Washington	State Program	10	C789	07-19-19
West Virginia DEP	State Program	3	219	02-28-19
Wisconsin	State Program	5	998020430	08-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-179817-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Laboratory: TestAmerica Nashville (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wyoming (UST)	A2LA	8	453.07	12-31-19

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler:	Lab PM: McDaniel, Bethany	Carrier Tracking No(s):	COC No: 01
Client Contact: Aleeca Forsberg	Phone:	E-Mail: bethany.mcdaniel@testamericainc.com		Page: 1 of 1
Company: CH2M Hill, Inc.				Job #: 7455 1172 0751

Address: 3721 Rutledge Road NE Suite B-1	Due Date Requested:	
City: Albuquerque	TAT Requested (days): SEC ARF	
State, Zip: NM, 87109		
Phone: 505-855-5239	PO #: WD794541	
Email: Aleeca.Forsberg@CH2M.com	WO #: WD794541	
Project Name: Kinder Morgan San Juan River Plant RWIP	Project #: 60005961	
Site: San Juan River Gas Plant	ARF#: ERG ARF_CH2M_01-15-2019	

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260 - BTEX	8015 - GRO Range (C6-C10)	8015 - DRO/ORO Range	6010/7470 - NMWQCC Metals with Hg	TCLP VOA (TCL)/TCLP SVOA (TCL List)	TCLP RCRA 8 Metals w /Hg	Total VOA 8260	Total SVOA 8270	Flashpoint and pH	Moisture				Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
SJRP-MW18-00-01-01282019	01/28/19	1230	G	~~Water~~ S	N	N	X	X	X	X						X					
SJRP-MW18-10-11-01282019	01/28/19	1430	G	~~Water~~ S	N	N	X	X	X	X						X					
SJRP-MW18-19-20-01282019	01/28/19	1530	G	~~Water~~ S	N	N	X	X	X	X						X					
~~SJRP-MW18-29-30-01282019~~	~~01/28/19~~		G	~~Water~~ S																	-7
SJRP-MW17-00-01-01282019	1/29/19	1425	G	~~Water~~ S			Y	X	X	X	X					X					
SJRP-MW17-00-01-01282019-MS		1425	G	~~Water~~ S			Y	X	X	X	X					X					
SJRP-MW17-00-01-01282019-MSD		1425	G	~~Water~~ S			Y	X	X	X	X					X					
SJRP-MW22-00-01-01282019		1525	G	~~Water~~ S			N	X	X	X	X					X					
SJRP-TB01-01282019	1/28/19	1620	G	~~Water~~ S			X														
			G	~~Water~~ S																	
			G	~~Water~~ S																	

600-179817 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Mont

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by:	1/28/19 1630	Jacobs		1-29-19 1012	TA Houston
Relinquished by:			Received by:		
Relinquished by:			Received by:		

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Receipt Checklist

Loc: 600
179817

Date/Time Received: '19 JAN 29 10:12

JOB NUMBER: _ ___ CLIENT: CH2M Hill

UNPACKED BY: T. L. CARRIER/DRIVER: FedEx

Custody Seal Present: ☑ YES ☐ NO Number of Coolers Received: _____

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Them CF	Corrected Temp (°C)
BW	Y / N	Y / N	0.0	0710	+0.1	0.1
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N	T. L. 1-29-19			
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☑ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☑ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☐ YES ☐ NO

pH paper Lot #_____

VOA headspace acceptable (5-6mm): ☒ YES ☐ NO ☐ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X	

COMMENTS:

T. L. 1-29-19

HS-SA-WI-013 Rev. 3; 07/01/2014



600-179817 Wayt

FedEx
TRK# 0221 7455 1172 8751

TUE – 29 JAN 10:30A
PRIORITY OVERNIGHT

XH LKSA

77040
TX–US IAH



TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

600-179817 Chain of Custody

Cooler Received/Opened On 1/30/2019 @ 0920

Time Samples Removed From Cooler 13:30 Time Samples Placed In Storage 13:42 (2 Hour Window)

1. Tracking # 9380 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 17610176 pH Strip Lot _____ Chlorine Strip Lot _____

2. Temperature of rep. sample or temp blank when opened: 2.6 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 (Front) 1 (Back)

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) 2.2

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

● ⬅ Larger than this.

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) 2.2

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) 2.2

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) 2.2

I certify that I attached a label with the unique LIMS number to each container (intial) 2.2

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 8/23/17

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

600-179817

TestAmerica — LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: McDaniel, Bethany A	No: 37396.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: bethany.mcdaniel@testamericainc.com	State of Origin: New Mexico
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):	Page: Page 1 of 1
Address: 2960 Foster Creighton Drive,	Due Date Requested: 2/8/2019		Job #: 600-179817-1
City: Nashville	TAT Requested (days):		
State, Zip: TN, 37204			
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:		
Email:	WO #:		
Project Name: San Juan Kinder Morgan Bloomfield, NM	Project #: 60005961		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO/3550C DRO/ORO	8015C_GRO/5030B_H Standard GRO Range (C6-C10)	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
SJRP-MW18-00-01-01282019 (600-179817-1)	1/28/19	12:30 Central		Solid			X	X	2	
SJRP-MW18-10-11-01282019 (600-179817-2)	1/28/19	14:30 Central		Solid			X	X	2	
SJRP-MW18-19-20-01282019 (600-179817-3)	1/28/19	15:30 Central		Solid			X	X	2	
SJRP-MW17-00-01-01282019 (600-179817-4)	1/28/19	14:25 Central		Solid			X	X	2	
SJRP-MW17-00-01-01282019 (600-179817-4MS)	1/28/19	14:25 Central	MS	Solid			X	X	2	
SJRP-MW17-00-01-01282019 (600-179817-4MSD)	1/28/19	14:25 Central	MSD	Solid			X	X	2	
SJRP-MW22-00-01-01282019 (600-179817-5)	1/28/19	15:25 Central		Solid			X	X	2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: [signature]	Date/Time: 1/29/19 1500	Company TA	Received by: [signature]	Date/Time: 01/30/19 0820	Company TA-NAS
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.6

Ver: 09/20/2016

Login Sample Receipt Checklist

Client: CH2M Hill, Inc.

Job Number: 600-179817-1

Login Number: 179817

List Source: TestAmerica Houston

List Number: 1

Creator: Snow, Tiffany B

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Refer to Job Narrative for details.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

eurofins | Environment Testing America



ANALYTICAL REPORT

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-179897-1
Client Project/Site: San Juan Kinder Morgan Bloomfield, NM
Revision: 1

For:
CH2M Hill, Inc.
3721 Rutledge Rd. NE
Suite B-1
Albuquerque, New Mexico 87109

Attn: Aleeca Forsberg

Steve A Stepanski

Authorized for release by:
12/7/2020 4:55:48 PM
Steve Stepanski, Project Mgmt. Assistant
(713)690-4444
steve.stepanski@Eurofinset.com

Designee for

Bethany McDaniel, Senior Project Manager
(713)358-2005
bethany.mcdaniel@testamericainc.com

LINKS

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Have a Question? Ask The Expert

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Laboratory Job ID: 600-179897-1

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Case Narrative

Client: CH2M Hill, Inc. Job ID: 600-179897-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Job ID: 600-179897-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-179897-1

Comments
This report was revised to a Level 2 deliverable per client's request.

Receipt
The samples were received on 1/30/2019 11:02 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.7º C.

Receipt Exceptions
Sample TB02 (Trip Blank) requested for multiple analyses on the chain of custody, however analyzed for Volatile Organics only.

Sample EB01 requested for moisture on the chain of custody, however not analyzed.

GC/MS VOA
No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA
Method(s) 8015C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with analytical batch 490-573790.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8015C, 8015D: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 490-573322 and analytical batch 490-573663.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 6010B: The continuing calibration verification (CCV) associated with batch 257874 recovered above the upper control limit for Boron and Iron. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 6010B: The method blank for Prep Batch 257994 contained Barium and Lead above the method detection limit. These target analyte concentrations were less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 6010B: The serial dilution performed for the following sample associated with batch 258058 was outside control limits for Chromium at 15% recovery and Manganese at 12% recovery: (600-179897-A-1-D SD ^5)

Method(s) 6010B: The following sample was diluted to bring the concentration of target analytes within the calibration range: SJRP-MW23-00-01-01292019 (600-179897-7). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Method Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL NSH
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL NSH
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU
3010A	Acid Digestion of Aqueous Samples and Extracts for Total Metals	SW846	TAL HOU
3050B	Acid Digestion of Sediments, Sludges, and Soils	SW846	TAL HOU
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL NSH
3550C	Ultrasonic Extraction	SW846	TAL NSH
5030B	Purge and Trap	SW846	TAL HOU
5030B	Purge and Trap	SW846	TAL NSH
5035	Closed System Purge & Trap/Laboratory Preservation	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)/Preparation	SW846	TAL HOU
7471A	Mercury in Solid or Semi-Solid Waste (Manual Cold Vapor Technique)/Preparation	SW846	TAL HOU

Protocol References:

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-179897-1	SJRP-MW19-00-01-01292019	Solid	01/29/19 11:40	01/30/19 11:02
600-179897-2	SJRP-MW19-00-01-01292019-2	Solid	01/29/19 11:40	01/30/19 11:02
600-179897-3	SJRP-EB01-01292019	Water	01/29/19 13:50	01/30/19 11:02
600-179897-4	SJRP-MW20-00-01-01292019	Solid	01/29/19 14:30	01/30/19 11:02
600-179897-5	SJRP-MW21-00-01-01292019	Solid	01/29/19 14:05	01/30/19 11:02
600-179897-6	SJRP-MW22-00-01-01292019	Solid	01/29/19 14:12	01/30/19 11:02
600-179897-7	SJRP-MW23-00-01-01292019	Solid	01/29/19 14:20	01/30/19 11:02
600-179897-8	SJRP-TB02-01292019	Water	01/29/19 15:00	01/30/19 11:02

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

Client Sample ID: SJRP-MW19-00-01-01292019 — **Lab Sample ID: 600-179897-1**
Date Collected: 01/29/19 11:40 — **Matrix: Solid**
Date Received: 01/30/19 11:02 — **Percent Solids: 79.5**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000705	U	0.00559	0.000705	mg/Kg	☼	01/30/19 12:30	01/30/19 13:06	1
Ethylbenzene	0.00114	U	0.00559	0.00114	mg/Kg	☼	01/30/19 12:30	01/30/19 13:06	1
Toluene	0.00154	U	0.00559	0.00154	mg/Kg	☼	01/30/19 12:30	01/30/19 13:06	1
Xylenes, Total	0.00126	U	0.00559	0.00126	mg/Kg	☼	01/30/19 12:30	01/30/19 13:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*61 - 130*	*01/30/19 12:30*	*01/30/19 13:06*	*1*
Dibromofluoromethane	*100*		*68 - 140*	*01/30/19 12:30*	*01/30/19 13:06*	*1*
Toluene-d8 (Surr)	*77*		*50 - 130*	*01/30/19 12:30*	*01/30/19 13:06*	*1*
4-Bromofluorobenzene	*89*		*57 - 140*	*01/30/19 12:30*	*01/30/19 13:06*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.43	U	6.85	3.43	mg/Kg	☼	02/04/19 11:08	02/05/19 15:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*88*		*50 - 150*	*02/04/19 11:08*	*02/05/19 15:02*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**11.8**		6.24	3.12	mg/Kg	☼	02/04/19 12:08	02/05/19 16:19	1
ORO C24-C40	**7.14**		6.24	3.12	mg/Kg	☼	02/04/19 12:08	02/05/19 16:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*107*		*50 - 150*	*02/04/19 12:08*	*02/05/19 16:19*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**9740**		30.5	0.366	mg/Kg	☼	02/07/19 12:43	02/08/19 14:11	1
Arsenic	**2.48**		1.22	0.266	mg/Kg	☼	02/07/19 12:43	02/08/19 14:11	1
Barium	**44.8**	**B**	1.22	0.0366	mg/Kg	☼	02/07/19 12:43	02/08/19 14:11	1
Boron	**3.27**	**J F1**	24.4	0.471	mg/Kg	☼	02/07/19 12:43	02/08/19 14:11	1
Cadmium	**0.226**	**J**	0.305	0.0313	mg/Kg	☼	02/07/19 12:43	02/08/19 14:11	1
Chromium	**5.86**		0.610	0.0618	mg/Kg	☼	02/07/19 12:43	02/08/19 14:11	1
Cobalt	**5.27**		0.610	0.0825	mg/Kg	☼	02/07/19 12:43	02/08/19 14:11	1
Iron	**13300**		24.4	3.09	mg/Kg	☼	02/07/19 12:43	02/08/19 14:11	1
Lead	**9.16**	**B**	0.610	0.128	mg/Kg	☼	02/07/19 12:43	02/08/19 14:11	1
Manganese	**235**	**F1**	1.83	0.0465	mg/Kg	☼	02/07/19 12:43	02/08/19 14:11	1
Molybdenum	**2.54**		0.610	0.166	mg/Kg	☼	02/07/19 12:43	02/08/19 14:11	1
Nickel	**5.59**		1.22	0.143	mg/Kg	☼	02/07/19 12:43	02/08/19 14:11	1
Selenium	0.316	U	2.44	0.316	mg/Kg	☼	02/07/19 12:43	02/08/19 14:11	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00611**	**J**	0.0194	0.00409	mg/Kg	☼	01/31/19 08:46	01/31/19 13:00	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**20.5**		1.0	1.0	%			01/31/19 10:05	1
Percent Solids	**79.5**		1.0	1.0	%			01/31/19 10:05	1

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

Client Sample ID: SJRP-MW19-00-01-01292019-2
Date Collected: 01/29/19 11:40
Date Received: 01/30/19 11:02

Lab Sample ID: 600-179897-2
Matrix: Solid
Percent Solids: 77.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000664	U	0.00527	0.000664	mg/Kg	☼	01/30/19 12:30	01/30/19 13:30	1
Ethylbenzene	0.00107	U	0.00527	0.00107	mg/Kg	☼	01/30/19 12:30	01/30/19 13:30	1
Toluene	0.00145	U	0.00527	0.00145	mg/Kg	☼	01/30/19 12:30	01/30/19 13:30	1
Xylenes, Total	0.00119	U	0.00527	0.00119	mg/Kg	☼	01/30/19 12:30	01/30/19 13:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*61 - 130*	*01/30/19 12:30*	*01/30/19 13:30*	*1*
Dibromofluoromethane	*104*		*68 - 140*	*01/30/19 12:30*	*01/30/19 13:30*	*1*
Toluene-d8 (Surr)	*78*		*50 - 130*	*01/30/19 12:30*	*01/30/19 13:30*	*1*
4-Bromofluorobenzene	*90*		*57 - 140*	*01/30/19 12:30*	*01/30/19 13:30*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.55	U	7.10	3.55	mg/Kg	☼	02/04/19 11:08	02/05/19 15:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*88*		*50 - 150*	*02/04/19 11:08*	*02/05/19 15:36*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**4.23**	**J**	6.44	3.22	mg/Kg	☼	02/04/19 12:08	02/05/19 17:15	1
ORO C24-C40	**5.79**	**J**	6.44	3.22	mg/Kg	☼	02/04/19 12:08	02/05/19 17:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*102*		*50 - 150*	*02/04/19 12:08*	*02/05/19 17:15*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8660**		31.0	0.372	mg/Kg	☼	02/07/19 12:43	02/08/19 14:17	1
Arsenic	**2.30**		1.24	0.270	mg/Kg	☼	02/07/19 12:43	02/08/19 14:17	1
Barium	**55.5**	**B**	1.24	0.0372	mg/Kg	☼	02/07/19 12:43	02/08/19 14:17	1
Boron	**2.80**	**J**	24.8	0.479	mg/Kg	☼	02/07/19 12:43	02/08/19 14:17	1
Cadmium	**0.205**	**J**	0.310	0.0317	mg/Kg	☼	02/07/19 12:43	02/08/19 14:17	1
Chromium	**5.01**		0.620	0.0627	mg/Kg	☼	02/07/19 12:43	02/08/19 14:17	1
Cobalt	**5.04**		0.620	0.0838	mg/Kg	☼	02/07/19 12:43	02/08/19 14:17	1
Iron	**12100**		24.8	3.14	mg/Kg	☼	02/07/19 12:43	02/08/19 14:17	1
Lead	**7.80**	**B**	0.620	0.130	mg/Kg	☼	02/07/19 12:43	02/08/19 14:17	1
Manganese	**170**		1.86	0.0472	mg/Kg	☼	02/07/19 12:43	02/08/19 14:17	1
Molybdenum	**2.37**		0.620	0.169	mg/Kg	☼	02/07/19 12:43	02/08/19 14:17	1
Nickel	**5.51**		1.24	0.145	mg/Kg	☼	02/07/19 12:43	02/08/19 14:17	1
Selenium	0.321	U	2.48	0.321	mg/Kg	☼	02/07/19 12:43	02/08/19 14:17	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00462	U	0.0219	0.00462	mg/Kg	☼	01/31/19 08:46	01/31/19 13:06	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**22.5**		1.0	1.0	%			01/31/19 10:05	1
Percent Solids	**77.5**		1.0	1.0	%			01/31/19 10:05	1

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

Client Sample ID: SJRP-EB01-01292019
Date Collected: 01/29/19 13:50
Date Received: 01/30/19 11:02

Lab Sample ID: 600-179897-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			01/31/19 19:36	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			01/31/19 19:36	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			01/31/19 19:36	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			01/31/19 19:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*50 - 134*		*01/31/19 19:36*	*1*
Dibromofluoromethane	*86*		*62 - 130*		*01/31/19 19:36*	*1*
Toluene-d8 (Surr)	*90*		*70 - 130*		*01/31/19 19:36*	*1*
4-Bromofluorobenzene	*88*		*67 - 139*		*01/31/19 19:36*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			02/06/19 14:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*103*		*50 - 150*		*02/06/19 14:36*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0910	U	0.100	0.0910	mg/L		02/02/19 17:10	02/05/19 14:49	1
ORO C24-C40	0.0910	U	0.100	0.0910	mg/L		02/02/19 17:10	02/05/19 14:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*88*		*50 - 150*	*02/02/19 17:10*	*02/05/19 14:49*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		02/05/19 12:53	02/06/19 15:12	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		02/05/19 12:53	02/06/19 15:12	1
Barium	**0.000800**	**J**	0.0200	0.000530	mg/L		02/05/19 12:53	02/06/19 15:12	1
Boron	0.0116	U ^	0.200	0.0116	mg/L		02/05/19 12:53	02/06/19 15:12	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		02/05/19 12:53	02/06/19 15:12	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		02/05/19 12:53	02/06/19 15:12	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		02/05/19 12:53	02/06/19 15:12	1
Iron	0.0270	U ^	0.400	0.0270	mg/L		02/05/19 12:53	02/06/19 15:12	1
Lead	0.00219	U	0.0100	0.00219	mg/L		02/05/19 12:53	02/06/19 15:12	1
Manganese	0.000360	U	0.0100	0.000360	mg/L		02/05/19 12:53	02/06/19 15:12	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		02/05/19 12:53	02/06/19 15:12	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		02/05/19 12:53	02/06/19 15:12	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		02/05/19 12:53	02/06/19 15:12	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		01/31/19 11:58	02/01/19 16:31	1

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

Client Sample ID: SJRP-MW20-00-01-01292019 — **Lab Sample ID: 600-179897-4**
Date Collected: 01/29/19 14:30 — **Matrix: Solid**
Date Received: 01/30/19 11:02 — **Percent Solids: 85.1**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000808	U	0.00641	0.000808	mg/Kg	☼	01/30/19 12:30	01/30/19 13:54	1
Ethylbenzene	0.00131	U	0.00641	0.00131	mg/Kg	☼	01/30/19 12:30	01/30/19 13:54	1
Toluene	0.00177	U	0.00641	0.00177	mg/Kg	☼	01/30/19 12:30	01/30/19 13:54	1
Xylenes, Total	0.00145	U	0.00641	0.00145	mg/Kg	☼	01/30/19 12:30	01/30/19 13:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*61 - 130*	*01/30/19 12:30*	*01/30/19 13:54*	*1*
Dibromofluoromethane	*97*		*68 - 140*	*01/30/19 12:30*	*01/30/19 13:54*	*1*
Toluene-d8 (Surr)	*78*		*50 - 130*	*01/30/19 12:30*	*01/30/19 13:54*	*1*
4-Bromofluorobenzene	*89*		*57 - 140*	*01/30/19 12:30*	*01/30/19 13:54*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.13	U	6.26	3.13	mg/Kg	☼	02/04/19 11:08	02/05/19 16:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*89*		*50 - 150*	*02/04/19 11:08*	*02/05/19 16:10*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**2.98**	**J**	5.78	2.89	mg/Kg	☼	02/04/19 12:08	02/05/19 17:33	1
ORO C24-C40	**5.12**	**J**	5.78	2.89	mg/Kg	☼	02/04/19 12:08	02/05/19 17:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*99*		*50 - 150*	*02/04/19 12:08*	*02/05/19 17:33*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**9620**		27.4	0.329	mg/Kg	☼	02/07/19 12:43	02/08/19 14:19	1
Arsenic	**3.02**		1.10	0.239	mg/Kg	☼	02/07/19 12:43	02/08/19 14:19	1
Barium	**277**	**B**	1.10	0.0329	mg/Kg	☼	02/07/19 12:43	02/08/19 14:19	1
Boron	**3.85**	**J**	22.0	0.424	mg/Kg	☼	02/07/19 12:43	02/08/19 14:19	1
Cadmium	**0.198**	**J**	0.274	0.0281	mg/Kg	☼	02/07/19 12:43	02/08/19 14:19	1
Chromium	**6.15**		0.549	0.0555	mg/Kg	☼	02/07/19 12:43	02/08/19 14:19	1
Cobalt	**14.3**		0.549	0.0742	mg/Kg	☼	02/07/19 12:43	02/08/19 14:19	1
Iron	**14100**		22.0	2.78	mg/Kg	☼	02/07/19 12:43	02/08/19 14:19	1
Lead	**9.85**	**B**	0.549	0.115	mg/Kg	☼	02/07/19 12:43	02/08/19 14:19	1
Manganese	**232**		1.65	0.0418	mg/Kg	☼	02/07/19 12:43	02/08/19 14:19	1
Molybdenum	**0.873**		0.549	0.149	mg/Kg	☼	02/07/19 12:43	02/08/19 14:19	1
Nickel	**7.74**		1.10	0.128	mg/Kg	☼	02/07/19 12:43	02/08/19 14:19	1
Selenium	0.284	U	2.20	0.284	mg/Kg	☼	02/07/19 12:43	02/08/19 14:19	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00414	U	0.0196	0.00414	mg/Kg	☼	01/31/19 08:46	01/31/19 13:08	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**14.9**		1.0	1.0	%			01/31/19 10:05	1
Percent Solids	**85.1**		1.0	1.0	%			01/31/19 10:05	1

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

Client Sample ID: SJRP-MW21-00-01-01292019 — **Lab Sample ID: 600-179897-5**
Date Collected: 01/29/19 14:05 — **Matrix: Solid**
Date Received: 01/30/19 11:02 — **Percent Solids: 80.9**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000704	U	0.00559	0.000704	mg/Kg	☼	01/30/19 12:30	01/30/19 14:18	1
Ethylbenzene	0.00114	U	0.00559	0.00114	mg/Kg	☼	01/30/19 12:30	01/30/19 14:18	1
Toluene	0.00154	U	0.00559	0.00154	mg/Kg	☼	01/30/19 12:30	01/30/19 14:18	1
Xylenes, Total	0.00126	U	0.00559	0.00126	mg/Kg	☼	01/30/19 12:30	01/30/19 14:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*61 - 130*	*01/30/19 12:30*	*01/30/19 14:18*	*1*
Dibromofluoromethane	*102*		*68 - 140*	*01/30/19 12:30*	*01/30/19 14:18*	*1*
Toluene-d8 (Surr)	*78*		*50 - 130*	*01/30/19 12:30*	*01/30/19 14:18*	*1*
4-Bromofluorobenzene	*88*		*57 - 140*	*01/30/19 12:30*	*01/30/19 14:18*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.49	U	6.99	3.49	mg/Kg	☼	02/04/19 11:08	02/05/19 16:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*90*		*50 - 150*	*02/04/19 11:08*	*02/05/19 16:44*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**3.68**	**J**	6.16	3.08	mg/Kg	☼	02/04/19 12:08	02/05/19 17:52	1
ORO C24-C40	**7.05**		6.16	3.08	mg/Kg	☼	02/04/19 12:08	02/05/19 17:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*101*		*50 - 150*	*02/04/19 12:08*	*02/05/19 17:52*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**11700**		30.0	0.360	mg/Kg	☼	02/07/19 12:43	02/08/19 14:21	1
Arsenic	**4.39**		1.20	0.262	mg/Kg	☼	02/07/19 12:43	02/08/19 14:21	1
Barium	**70.6**	**B**	1.20	0.0360	mg/Kg	☼	02/07/19 12:43	02/08/19 14:21	1
Boron	**2.69**	**J**	24.0	0.463	mg/Kg	☼	02/07/19 12:43	02/08/19 14:21	1
Cadmium	**0.360**		0.300	0.0307	mg/Kg	☼	02/07/19 12:43	02/08/19 14:21	1
Chromium	**6.87**		0.600	0.0607	mg/Kg	☼	02/07/19 12:43	02/08/19 14:21	1
Cobalt	**8.45**		0.600	0.0811	mg/Kg	☼	02/07/19 12:43	02/08/19 14:21	1
Iron	**19200**		24.0	3.04	mg/Kg	☼	02/07/19 12:43	02/08/19 14:21	1
Lead	**14.6**	**B**	0.600	0.126	mg/Kg	☼	02/07/19 12:43	02/08/19 14:21	1
Manganese	**249**		1.80	0.0457	mg/Kg	☼	02/07/19 12:43	02/08/19 14:21	1
Molybdenum	**1.91**		0.600	0.163	mg/Kg	☼	02/07/19 12:43	02/08/19 14:21	1
Nickel	**9.37**		1.20	0.140	mg/Kg	☼	02/07/19 12:43	02/08/19 14:21	1
Selenium	0.311	U	2.40	0.311	mg/Kg	☼	02/07/19 12:43	02/08/19 14:21	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0361**		0.0207	0.00435	mg/Kg	☼	01/31/19 08:46	01/31/19 13:10	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**19.1**		1.0	1.0	%			01/31/19 10:05	1
Percent Solids	**80.9**		1.0	1.0	%			01/31/19 10:05	1

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

Client Sample ID: SJRP-MW22-00-01-01292019 — **Lab Sample ID: 600-179897-6**
Date Collected: 01/29/19 14:12 — **Matrix: Solid**
Date Received: 01/30/19 11:02 — **Percent Solids: 87.5**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000866	U	0.00687	0.000866	mg/Kg	☼	01/30/19 12:30	01/30/19 15:54	1
Ethylbenzene	0.00140	U	0.00687	0.00140	mg/Kg	☼	01/30/19 12:30	01/30/19 15:54	1
Toluene	0.00190	U	0.00687	0.00190	mg/Kg	☼	01/30/19 12:30	01/30/19 15:54	1
Xylenes, Total	0.00155	U	0.00687	0.00155	mg/Kg	☼	01/30/19 12:30	01/30/19 15:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*61 - 130*	*01/30/19 12:30*	*01/30/19 15:54*	*1*
Dibromofluoromethane	*96*		*68 - 140*	*01/30/19 12:30*	*01/30/19 15:54*	*1*
Toluene-d8 (Surr)	*77*		*50 - 130*	*01/30/19 12:30*	*01/30/19 15:54*	*1*
4-Bromofluorobenzene	*90*		*57 - 140*	*01/30/19 12:30*	*01/30/19 15:54*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.18	U	6.35	3.18	mg/Kg	☼	02/04/19 11:08	02/05/19 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*88*		*50 - 150*	*02/04/19 11:08*	*02/05/19 17:18*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**3.11**	**J**	5.67	2.84	mg/Kg	☼	02/04/19 12:08	02/05/19 18:10	1
ORO C24-C40	**5.53**	**J**	5.67	2.84	mg/Kg	☼	02/04/19 12:08	02/05/19 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*107*		*50 - 150*	*02/04/19 12:08*	*02/05/19 18:10*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**11500**		27.0	0.324	mg/Kg	☼	02/07/19 12:43	02/08/19 14:23	1
Arsenic	**4.52**		1.08	0.235	mg/Kg	☼	02/07/19 12:43	02/08/19 14:23	1
Barium	**60.4**	**B**	1.08	0.0324	mg/Kg	☼	02/07/19 12:43	02/08/19 14:23	1
Boron	**1.96**	**J**	21.6	0.416	mg/Kg	☼	02/07/19 12:43	02/08/19 14:23	1
Cadmium	**0.297**		0.270	0.0276	mg/Kg	☼	02/07/19 12:43	02/08/19 14:23	1
Chromium	**5.90**		0.539	0.0546	mg/Kg	☼	02/07/19 12:43	02/08/19 14:23	1
Cobalt	**20.0**		0.539	0.0729	mg/Kg	☼	02/07/19 12:43	02/08/19 14:23	1
Iron	**15600**		21.6	2.73	mg/Kg	☼	02/07/19 12:43	02/08/19 14:23	1
Lead	**24.8**	**B**	0.539	0.113	mg/Kg	☼	02/07/19 12:43	02/08/19 14:23	1
Manganese	**410**		1.62	0.0411	mg/Kg	☼	02/07/19 12:43	02/08/19 14:23	1
Molybdenum	**1.37**		0.539	0.147	mg/Kg	☼	02/07/19 12:43	02/08/19 14:23	1
Nickel	**13.2**		1.08	0.126	mg/Kg	☼	02/07/19 12:43	02/08/19 14:23	1
Selenium	0.279	U	2.16	0.279	mg/Kg	☼	02/07/19 12:43	02/08/19 14:23	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0288**		0.0188	0.00396	mg/Kg	☼	01/31/19 08:46	01/31/19 13:12	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**12.5**		1.0	1.0	%			01/31/19 10:05	1
Percent Solids	**87.5**		1.0	1.0	%			01/31/19 10:05	1

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

Client Sample ID: SJRP-MW23-00-01-01292019 — **Lab Sample ID: 600-179897-7**
Date Collected: 01/29/19 14:20 — **Matrix: Solid**
Date Received: 01/30/19 11:02 — **Percent Solids: 88.9**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000706	U	0.00560	0.000706	mg/Kg	☼	01/30/19 12:30	01/30/19 16:18	1
Ethylbenzene	0.00114	U	0.00560	0.00114	mg/Kg	☼	01/30/19 12:30	01/30/19 16:18	1
Toluene	0.00155	U	0.00560	0.00155	mg/Kg	☼	01/30/19 12:30	01/30/19 16:18	1
Xylenes, Total	0.00127	U	0.00560	0.00127	mg/Kg	☼	01/30/19 12:30	01/30/19 16:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*61 - 130*	*01/30/19 12:30*	*01/30/19 16:18*	*1*
Dibromofluoromethane	*98*		*68 - 140*	*01/30/19 12:30*	*01/30/19 16:18*	*1*
Toluene-d8 (Surr)	*76*		*50 - 130*	*01/30/19 12:30*	*01/30/19 16:18*	*1*
4-Bromofluorobenzene	*88*		*57 - 140*	*01/30/19 12:30*	*01/30/19 16:18*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.93	U	5.85	2.93	mg/Kg	☼	02/04/19 11:08	02/05/19 17:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*89*		*50 - 150*	*02/04/19 11:08*	*02/05/19 17:53*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.81	U	5.62	2.81	mg/Kg	☼	02/04/19 12:08	02/05/19 18:29	1
ORO C24-C40	**5.19**	**J**	5.62	2.81	mg/Kg	☼	02/04/19 12:08	02/05/19 18:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*96*		*50 - 150*	*02/04/19 12:08*	*02/05/19 18:29*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**10600**		27.6	0.331	mg/Kg	☼	02/07/19 12:43	02/08/19 14:25	1
Arsenic	**3.63**		1.10	0.240	mg/Kg	☼	02/07/19 12:43	02/08/19 14:25	1
Barium	**188**	**B**	1.10	0.0331	mg/Kg	☼	02/07/19 12:43	02/08/19 14:25	1
Boron	**2.16**	**J**	22.1	0.426	mg/Kg	☼	02/07/19 12:43	02/08/19 14:25	1
Cadmium	**0.287**		0.276	0.0282	mg/Kg	☼	02/07/19 12:43	02/08/19 14:25	1
Chromium	**5.50**		0.551	0.0558	mg/Kg	☼	02/07/19 12:43	02/08/19 14:25	1
Cobalt	**12.1**		0.551	0.0745	mg/Kg	☼	02/07/19 12:43	02/08/19 14:25	1
Iron	**17200**		22.1	2.79	mg/Kg	☼	02/07/19 12:43	02/08/19 14:25	1
Lead	**12.1**	**B**	0.551	0.116	mg/Kg	☼	02/07/19 12:43	02/08/19 14:25	1
Manganese	**908**		8.27	0.210	mg/Kg	☼	02/07/19 12:43	02/08/19 16:06	5
Molybdenum	**0.915**		0.551	0.150	mg/Kg	☼	02/07/19 12:43	02/08/19 14:25	1
Nickel	**10.4**		1.10	0.129	mg/Kg	☼	02/07/19 12:43	02/08/19 14:25	1
Selenium	0.286	U	2.21	0.286	mg/Kg	☼	02/07/19 12:43	02/08/19 14:25	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00383	U	0.0182	0.00383	mg/Kg	☼	01/31/19 08:46	01/31/19 13:14	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**11.1**		1.0	1.0	%			01/31/19 10:05	1
Percent Solids	**88.9**		1.0	1.0	%			01/31/19 10:05	1

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

Client Sample ID: SJRP-TB02-01292019
Date Collected: 01/29/19 15:00
Date Received: 01/30/19 11:02

Lab Sample ID: 600-179897-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			01/31/19 12:52	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			01/31/19 12:52	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			01/31/19 12:52	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			01/31/19 12:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*50 - 134*		*01/31/19 12:52*	*1*
Dibromofluoromethane	*87*		*62 - 130*		*01/31/19 12:52*	*1*
Toluene-d8 (Surr)	*89*		*70 - 130*		*01/31/19 12:52*	*1*
4-Bromofluorobenzene	*83*		*67 - 139*		*01/31/19 12:52*	*1*

Definitions/Glossary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
F3	Duplicate RPD exceeds the control limit
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Surrogate Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(61-130)	(68-140)	(50-130)	(57-140)
600-179897-1	SJRP-MW19-00-01-01292019	100	100	77	89
600-179897-2	SJRP-MW19-00-01-01292019-2	109	104	78	90
600-179897-4	SJRP-MW20-00-01-01292019	99	97	78	89
600-179897-5	SJRP-MW21-00-01-01292019	103	102	78	88
600-179897-6	SJRP-MW22-00-01-01292019	97	96	77	90
600-179897-7	SJRP-MW23-00-01-01292019	98	98	76	88
LCS 600-257347/3	Lab Control Sample	94	99	79	66
LCSD 600-257347/4	Lab Control Sample Dup	90	96	78	89
MB 600-257347/6	Method Blank	111	101	76	88

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(50-134)	(62-130)	(70-130)	(67-139)
600-179897-3	SJRP-EB01-01292019	82	86	90	88
600-179897-8	SJRP-TB02-01292019	81	87	89	83
LCS 600-257442/3	Lab Control Sample	83	97	97	83
LCSD 600-257442/4	Lab Control Sample Dup	83	99	98	85
MB 600-257442/6	Method Blank	83	89	88	82

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(50-150)
600-179897-1	SJRP-MW19-00-01-01292019	88
600-179897-2	SJRP-MW19-00-01-01292019-2	88
600-179897-4	SJRP-MW20-00-01-01292019	89
600-179897-5	SJRP-MW21-00-01-01292019	90
600-179897-6	SJRP-MW22-00-01-01292019	88
600-179897-7	SJRP-MW23-00-01-01292019	89
LCS 490-573386/2-A	Lab Control Sample	103
LCSD 490-573386/3-A	Lab Control Sample Dup	105

Surrogate Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(50-150)
MB 490-573386/1-A	Method Blank	90

Surrogate Legend
TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(50-150)
600-179897-3	SJRP-EB01-01292019	103
LCS 490-573790/5	Lab Control Sample	104
LCSD 490-573790/6	Lab Control Sample Dup	88
MB 490-573790/8	Method Blank	103

Surrogate Legend
TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		OTPH1
Lab Sample ID	Client Sample ID	(50-150)
600-179897-1	SJRP-MW19-00-01-01292019	107
600-179897-1 MS	SJRP-MW19-00-01-01292019	97
600-179897-1 MSD	SJRP-MW19-00-01-01292019	95
600-179897-2	SJRP-MW19-00-01-01292019-2	102
600-179897-4	SJRP-MW20-00-01-01292019	99
600-179897-5	SJRP-MW21-00-01-01292019	101
600-179897-6	SJRP-MW22-00-01-01292019	107
600-179897-7	SJRP-MW23-00-01-01292019	96
LCS 490-573463/2-A	Lab Control Sample	106
MB 490-573463/1-A	Method Blank	105

Surrogate Legend
OTPH = o-Terphenyl (Surr)

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		OTPH1
Lab Sample ID	Client Sample ID	(50-150)
600-179897-3	SJRP-EB01-01292019	88
LCS 490-573322/2-A	Lab Control Sample	91
MB 490-573322/1-A	Method Blank	95

Surrogate Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

Surrogate Legend

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-257347/6
Matrix: Solid
Analysis Batch: 257347

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			01/30/19 11:13	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			01/30/19 11:13	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			01/30/19 11:13	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			01/30/19 11:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*61 - 130*		*01/30/19 11:13*	*1*
Dibromofluoromethane	*101*		*68 - 140*		*01/30/19 11:13*	*1*
Toluene-d8 (Surr)	*76*		*50 - 130*		*01/30/19 11:13*	*1*
4-Bromofluorobenzene	*88*		*57 - 140*		*01/30/19 11:13*	*1*

Lab Sample ID: LCS 600-257347/3
Matrix: Solid
Analysis Batch: 257347

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.04732		mg/Kg		95	70 - 131		
Ethylbenzene			0.0500	0.04644		mg/Kg		93	66 - 130		
Toluene			0.0500	0.04470		mg/Kg		89	67 - 130		
Xylenes, Total			0.100	0.07885		mg/Kg		79	63 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*61 - 130*
Dibromofluoromethane	*99*		*68 - 140*
Toluene-d8 (Surr)	*79*		*50 - 130*
4-Bromofluorobenzene	*66*		*57 - 140*

Lab Sample ID: LCSD 600-257347/4
Matrix: Solid
Analysis Batch: 257347

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.04651		mg/Kg		93	70 - 131	2	30
Ethylbenzene			0.0500	0.04501		mg/Kg		90	66 - 130	3	30
Toluene			0.0500	0.04394		mg/Kg		88	67 - 130	2	30
Xylenes, Total			0.100	0.08998		mg/Kg		90	63 - 130	13	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*61 - 130*
Dibromofluoromethane	*96*		*68 - 140*
Toluene-d8 (Surr)	*78*		*50 - 130*
4-Bromofluorobenzene	*89*		*57 - 140*

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-257442/6
Matrix: Water
Analysis Batch: 257442

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			01/31/19 12:05	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			01/31/19 12:05	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			01/31/19 12:05	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			01/31/19 12:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*50 - 134*		*01/31/19 12:05*	*1*
Dibromofluoromethane	*89*		*62 - 130*		*01/31/19 12:05*	*1*
Toluene-d8 (Surr)	*88*		*70 - 130*		*01/31/19 12:05*	*1*
4-Bromofluorobenzene	*82*		*67 - 139*		*01/31/19 12:05*	*1*

Lab Sample ID: LCS 600-257442/3
Matrix: Water
Analysis Batch: 257442

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0100	0.01079		mg/L		108	70 - 130		
Ethylbenzene			0.0100	0.01114		mg/L		111	70 - 130		
Toluene			0.0100	0.01160		mg/L		116	70 - 130		
Xylenes, Total			0.0200	0.02168		mg/L		108	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*83*		*50 - 134*
Dibromofluoromethane	*97*		*62 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*
4-Bromofluorobenzene	*83*		*67 - 139*

Lab Sample ID: LCSD 600-257442/4
Matrix: Water
Analysis Batch: 257442

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0100	0.01074		mg/L		107	70 - 130	0	20
Ethylbenzene			0.0100	0.01114		mg/L		111	70 - 130	0	20
Toluene			0.0100	0.01156		mg/L		116	70 - 130	0	20
Xylenes, Total			0.0200	0.02143		mg/L		107	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*83*		*50 - 134*
Dibromofluoromethane	*99*		*62 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*
4-Bromofluorobenzene	*85*		*67 - 139*

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 490-573386/1-A
Matrix: Solid
Analysis Batch: 573402

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 573386

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		02/04/19 09:32	02/05/19 11:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*90*		*50 - 150*	*02/04/19 09:32*	*02/05/19 11:37*	*1*

Lab Sample ID: LCS 490-573386/2-A
Matrix: Solid
Analysis Batch: 573402

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 573386

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	500	549.6		mg/Kg		110	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*103*		*50 - 150*

Lab Sample ID: LCSD 490-573386/3-A
Matrix: Solid
Analysis Batch: 573402

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 573386

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	500	546.7		mg/Kg		109	70 - 130	1	21

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*105*		*50 - 150*

Lab Sample ID: MB 490-573790/8
Matrix: Water
Analysis Batch: 573790

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			02/06/19 12:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*103*		*50 - 150*		*02/06/19 12:57*	*1*

Lab Sample ID: LCS 490-573790/5
Matrix: Water
Analysis Batch: 573790

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	1.00	1.125		mg/L		113	66 - 140

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: LCS 490-573790/5
Matrix: Water
Analysis Batch: 573790

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	*104*		*50 - 150*

Lab Sample ID: LCSD 490-573790/6
Matrix: Water
Analysis Batch: 573790

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	1.00	1.117		mg/L		112	66 - 140	1	42

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	*88*		*50 - 150*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Lab Sample ID: MB 490-573322/1-A
Matrix: Water
Analysis Batch: 573663

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 573322

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0879	U	0.0966	0.0879	mg/L		02/02/19 17:10	02/05/19 13:33	1
ORO C24-C40	0.0879	U	0.0966	0.0879	mg/L		02/02/19 17:10	02/05/19 13:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	*95*		*50 - 150*	*02/02/19 17:10*	*02/05/19 13:33*	*1*

Lab Sample ID: LCS 490-573322/2-A
Matrix: Water
Analysis Batch: 573663

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 573322

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	0.778	0.8534		mg/L		110	46 - 132

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	*91*		*50 - 150*

Lab Sample ID: MB 490-573463/1-A
Matrix: Solid
Analysis Batch: 573659

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 573463

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.50	U	5.00	2.50	mg/Kg		02/04/19 12:08	02/05/19 14:29	1
ORO C24-C40	2.50	U	5.00	2.50	mg/Kg		02/04/19 12:08	02/05/19 14:29	1

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Lab Sample ID: MB 490-573463/1-A
Matrix: Solid
Analysis Batch: 573659

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 573463

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	105		50 - 150	02/04/19 12:08	02/05/19 14:29	1

Lab Sample ID: LCS 490-573463/2-A
Matrix: Solid
Analysis Batch: 573659

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 573463

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			40.0	46.05		mg/Kg		115	54 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	106		50 - 150

Lab Sample ID: 600-179897-1 MS
Matrix: Solid
Analysis Batch: 573659

Client Sample ID: SJRP-MW19-00-01-01292019
Prep Type: Total/NA
Prep Batch: 573463

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]	11.8		50.0	55.49		mg/Kg	☼	87	10 - 142		

Surrogate	MS %Recovery	MS Qualifier	Limits
o-Terphenyl (Surr)	97		50 - 150

Lab Sample ID: 600-179897-1 MSD
Matrix: Solid
Analysis Batch: 573659

Client Sample ID: SJRP-MW19-00-01-01292019
Prep Type: Total/NA
Prep Batch: 573463

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	11.8		50.1	50.56		mg/Kg	☼	77	10 - 142	9	47

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl (Surr)	95		50 - 150

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-257794/1-A
Matrix: Water
Analysis Batch: 257874

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 257794

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		02/05/19 12:53	02/06/19 14:11	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		02/05/19 12:53	02/06/19 14:11	1
Barium	0.000530	U	0.0200	0.000530	mg/L		02/05/19 12:53	02/06/19 14:11	1
Boron	0.0116	U	0.200	0.0116	mg/L		02/05/19 12:53	02/06/19 14:11	1

TestAmerica Houston

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: MB 600-257794/1-A
Matrix: Water
Analysis Batch: 257874

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 257794

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000280	U	0.00500	0.000280	mg/L		02/05/19 12:53	02/06/19 14:11	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		02/05/19 12:53	02/06/19 14:11	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		02/05/19 12:53	02/06/19 14:11	1
Iron	0.0270	U	0.400	0.0270	mg/L		02/05/19 12:53	02/06/19 14:11	1
Lead	0.00219	U	0.0100	0.00219	mg/L		02/05/19 12:53	02/06/19 14:11	1
Manganese	0.000360	U	0.0100	0.000360	mg/L		02/05/19 12:53	02/06/19 14:11	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		02/05/19 12:53	02/06/19 14:11	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		02/05/19 12:53	02/06/19 14:11	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		02/05/19 12:53	02/06/19 14:11	1

Lab Sample ID: LCS 600-257794/2-A
Matrix: Water
Analysis Batch: 257874

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 257794

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	11.04		mg/L		110	80 - 120
Arsenic	1.00	1.116		mg/L		112	80 - 120
Barium	1.00	1.109		mg/L		111	80 - 120
Boron	1.00	1.101		mg/L		110	80 - 120
Cadmium	0.500	0.5576		mg/L		112	80 - 120
Chromium	1.00	1.078		mg/L		108	80 - 120
Cobalt	1.00	1.104		mg/L		110	80 - 120
Iron	10.0	11.13		mg/L		111	80 - 120
Lead	1.00	1.089		mg/L		109	80 - 120
Manganese	1.00	1.081		mg/L		108	80 - 120
Molybdenum	1.00	1.180		mg/L		118	80 - 120
Nickel	1.00	1.087		mg/L		109	80 - 120
Selenium	1.00	1.118		mg/L		112	80 - 120

Lab Sample ID: MB 600-257994/1-A
Matrix: Solid
Analysis Batch: 258058

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 257994

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.300	U	25.0	0.300	mg/Kg		02/07/19 12:43	02/08/19 14:09	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		02/07/19 12:43	02/08/19 14:09	1
Barium	0.09000	J	1.00	0.0300	mg/Kg		02/07/19 12:43	02/08/19 14:09	1
Boron	0.386	U	20.0	0.386	mg/Kg		02/07/19 12:43	02/08/19 14:09	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		02/07/19 12:43	02/08/19 14:09	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		02/07/19 12:43	02/08/19 14:09	1
Cobalt	0.0676	U	0.500	0.0676	mg/Kg		02/07/19 12:43	02/08/19 14:09	1
Iron	2.53	U	20.0	2.53	mg/Kg		02/07/19 12:43	02/08/19 14:09	1
Lead	0.1200	J	0.500	0.105	mg/Kg		02/07/19 12:43	02/08/19 14:09	1
Manganese	0.0381	U	1.50	0.0381	mg/Kg		02/07/19 12:43	02/08/19 14:09	1
Molybdenum	0.136	U	0.500	0.136	mg/Kg		02/07/19 12:43	02/08/19 14:09	1
Nickel	0.117	U	1.00	0.117	mg/Kg		02/07/19 12:43	02/08/19 14:09	1
Selenium	0.259	U	2.00	0.259	mg/Kg		02/07/19 12:43	02/08/19 14:09	1

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCS 600-257994/2-A
Matrix: Solid
Analysis Batch: 258058

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 257994

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	500	513.5		mg/Kg		103	42 - 158
Arsenic	50.0	49.30		mg/Kg		99	78 - 122
Barium	50.0	51.10		mg/Kg		102	80 - 120
Boron	50.0	49.30		mg/Kg		99	68 - 133
Cadmium	25.0	24.76		mg/Kg		99	81 - 119
Chromium	50.0	50.55		mg/Kg		101	81 - 119
Cobalt	50.0	50.80		mg/Kg		102	82 - 118
Iron	500	510.5		mg/Kg		102	51 - 149
Lead	50.0	49.73		mg/Kg		99	79 - 121
Manganese	50.0	49.97		mg/Kg		100	81 - 119
Molybdenum	50.0	54.30		mg/Kg		109	75 - 125
Nickel	50.0	50.15		mg/Kg		100	81 - 119
Selenium	50.0	48.43		mg/Kg		97	80 - 120

Lab Sample ID: 600-179897-1 MS
Matrix: Solid
Analysis Batch: 258058

Client Sample ID: SJRP-MW19-00-01-01292019
Prep Type: Total/NA
Prep Batch: 257994

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	9740		616	11370	4	mg/Kg	☼	263	75 - 125
Arsenic	2.48		61.6	63.92		mg/Kg	☼	100	75 - 125
Barium	44.8	B	61.6	114.2		mg/Kg	☼	113	75 - 125
Boron	3.27	J F1	61.6	36.54	F1	mg/Kg	☼	54	75 - 125
Cadmium	0.226	J	30.8	30.74		mg/Kg	☼	99	75 - 125
Chromium	5.86		61.6	64.72		mg/Kg	☼	95	75 - 125
Cobalt	5.27		61.6	72.30		mg/Kg	☼	109	75 - 125
Iron	13300		616	13390	4	mg/Kg	☼	11	75 - 125
Lead	9.16	B	61.6	70.82		mg/Kg	☼	100	75 - 125
Manganese	235	F1	61.6	437.4	F1	mg/Kg	☼	328	75 - 125
Molybdenum	2.54		61.6	59.70		mg/Kg	☼	93	75 - 125
Nickel	5.59		61.6	70.69		mg/Kg	☼	106	75 - 125
Selenium	0.316	U	61.6	61.70		mg/Kg	☼	100	75 - 125

Lab Sample ID: 600-179897-1 DU
Matrix: Solid
Analysis Batch: 258058

Client Sample ID: SJRP-MW19-00-01-01292019
Prep Type: Total/NA
Prep Batch: 257994

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	9740		9862		mg/Kg	☼	1	20
Arsenic	2.48		2.952		mg/Kg	☼	17	20
Barium	44.8	B	52.96		mg/Kg	☼	17	20
Boron	3.27	J F1	2.989	J	mg/Kg	☼	9	20
Cadmium	0.226	J	0.2527	J	mg/Kg	☼	11	20
Chromium	5.86		5.837		mg/Kg	☼	0.4	20
Cobalt	5.27		7.390	F3	mg/Kg	☼	33	20
Iron	13300		13740		mg/Kg	☼	3	20
Lead	9.16	B	9.344		mg/Kg	☼	2	20
Manganese	235	F1	389.4	F3	mg/Kg	☼	49	20

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-179897-1 DU — **Client Sample ID: SJRP-MW19-00-01-01292019**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 258058 — **Prep Batch: 257994**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Molybdenum	2.54		2.995		mg/Kg	☼	16	20
Nickel	5.59		6.946	F3	mg/Kg	☼	22	20
Selenium	0.316	U	0.319	U	mg/Kg	☼	NC	20

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Lab Sample ID: LB 600-257441/1-B — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 257613 — **Prep Batch: 257493**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		01/31/19 11:58	02/01/19 12:08	1

Lab Sample ID: LB 600-257445/1-B — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 257613 — **Prep Batch: 257493**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		01/31/19 11:58	02/01/19 16:16	1

Lab Sample ID: MB 600-257493/7-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 257613 — **Prep Batch: 257493**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		01/31/19 11:58	02/01/19 11:52	1

Lab Sample ID: LCS 600-257493/8-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 257613 — **Prep Batch: 257493**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00375	0.003895		mg/L		104	70 - 130

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-257447/7-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 257521 — **Prep Batch: 257447**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00321	U	0.0152	0.00321	mg/Kg		01/31/19 08:46	01/31/19 12:31	1

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) (Continued)

Lab Sample ID: LCSSRM 600-257447/8-A ^100
Matrix: Solid
Analysis Batch: 257521

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 257447

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			29.0	25.69		mg/Kg		88.6	59.7 - 115.2		

Lab Sample ID: 600-179897-1 MS
Matrix: Solid
Analysis Batch: 257521

Client Sample ID: SJRP-MW19-00-01-01292019
Prep Type: Total/NA
Prep Batch: 257447

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.00611	J	0.286	0.2998		mg/Kg	☼	103	75 - 125		

Lab Sample ID: 600-179897-1 DU
Matrix: Solid
Analysis Batch: 257521

Client Sample ID: SJRP-MW19-00-01-01292019
Prep Type: Total/NA
Prep Batch: 257447

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Mercury	0.00611	J		0.007906	J F5	mg/Kg	☼			26	20

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

GC/MS VOA

Analysis Batch: 257347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179897-1	SJRP-MW19-00-01-01292019	Total/NA	Solid	8260B	257399
600-179897-2	SJRP-MW19-00-01-01292019-2	Total/NA	Solid	8260B	257399
600-179897-4	SJRP-MW20-00-01-01292019	Total/NA	Solid	8260B	257399
600-179897-5	SJRP-MW21-00-01-01292019	Total/NA	Solid	8260B	257399
600-179897-6	SJRP-MW22-00-01-01292019	Total/NA	Solid	8260B	257399
600-179897-7	SJRP-MW23-00-01-01292019	Total/NA	Solid	8260B	257399
MB 600-257347/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-257347/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-257347/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 257399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179897-1	SJRP-MW19-00-01-01292019	Total/NA	Solid	5035	
600-179897-2	SJRP-MW19-00-01-01292019-2	Total/NA	Solid	5035	
600-179897-4	SJRP-MW20-00-01-01292019	Total/NA	Solid	5035	
600-179897-5	SJRP-MW21-00-01-01292019	Total/NA	Solid	5035	
600-179897-6	SJRP-MW22-00-01-01292019	Total/NA	Solid	5035	
600-179897-7	SJRP-MW23-00-01-01292019	Total/NA	Solid	5035	

Analysis Batch: 257442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179897-3	SJRP-EB01-01292019	Total/NA	Water	8260B	
600-179897-8	SJRP-TB02-01292019	Total/NA	Water	8260B	
MB 600-257442/6	Method Blank	Total/NA	Water	8260B	
LCS 600-257442/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-257442/4	Lab Control Sample Dup	Total/NA	Water	8260B	

GC VOA

Prep Batch: 573386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179897-1	SJRP-MW19-00-01-01292019	Total/NA	Solid	5030B	
600-179897-2	SJRP-MW19-00-01-01292019-2	Total/NA	Solid	5030B	
600-179897-4	SJRP-MW20-00-01-01292019	Total/NA	Solid	5030B	
600-179897-5	SJRP-MW21-00-01-01292019	Total/NA	Solid	5030B	
600-179897-6	SJRP-MW22-00-01-01292019	Total/NA	Solid	5030B	
600-179897-7	SJRP-MW23-00-01-01292019	Total/NA	Solid	5030B	
MB 490-573386/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 490-573386/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 490-573386/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 573402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179897-1	SJRP-MW19-00-01-01292019	Total/NA	Solid	8015C	573386
600-179897-2	SJRP-MW19-00-01-01292019-2	Total/NA	Solid	8015C	573386
600-179897-4	SJRP-MW20-00-01-01292019	Total/NA	Solid	8015C	573386
600-179897-5	SJRP-MW21-00-01-01292019	Total/NA	Solid	8015C	573386
600-179897-6	SJRP-MW22-00-01-01292019	Total/NA	Solid	8015C	573386
600-179897-7	SJRP-MW23-00-01-01292019	Total/NA	Solid	8015C	573386
MB 490-573386/1-A	Method Blank	Total/NA	Solid	8015C	573386

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

GC VOA (Continued)

Analysis Batch: 573402 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 490-573386/2-A	Lab Control Sample	Total/NA	Solid	8015C	573386
LCSD 490-573386/3-A	Lab Control Sample Dup	Total/NA	Solid	8015C	573386

Analysis Batch: 573790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179897-3	SJRP-EB01-01292019	Total/NA	Water	8015C	
MB 490-573790/8	Method Blank	Total/NA	Water	8015C	
LCS 490-573790/5	Lab Control Sample	Total/NA	Water	8015C	
LCSD 490-573790/6	Lab Control Sample Dup	Total/NA	Water	8015C	

GC Semi VOA

Prep Batch: 573322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179897-3	SJRP-EB01-01292019	Total/NA	Water	3510C	
MB 490-573322/1-A	Method Blank	Total/NA	Water	3510C	
LCS 490-573322/2-A	Lab Control Sample	Total/NA	Water	3510C	

Prep Batch: 573463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179897-1	SJRP-MW19-00-01-01292019	Total/NA	Solid	3550C	
600-179897-2	SJRP-MW19-00-01-01292019-2	Total/NA	Solid	3550C	
600-179897-4	SJRP-MW20-00-01-01292019	Total/NA	Solid	3550C	
600-179897-5	SJRP-MW21-00-01-01292019	Total/NA	Solid	3550C	
600-179897-6	SJRP-MW22-00-01-01292019	Total/NA	Solid	3550C	
600-179897-7	SJRP-MW23-00-01-01292019	Total/NA	Solid	3550C	
MB 490-573463/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-573463/2-A	Lab Control Sample	Total/NA	Solid	3550C	
600-179897-1 MS	SJRP-MW19-00-01-01292019	Total/NA	Solid	3550C	
600-179897-1 MSD	SJRP-MW19-00-01-01292019	Total/NA	Solid	3550C	

Analysis Batch: 573659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179897-1	SJRP-MW19-00-01-01292019	Total/NA	Solid	8015C	573463
600-179897-2	SJRP-MW19-00-01-01292019-2	Total/NA	Solid	8015C	573463
600-179897-4	SJRP-MW20-00-01-01292019	Total/NA	Solid	8015C	573463
600-179897-5	SJRP-MW21-00-01-01292019	Total/NA	Solid	8015C	573463
600-179897-6	SJRP-MW22-00-01-01292019	Total/NA	Solid	8015C	573463
600-179897-7	SJRP-MW23-00-01-01292019	Total/NA	Solid	8015C	573463
MB 490-573463/1-A	Method Blank	Total/NA	Solid	8015C	573463
LCS 490-573463/2-A	Lab Control Sample	Total/NA	Solid	8015C	573463
600-179897-1 MS	SJRP-MW19-00-01-01292019	Total/NA	Solid	8015C	573463
600-179897-1 MSD	SJRP-MW19-00-01-01292019	Total/NA	Solid	8015C	573463

Analysis Batch: 573663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179897-3	SJRP-EB01-01292019	Total/NA	Water	8015C	573322
MB 490-573322/1-A	Method Blank	Total/NA	Water	8015C	573322
LCS 490-573322/2-A	Lab Control Sample	Total/NA	Water	8015C	573322

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

Metals

Leach Batch: 257441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 600-257441/1-B	Method Blank	Total/NA	Water	1311	

Leach Batch: 257445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 600-257445/1-B	Method Blank	Total/NA	Water	1311	

Prep Batch: 257447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179897-1	SJRP-MW19-00-01-01292019	Total/NA	Solid	7471A	
600-179897-2	SJRP-MW19-00-01-01292019-2	Total/NA	Solid	7471A	
600-179897-4	SJRP-MW20-00-01-01292019	Total/NA	Solid	7471A	
600-179897-5	SJRP-MW21-00-01-01292019	Total/NA	Solid	7471A	
600-179897-6	SJRP-MW22-00-01-01292019	Total/NA	Solid	7471A	
600-179897-7	SJRP-MW23-00-01-01292019	Total/NA	Solid	7471A	
MB 600-257447/7-A	Method Blank	Total/NA	Solid	7471A	
LCSSRM 600-257447/8-A ^100	Lab Control Sample	Total/NA	Solid	7471A	
600-179897-1 MS	SJRP-MW19-00-01-01292019	Total/NA	Solid	7471A	
600-179897-1 DU	SJRP-MW19-00-01-01292019	Total/NA	Solid	7471A	

Prep Batch: 257493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179897-3	SJRP-EB01-01292019	Total/NA	Water	7470A	
LB 600-257441/1-B	Method Blank	Total/NA	Water	7470A	257441
LB 600-257445/1-B	Method Blank	Total/NA	Water	7470A	257445
MB 600-257493/7-A	Method Blank	Total/NA	Water	7470A	
LCS 600-257493/8-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 257521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179897-1	SJRP-MW19-00-01-01292019	Total/NA	Solid	7471A	257447
600-179897-2	SJRP-MW19-00-01-01292019-2	Total/NA	Solid	7471A	257447
600-179897-4	SJRP-MW20-00-01-01292019	Total/NA	Solid	7471A	257447
600-179897-5	SJRP-MW21-00-01-01292019	Total/NA	Solid	7471A	257447
600-179897-6	SJRP-MW22-00-01-01292019	Total/NA	Solid	7471A	257447
600-179897-7	SJRP-MW23-00-01-01292019	Total/NA	Solid	7471A	257447
MB 600-257447/7-A	Method Blank	Total/NA	Solid	7471A	257447
LCSSRM 600-257447/8-A ^100	Lab Control Sample	Total/NA	Solid	7471A	257447
600-179897-1 MS	SJRP-MW19-00-01-01292019	Total/NA	Solid	7471A	257447
600-179897-1 DU	SJRP-MW19-00-01-01292019	Total/NA	Solid	7471A	257447

Analysis Batch: 257613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179897-3	SJRP-EB01-01292019	Total/NA	Water	7470A	257493
LB 600-257441/1-B	Method Blank	Total/NA	Water	7470A	257493
LB 600-257445/1-B	Method Blank	Total/NA	Water	7470A	257493
MB 600-257493/7-A	Method Blank	Total/NA	Water	7470A	257493
LCS 600-257493/8-A	Lab Control Sample	Total/NA	Water	7470A	257493

Prep Batch: 257794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179897-3	SJRP-EB01-01292019	Total/NA	Water	3010A	

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

Metals (Continued)

Prep Batch: 257794 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-257794/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-257794/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 257874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179897-3	SJRP-EB01-01292019	Total/NA	Water	6010B	257794
MB 600-257794/1-A	Method Blank	Total/NA	Water	6010B	257794
LCS 600-257794/2-A	Lab Control Sample	Total/NA	Water	6010B	257794

Prep Batch: 257994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179897-1	SJRP-MW19-00-01-01292019	Total/NA	Solid	3050B	
600-179897-2	SJRP-MW19-00-01-01292019-2	Total/NA	Solid	3050B	
600-179897-4	SJRP-MW20-00-01-01292019	Total/NA	Solid	3050B	
600-179897-5	SJRP-MW21-00-01-01292019	Total/NA	Solid	3050B	
600-179897-6	SJRP-MW22-00-01-01292019	Total/NA	Solid	3050B	
600-179897-7	SJRP-MW23-00-01-01292019	Total/NA	Solid	3050B	
MB 600-257994/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 600-257994/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-179897-1 MS	SJRP-MW19-00-01-01292019	Total/NA	Solid	3050B	
600-179897-1 DU	SJRP-MW19-00-01-01292019	Total/NA	Solid	3050B	

Analysis Batch: 258058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179897-1	SJRP-MW19-00-01-01292019	Total/NA	Solid	6010B	257994
600-179897-2	SJRP-MW19-00-01-01292019-2	Total/NA	Solid	6010B	257994
600-179897-4	SJRP-MW20-00-01-01292019	Total/NA	Solid	6010B	257994
600-179897-5	SJRP-MW21-00-01-01292019	Total/NA	Solid	6010B	257994
600-179897-6	SJRP-MW22-00-01-01292019	Total/NA	Solid	6010B	257994
600-179897-7	SJRP-MW23-00-01-01292019	Total/NA	Solid	6010B	257994
600-179897-7	SJRP-MW23-00-01-01292019	Total/NA	Solid	6010B	257994
MB 600-257994/1-A	Method Blank	Total/NA	Solid	6010B	257994
LCS 600-257994/2-A	Lab Control Sample	Total/NA	Solid	6010B	257994
600-179897-1 MS	SJRP-MW19-00-01-01292019	Total/NA	Solid	6010B	257994
600-179897-1 DU	SJRP-MW19-00-01-01292019	Total/NA	Solid	6010B	257994

General Chemistry

Analysis Batch: 257466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179897-1	SJRP-MW19-00-01-01292019	Total/NA	Solid	2540B	
600-179897-2	SJRP-MW19-00-01-01292019-2	Total/NA	Solid	2540B	
600-179897-4	SJRP-MW20-00-01-01292019	Total/NA	Solid	2540B	
600-179897-5	SJRP-MW21-00-01-01292019	Total/NA	Solid	2540B	
600-179897-6	SJRP-MW22-00-01-01292019	Total/NA	Solid	2540B	
600-179897-7	SJRP-MW23-00-01-01292019	Total/NA	Solid	2540B	

Lab Chronicle

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

Client Sample ID: SJRP-MW19-00-01-01292019
Lab Sample ID: 600-179897-1
Date Collected: 01/29/19 11:40
Matrix: Solid
Date Received: 01/30/19 11:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			257466	01/31/19 10:05	DTN	TAL HOU

Client Sample ID: SJRP-MW19-00-01-01292019
Lab Sample ID: 600-179897-1
Date Collected: 01/29/19 11:40
Matrix: Solid
Date Received: 01/30/19 11:02
Percent Solids: 79.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.62 g	5 mL	257399	01/30/19 12:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	257347	01/30/19 13:06	WS1	TAL HOU
Total/NA	Prep	5030B			5.65 g	5.0 mL	573386	02/04/19 11:08	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	573402	02/05/19 15:02	S1S	TAL NSH
Total/NA	Prep	3550C			25.18 g	1 mL	573463	02/04/19 12:08	EDS	TAL NSH
Total/NA	Analysis	8015C		1			573659	02/05/19 16:19	LOJ	TAL NSH
Total/NA	Prep	3050B			1.03 g	50.0 mL	257994	02/07/19 12:43	AML	TAL HOU
Total/NA	Analysis	6010B		1			258058	02/08/19 14:11	DCL	TAL HOU
Total/NA	Prep	7471A			0.66 g	50 mL	257447	01/31/19 08:46	SOT	TAL HOU
Total/NA	Analysis	7471A		1			257521	01/31/19 13:00	SOT	TAL HOU

Client Sample ID: SJRP-MW19-00-01-01292019-2
Lab Sample ID: 600-179897-2
Date Collected: 01/29/19 11:40
Matrix: Solid
Date Received: 01/30/19 11:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			257466	01/31/19 10:05	DTN	TAL HOU

Client Sample ID: SJRP-MW19-00-01-01292019-2
Lab Sample ID: 600-179897-2
Date Collected: 01/29/19 11:40
Matrix: Solid
Date Received: 01/30/19 11:02
Percent Solids: 77.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.12 g	5 mL	257399	01/30/19 12:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	257347	01/30/19 13:30	WS1	TAL HOU
Total/NA	Prep	5030B			5.70 g	5.0 mL	573386	02/04/19 11:08	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	573402	02/05/19 15:36	S1S	TAL NSH
Total/NA	Prep	3550C			25.02 g	1 mL	573463	02/04/19 12:08	EDS	TAL NSH
Total/NA	Analysis	8015C		1			573659	02/05/19 17:15	LOJ	TAL NSH
Total/NA	Prep	3050B			1.04 g	50.0 mL	257994	02/07/19 12:43	AML	TAL HOU
Total/NA	Analysis	6010B		1			258058	02/08/19 14:17	DCL	TAL HOU
Total/NA	Prep	7471A			0.60 g	50 mL	257447	01/31/19 08:46	SOT	TAL HOU
Total/NA	Analysis	7471A		1			257521	01/31/19 13:06	SOT	TAL HOU

Lab Chronicle

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

Client Sample ID: SJRP-EB01-01292019

Lab Sample ID: 600-179897-3
Date Collected: 01/29/19 13:50
Matrix: Water
Date Received: 01/30/19 11:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	257442	01/31/19 19:36	WS1	TAL HOU
Total/NA	Analysis	8015C		1	5 mL	5 mL	573790	02/06/19 14:36	S1S	TAL NSH
Total/NA	Prep	3510C			249.9 mL	1 mL	573322	02/02/19 17:10	KWS	TAL NSH
Total/NA	Analysis	8015C		1			573663	02/05/19 14:49	S1S	TAL NSH
Total/NA	Prep	3010A			50.0 mL	50.0 mL	257794	02/05/19 12:53	AML	TAL HOU
Total/NA	Analysis	6010B		1			257874	02/06/19 15:12	DCL	TAL HOU
Total/NA	Prep	7470A			40 mL	50 mL	257493	01/31/19 11:58	SOT	TAL HOU
Total/NA	Analysis	7470A		1			257613	02/01/19 16:31	TWR	TAL HOU

Client Sample ID: SJRP-MW20-00-01-01292019

Lab Sample ID: 600-179897-4
Date Collected: 01/29/19 14:30
Matrix: Solid
Date Received: 01/30/19 11:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			257466	01/31/19 10:05	DTN	TAL HOU

Client Sample ID: SJRP-MW20-00-01-01292019

Lab Sample ID: 600-179897-4
Date Collected: 01/29/19 14:30
Matrix: Solid
Date Received: 01/30/19 11:02
Percent Solids: 85.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.58 g	5 mL	257399	01/30/19 12:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	257347	01/30/19 13:54	WS1	TAL HOU
Total/NA	Prep	5030B			5.45 g	5.0 mL	573386	02/04/19 11:08	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	573402	02/05/19 16:10	S1S	TAL NSH
Total/NA	Prep	3550C			25.39 g	1 mL	573463	02/04/19 12:08	EDS	TAL NSH
Total/NA	Analysis	8015C		1			573659	02/05/19 17:33	LOJ	TAL NSH
Total/NA	Prep	3050B			1.07 g	50.0 mL	257994	02/07/19 12:43	AML	TAL HOU
Total/NA	Analysis	6010B		1			258058	02/08/19 14:19	DCL	TAL HOU
Total/NA	Prep	7471A			0.61 g	50 mL	257447	01/31/19 08:46	SOT	TAL HOU
Total/NA	Analysis	7471A		1			257521	01/31/19 13:08	SOT	TAL HOU

Client Sample ID: SJRP-MW21-00-01-01292019

Lab Sample ID: 600-179897-5
Date Collected: 01/29/19 14:05
Matrix: Solid
Date Received: 01/30/19 11:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			257466	01/31/19 10:05	DTN	TAL HOU

Lab Chronicle

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

Client Sample ID: SJRP-MW21-00-01-01292019 — Lab Sample ID: 600-179897-5

Date Collected: 01/29/19 14:05 — **Matrix: Solid**
Date Received: 01/30/19 11:02 — **Percent Solids: 80.9**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.53 g	5 mL	257399	01/30/19 12:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	257347	01/30/19 14:18	WS1	TAL HOU
Total/NA	Prep	5030B			5.32 g	5.0 mL	573386	02/04/19 11:08	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	573402	02/05/19 16:44	S1S	TAL NSH
Total/NA	Prep	3550C			25.07 g	1 mL	573463	02/04/19 12:08	EDS	TAL NSH
Total/NA	Analysis	8015C		1			573659	02/05/19 17:52	LOJ	TAL NSH
Total/NA	Prep	3050B			1.03 g	50.0 mL	257994	02/07/19 12:43	AML	TAL HOU
Total/NA	Analysis	6010B		1			258058	02/08/19 14:21	DCL	TAL HOU
Total/NA	Prep	7471A			0.61 g	50 mL	257447	01/31/19 08:46	SOT	TAL HOU
Total/NA	Analysis	7471A		1			257521	01/31/19 13:10	SOT	TAL HOU

Client Sample ID: SJRP-MW22-00-01-01292019 — Lab Sample ID: 600-179897-6

Date Collected: 01/29/19 14:12 — **Matrix: Solid**
Date Received: 01/30/19 11:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			257466	01/31/19 10:05	DTN	TAL HOU

Client Sample ID: SJRP-MW22-00-01-01292019 — Lab Sample ID: 600-179897-6

Date Collected: 01/29/19 14:12 — **Matrix: Solid**
Date Received: 01/30/19 11:02 — **Percent Solids: 87.5**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.16 g	5 mL	257399	01/30/19 12:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	257347	01/30/19 15:54	WS1	TAL HOU
Total/NA	Prep	5030B			5.07 g	5.0 mL	573386	02/04/19 11:08	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	573402	02/05/19 17:18	S1S	TAL NSH
Total/NA	Prep	3550C			25.20 g	1 mL	573463	02/04/19 12:08	EDS	TAL NSH
Total/NA	Analysis	8015C		1			573659	02/05/19 18:10	LOJ	TAL NSH
Total/NA	Prep	3050B			1.06 g	50.0 mL	257994	02/07/19 12:43	AML	TAL HOU
Total/NA	Analysis	6010B		1			258058	02/08/19 14:23	DCL	TAL HOU
Total/NA	Prep	7471A			0.62 g	50 mL	257447	01/31/19 08:46	SOT	TAL HOU
Total/NA	Analysis	7471A		1			257521	01/31/19 13:12	SOT	TAL HOU

Client Sample ID: SJRP-MW23-00-01-01292019 — Lab Sample ID: 600-179897-7

Date Collected: 01/29/19 14:20 — **Matrix: Solid**
Date Received: 01/30/19 11:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			257466	01/31/19 10:05	DTN	TAL HOU

Lab Chronicle

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

Client Sample ID: SJRP-MW23-00-01-01292019

Lab Sample ID: 600-179897-7

Date Collected: 01/29/19 14:20
Matrix: Solid
Date Received: 01/30/19 11:02
Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	257399	01/30/19 12:30	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	257347	01/30/19 16:18	WS1	TAL HOU
Total/NA	Prep	5030B			5.38 g	5.0 mL	573386	02/04/19 11:08	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	573402	02/05/19 17:53	S1S	TAL NSH
Total/NA	Prep	3550C			25.03 g	1 mL	573463	02/04/19 12:08	EDS	TAL NSH
Total/NA	Analysis	8015C		1			573659	02/05/19 18:29	LOJ	TAL NSH
Total/NA	Prep	3050B			1.02 g	50.0 mL	257994	02/07/19 12:43	AML	TAL HOU
Total/NA	Analysis	6010B		1			258058	02/08/19 14:25	DCL	TAL HOU
Total/NA	Prep	3050B			1.02 g	50.0 mL	257994	02/07/19 12:43	AML	TAL HOU
Total/NA	Analysis	6010B		5			258058	02/08/19 16:06	DCL	TAL HOU
Total/NA	Prep	7471A			0.63 g	50 mL	257447	01/31/19 08:46	SOT	TAL HOU
Total/NA	Analysis	7471A		1			257521	01/31/19 13:14	SOT	TAL HOU

Client Sample ID: SJRP-TB02-01292019

Lab Sample ID: 600-179897-8

Date Collected: 01/29/19 15:00
Matrix: Water
Date Received: 01/30/19 11:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	257442	01/31/19 12:52	WS1	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179897-1

Laboratory: TestAmerica Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	18-061-0	08-04-19
Louisiana	NELAP	6	01967	06-30-19
Oklahoma	State Program	6	2018-052	08-31-19
Texas	NELAP	6	T104704223-18-23	10-31-19
USDA	Federal		P330-18-00130	04-30-21

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-19
Alaska (UST)	State Program	10	UST-087	06-30-19
Arizona	State Program	9	AZ0473	05-05-19
Arkansas DEQ	State Program	6	88-0737	04-25-19
California	State Program	9	2938	06-30-19 *
Connecticut	State Program	1	PH-0220	12-31-19
Florida	NELAP	4	E87358	06-30-19
Georgia	State Program	4	NA: NELAP & A2LA	12-31-19
Illinois	NELAP	5	200010	12-09-18 *
Iowa	State Program	7	131	04-01-20
Kansas	NELAP	7	E-10229	10-31-19
Kentucky (UST)	State Program	4	19	06-30-19
Kentucky (WW)	State Program	4	90038	12-31-19
Louisiana	NELAP	6	30613	06-30-19
Maine	State Program	1	TN00032	11-03-19
Maryland	State Program	3	316	03-31-19
Massachusetts	State Program	1	M-TN032	06-30-19
Minnesota	NELAP	5	047-999-345	12-31-19
Mississippi	State Program	4	N/A	06-30-19
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-19
New Hampshire	NELAP	1	2963	10-09-19
New Jersey	NELAP	2	TN965	06-30-19
New York	NELAP	2	11342	03-31-19
North Carolina (WW/SW)	State Program	4	387	12-31-19
North Dakota	State Program	8	R-146	06-30-19
Ohio VAP	State Program	5	CL0033	07-06-19
Oklahoma	State Program	6	9412	08-31-19
Oregon	NELAP	10	TN200001	04-26-19
Pennsylvania	NELAP	3	68-00585	07-31-19
Rhode Island	State Program	1	LAO00268	12-30-19
South Carolina	State Program	4	84009 (001)	02-28-19
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-19
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-19
Virginia	NELAP	3	460152	06-14-19
Washington	State Program	10	C789	07-19-19
West Virginia DEP	State Program	3	219	02-28-19
Wisconsin	State Program	5	998020430	08-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-179897-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Laboratory: TestAmerica Nashville (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wyoming (UST)	A2LA	8	453.07	12-31-19

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: A. Tuchasz	Lab PM: McDaniel, Bethany	Carrier Tracking No(s): FedEx 745117128740	COC No: 02
Client Contact: Aleeca Forsberg	Phone:	E-Mail: bethany.mcdaniel@testamericainc.com		Page: 1 of 1
Company: CH2M Hill, Inc.				Job #:
Address: 3721 Rutledge Road NE Suite B-1	Due Date Requested:			
City: Albuquerque	TAT Requested (days): 5'C ARF			
State, Zip: NM, 87109				
Phone: 505-855-5239	PO #: WD794541			
Email: Aleeca.Forsberg@CH2M.com	WO #: WD794541			
Project Name: Kinder Morgan San Juan River Plant RWIP	Project #: 60005961			
Site: San Juan River Gas Plant	ARF#: ERG ARF_CH2M_01-15-2019			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260 - BTEX	8015 - GRO Range (C6-C10)	8015 - DRO/ORO Range	6010/7470 - NMWQCC Metals with Hg	TCLP VOA (TCL)/TCLP SVOA (TCL List)	TCLP RCRA 8 Metals w/Hg	Total VOA 8260	Total SVOA 8270	Flashpoint and pH	Moisture				Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
SJRP-MW19-00-01-01292019	1/29/19	1140	G	~~Water~~ S	N	N	X	X	X	X						X					
SJRP-MW19-00-01-01292019-2	1/29/19	1140	G	~~Water~~ S	N	N	X	X	X	X						X					
SJRP-EB01-01292019	1/29/19	1350	G	W ~~Water~~ S	N	N	X	X	X	X											
SJRP-MW20-00-01-01292019		1430	G	~~Water~~ S																	
SJRP-MW21-00-01-01292019		1405	G	~~Water~~ S																	
SJRP-MW22-00-01-01292019		1412	G	~~Water~~ S																	
SJRP-MW23-00-01-01292019		1420	G	~~Water~~ S																	
SJRP-TB02-01292019	1/24/19	1520	G	Water	N	N	X	X	X	X						X					AT
			G	Water																	
			G	~~Water~~																	
			G	Water																	

600-179897 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1/24/19	1510	TAL-HOU		1-30-19 1102	TA Houston
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

S Loc: 600 179897 eipt Checklist

Date/Time Received: '19 JAN 30 11:02

JOB NUMBER: _ ___

CLIENT: CH2M Hill

UNPACKED BY: J.L.

CARRIER/DRIVER: Fedex

Custody Seal Present: ☒ YES ☐ NO

Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Them CF	Corrected Temp (°C)
GW	(Y) / N	(Y) / N	5.6	IR676	+0.1	5.7
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N	J.L. 1-30-19			
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☒ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☐ YES ☐ NO

pH paper Lot #_____

VOA headspace acceptable (5-6mm): ☒ YES ☐ NO ☐ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	☒	

COMMENTS:

J.L. 1-30-19

HS-SA-WI-013 Rev. 3; 07/01/2014

600-179897 Wayt



TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

600-179897 Chain of Custody

Cooler Received/Opened On 2/1/2019 @ 9:15

Time Samples Removed From Cooler 15:20 Time Samples Placed In Storage 15:50 (2 Hour Window)

1. Tracking # 9585 (last 4 digits, FedEx) Courier: Fedex

IR Gun ID 17960353 pH Strip Lot _____ Chlorine Strip Lot _____

2. Temperature of rep. sample or temp blank when opened: 1.8 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) ACB

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

Larger than this.

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) 2.8

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) 2.8

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) 2.8

I certify that I attached a label with the unique LIMS number to each container (intial) 2.8

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 8/23/17

12/7/2020 (Rev. 1)

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

600-179897

TestAmerica LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: McDaniel, Bethany A	No: -37457.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: bethany.mcdaniel@testamericainc.com	State of Origin: New Mexico
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):	Page: Page 1 of 1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 2/11/2019		Job #: 600-179897-1
City: Nashville	TAT Requested (days):		
State, Zip: TN, 37204			
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:		
Email:	WO #:		
Project Name: San Juan Kinder Morgan Bloomfield, NM	Project #: 60005961		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO/3550C DRO/ORO	8015C_GRO/5030B_H Standard GRO Range (C6-C10)	8015C_GRO/5030B GRO Range (C6-C10)	8015C_DRO/3510C_LVI DRO/ORO	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
SJRP-MW19-00-01-01292019 (600-179897-1)	1/29/19	11:40 Central		Solid			X	X			2	
SJRP-MW19-00-01-01292019-2 (600-179897-2)	1/29/19	11:40 Central		Solid			X	X			2	
SJRP-EB01-01292019 (600-179897-3)	1/29/19	13:50 Central		Water					X	X	5	
SJRP-MW20-00-01-01292019 (600-179897-4)	1/29/19	14:30 Central		Solid			X	X			2	
SJRP-MW21-00-01-01292019 (600-179897-5)	1/29/19	14:05 Central		Solid			X	X			2	
SJRP-MW22-00-01-01292019 (600-179897-6)	1/29/19	14:12 Central		Solid			X	X			2	
SJRP-MW23-00-01-01292019 (600-179897-7)	1/29/19	14:20 Central		Solid			X	X			2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	1/31/19 1400	TA	[signature]	02/01/19 0915	TA-VAS
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.8

Ver: 09/20/2016

Login Sample Receipt Checklist

Client: CH2M Hill, Inc. Job Number: 600-179897-1

Login Number: 179897 **List Source: TestAmerica Houston**
List Number: 1
Creator: Snow, Tiffany B

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Appendix D
Laboratory Analytical Reports

eurofins | Environment Testing America



ANALYTICAL REPORT

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-179991-1
Client Project/Site: San Juan Kinder Morgan Bloomfield, NM
Revision: 1

For:
CH2M Hill, Inc.
3721 Rutledge Rd. NE
Suite B-1
Albuquerque, New Mexico 87109

Attn: Aleeca Forsberg

Steve A Stepanski

Authorized for release by:
12/7/2020 4:58:08 PM
Steve Stepanski, Project Mgmt. Assistant
(713)690-4444
steve.stepanski@Eurofinset.com

Designee for

Bethany McDaniel, Senior Project Manager
(713)358-2005
bethany.mcdaniel@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Laboratory Job ID: 600-179991-1

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Case Narrative

Client: CH2M Hill, Inc. Job ID: 600-179991-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Job ID: 600-179991-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-179991-1

Comments
This report was revised to a Level 2 deliverable per client's request.

Receipt
The samples were received on 1/31/2019 11:08 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 6.0º C.

Receipt Exceptions
The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. Trip blank marked for multiple analyses on COC. The client was contacted and the lab was instructed to analyze the trip blank for 8260_LL only.

GC/MS VOA
Method(s) 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: SJRP-MW17-09-10-01302019 (600-179991-5) and SJRP-MW17-09-10-01302019-2 (600-179991-6). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA
Method(s) 8015C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with analytical batch 490-573790.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8015C, 8015D: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 490-573322 and analytical batch 490-573663.

Method(s) 8015C: The following sample was diluted to bring the concentration of target analytes within the calibration range: SJRP-MW17-09-10-01302019-2 (600-179991-6). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 6010B: The method blank for preparation batch 600-258073 and analytical batch 600-258232 contained Lead above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 200.7 Rev 4.4, 6010B: The following samples were diluted to bring the concentration of target analytes within the calibration range: SJRP-MW17-09-10-01302019 (600-179991-5) and SJRP-MW17-09-10-01302019-2 (600-179991-6). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Method Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179991-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL NSH
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL NSH
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU
3010A	Acid Digestion of Aqueous Samples and Extracts for Total Metals	SW846	TAL HOU
3050B	Acid Digestion of Sediments, Sludges, and Soils	SW846	TAL HOU
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL NSH
3550C	Ultrasonic Extraction	SW846	TAL NSH
5030B	Purge and Trap	SW846	TAL HOU
5030B	Purge and Trap	SW846	TAL NSH
5035	Closed System Purge & Trap/Field Methanol	SW846	TAL HOU
5035	Closed System Purge & Trap/Laboratory Preservation	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)/Preparation	SW846	TAL HOU
7471A	Mercury in Solid or Semi-Solid Waste (Manual Cold Vapor Technique)/Preparation	SW846	TAL HOU

Protocol References:

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179991-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-179991-1	SJRP-MW19-10-11-01292019	Solid	01/29/19 17:20	01/31/19 11:08
600-179991-2	SJRP-MW19-18-19-01292019	Solid	01/29/19 17:30	01/31/19 11:08
600-179991-3	SJRP-TB03-01302019	Water	01/30/19 09:45	01/31/19 11:08
600-179991-4	SJRP-EB02-01302019	Water	01/30/19 11:00	01/31/19 11:08
600-179991-5	SJRP-MW17-09-10-01302019	Solid	01/30/19 12:20	01/31/19 11:08
600-179991-6	SJRP-MW17-09-10-01302019-2	Solid	01/30/19 12:20	01/31/19 11:08

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179991-1

Client Sample ID: SJRP-MW19-10-11-01292019
Date Collected: 01/29/19 17:20
Date Received: 01/31/19 11:08

Lab Sample ID: 600-179991-1
Matrix: Solid
Percent Solids: 82.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000745	U	0.00591	0.000745	mg/Kg	☼	01/31/19 15:35	01/31/19 17:10	1
Ethylbenzene	0.00121	U	0.00591	0.00121	mg/Kg	☼	01/31/19 15:35	01/31/19 17:10	1
Toluene	0.00163	U	0.00591	0.00163	mg/Kg	☼	01/31/19 15:35	01/31/19 17:10	1
Xylenes, Total	0.00134	U	0.00591	0.00134	mg/Kg	☼	01/31/19 15:35	01/31/19 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*75*		*61 - 130*	*01/31/19 15:35*	*01/31/19 17:10*	*1*
Dibromofluoromethane	*80*		*68 - 140*	*01/31/19 15:35*	*01/31/19 17:10*	*1*
Toluene-d8 (Surr)	*79*		*50 - 130*	*01/31/19 15:35*	*01/31/19 17:10*	*1*
4-Bromofluorobenzene	*79*		*57 - 140*	*01/31/19 15:35*	*01/31/19 17:10*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.15	U	6.31	3.15	mg/Kg	☼	02/04/19 11:08	02/05/19 18:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*87*		*50 - 150*	*02/04/19 11:08*	*02/05/19 18:27*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3.00	U	5.99	3.00	mg/Kg	☼	02/04/19 12:08	02/05/19 18:47	1
ORO C24-C40	**5.46**	**J**	5.99	3.00	mg/Kg	☼	02/04/19 12:08	02/05/19 18:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*102*		*50 - 150*	*02/04/19 12:08*	*02/05/19 18:47*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**12600**		28.2	0.338	mg/Kg	☼	02/08/19 14:20	02/11/19 15:05	1
Arsenic	**6.44**		1.13	0.246	mg/Kg	☼	02/08/19 14:20	02/11/19 15:05	1
Barium	**32.3**	**F1**	1.13	0.0338	mg/Kg	☼	02/08/19 14:20	02/11/19 15:05	1
Boron	**1.94**	**J F1**	22.5	0.435	mg/Kg	☼	02/08/19 14:20	02/11/19 15:05	1
Cadmium	**0.287**		0.282	0.0288	mg/Kg	☼	02/08/19 14:20	02/11/19 15:05	1
Chromium	**6.93**		0.563	0.0570	mg/Kg	☼	02/08/19 14:20	02/11/19 15:05	1
Cobalt	**6.97**		0.563	0.0762	mg/Kg	☼	02/08/19 14:20	02/11/19 15:05	1
Iron	**18700**		22.5	2.85	mg/Kg	☼	02/08/19 14:20	02/11/19 15:05	1
Lead	**17.9**		0.563	0.118	mg/Kg	☼	02/08/19 14:20	02/11/19 15:05	1
Manganese	**75.1**		1.69	0.0429	mg/Kg	☼	02/08/19 14:20	02/11/19 15:05	1
Molybdenum	**0.411**	**J**	0.563	0.153	mg/Kg	☼	02/08/19 14:20	02/12/19 10:32	1
Nickel	**9.33**		1.13	0.132	mg/Kg	☼	02/08/19 14:20	02/11/19 15:05	1
Selenium	0.292	U	2.25	0.292	mg/Kg	☼	02/08/19 14:20	02/11/19 15:05	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0232**		0.0205	0.00432	mg/Kg	☼	02/04/19 07:19	02/04/19 10:42	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**17.1**		1.0	1.0	%			02/04/19 11:10	1
Percent Solids	**82.9**		1.0	1.0	%			02/04/19 11:10	1

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179991-1

Client Sample ID: SJRP-MW19-18-19-01292019
Date Collected: 01/29/19 17:30
Date Received: 01/31/19 11:08

Lab Sample ID: 600-179991-2
Matrix: Solid
Percent Solids: 83.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00162	J	0.00577	0.000726	mg/Kg	☼	01/31/19 15:35	01/31/19 17:34	1
Ethylbenzene	0.00118	U	0.00577	0.00118	mg/Kg	☼	01/31/19 15:35	01/31/19 17:34	1
Toluene	0.00159	U	0.00577	0.00159	mg/Kg	☼	01/31/19 15:35	01/31/19 17:34	1
Xylenes, Total	0.00130	U	0.00577	0.00130	mg/Kg	☼	01/31/19 15:35	01/31/19 17:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*61 - 130*	*01/31/19 15:35*	*01/31/19 17:34*	*1*
Dibromofluoromethane	*90*		*68 - 140*	*01/31/19 15:35*	*01/31/19 17:34*	*1*
Toluene-d8 (Surr)	*79*		*50 - 130*	*01/31/19 15:35*	*01/31/19 17:34*	*1*
4-Bromofluorobenzene	*101*		*57 - 140*	*01/31/19 15:35*	*01/31/19 17:34*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.36	U	6.73	3.36	mg/Kg	☼	02/04/19 11:08	02/05/19 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*88*		*50 - 150*	*02/04/19 11:08*	*02/05/19 19:01*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.96	U	5.92	2.96	mg/Kg	☼	02/04/19 12:08	02/05/19 19:42	1
ORO C24-C40	4.33	J	5.92	2.96	mg/Kg	☼	02/04/19 12:08	02/05/19 19:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*91*		*50 - 150*	*02/04/19 12:08*	*02/05/19 19:42*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9360		29.3	0.351	mg/Kg	☼	02/08/19 14:20	02/11/19 15:10	1
Arsenic	5.88		1.17	0.255	mg/Kg	☼	02/08/19 14:20	02/11/19 15:10	1
Barium	55.4		1.17	0.0351	mg/Kg	☼	02/08/19 14:20	02/11/19 15:10	1
Boron	1.45	J	23.4	0.452	mg/Kg	☼	02/08/19 14:20	02/11/19 15:10	1
Cadmium	0.597		0.293	0.0300	mg/Kg	☼	02/08/19 14:20	02/11/19 15:10	1
Chromium	5.70		0.586	0.0593	mg/Kg	☼	02/08/19 14:20	02/11/19 15:10	1
Cobalt	9.98		0.586	0.0792	mg/Kg	☼	02/08/19 14:20	02/11/19 15:10	1
Iron	20700		23.4	2.96	mg/Kg	☼	02/08/19 14:20	02/11/19 15:10	1
Lead	11.9		0.586	0.123	mg/Kg	☼	02/08/19 14:20	02/11/19 15:10	1
Manganese	141		1.76	0.0446	mg/Kg	☼	02/08/19 14:20	02/11/19 15:10	1
Molybdenum	1.17		0.586	0.159	mg/Kg	☼	02/08/19 14:20	02/12/19 10:38	1
Nickel	11.8		1.17	0.137	mg/Kg	☼	02/08/19 14:20	02/11/19 15:10	1
Selenium	0.303	U	2.34	0.303	mg/Kg	☼	02/08/19 14:20	02/11/19 15:10	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0155	J	0.0197	0.00414	mg/Kg	☼	02/04/19 07:19	02/04/19 10:44	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.3		1.0	1.0	%			02/04/19 11:10	1
Percent Solids	83.7		1.0	1.0	%			02/04/19 11:10	1

Client Sample Results

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-179991-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Client Sample ID: SJRP-TB03-01302019 Lab Sample ID: 600-179991-3

Date Collected: 01/30/19 09:45 **Matrix: Water**
Date Received: 01/31/19 11:08

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			02/01/19 15:26	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			02/01/19 15:26	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			02/01/19 15:26	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			02/01/19 15:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*78*		*50 - 134*		*02/01/19 15:26*	*1*
Dibromofluoromethane	*84*		*62 - 130*		*02/01/19 15:26*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*02/01/19 15:26*	*1*
4-Bromofluorobenzene	*86*		*67 - 139*		*02/01/19 15:26*	*1*

Client Sample ID: SJRP-EB02-01302019 Lab Sample ID: 600-179991-4

Date Collected: 01/30/19 11:00 **Matrix: Water**
Date Received: 01/31/19 11:08

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.000477**	**J**	0.00100	0.000176	mg/L			02/01/19 15:50	1
Ethylbenzene	**0.00100**		0.00100	0.000212	mg/L			02/01/19 15:50	1
Toluene	**0.00192**		0.00100	0.000198	mg/L			02/01/19 15:50	1
Xylenes, Total	**0.0118**		0.00200	0.000366	mg/L			02/01/19 15:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*50 - 134*		*02/01/19 15:50*	*1*
Dibromofluoromethane	*87*		*62 - 130*		*02/01/19 15:50*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*02/01/19 15:50*	*1*
4-Bromofluorobenzene	*86*		*67 - 139*		*02/01/19 15:50*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			02/06/19 15:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*102*		*50 - 150*		*02/06/19 15:20*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0890	U	0.0978	0.0890	mg/L		02/02/19 17:10	02/05/19 15:08	1
ORO C24-C40	0.0890	U	0.0978	0.0890	mg/L		02/02/19 17:10	02/05/19 15:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*94*		*50 - 150*	*02/02/19 17:10*	*02/05/19 15:08*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.234**	**J**	0.500	0.0926	mg/L		02/07/19 08:58	02/08/19 13:31	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		02/07/19 08:58	02/08/19 13:31	1
Barium	**0.00360**	**J**	0.0200	0.000530	mg/L		02/07/19 08:58	02/08/19 13:31	1
Boron	0.0116	U	0.200	0.0116	mg/L		02/07/19 08:58	02/08/19 13:31	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		02/07/19 08:58	02/08/19 13:31	1

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179991-1

Client Sample ID: SJRP-EB02-01302019

Lab Sample ID: 600-179991-4
Matrix: Water
Date Collected: 01/30/19 11:00
Date Received: 01/31/19 11:08

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.00159	U	0.0100	0.00159	mg/L		02/07/19 08:58	02/08/19 13:31	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		02/07/19 08:58	02/08/19 13:31	1
Iron	**0.184**	**J**	0.400	0.0270	mg/L		02/07/19 08:58	02/08/19 13:31	1
Lead	0.00219	U	0.0100	0.00219	mg/L		02/07/19 08:58	02/08/19 13:31	1
Manganese	**0.0124**		0.0100	0.000360	mg/L		02/07/19 08:58	02/08/19 13:31	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		02/07/19 08:58	02/08/19 13:31	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		02/07/19 08:58	02/08/19 13:31	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		02/07/19 08:58	02/08/19 13:31	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		02/04/19 13:40	02/05/19 12:55	1

Client Sample ID: SJRP-MW17-09-10-01302019

Lab Sample ID: 600-179991-5
Matrix: Solid
Date Collected: 01/30/19 12:20
Percent Solids: 90.0
Date Received: 01/31/19 11:08

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**16.1**		2.56	0.323	mg/Kg		01/31/19 15:35	02/04/19 19:21	10
Ethylbenzene	**29.0**		2.56	0.523	mg/Kg		01/31/19 15:35	02/04/19 19:21	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*61*		*61 - 130*	*01/31/19 15:35*	*02/04/19 19:21*	*10*
Dibromofluoromethane	*87*		*68 - 140*	*01/31/19 15:35*	*02/04/19 19:21*	*10*
Toluene-d8 (Surr)	*96*		*50 - 130*	*01/31/19 15:35*	*02/04/19 19:21*	*10*
4-Bromofluorobenzene	*85*		*57 - 140*	*01/31/19 15:35*	*02/04/19 19:21*	*10*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	**187**		25.6	7.07	mg/Kg		01/31/19 15:35	02/04/19 19:46	100
Xylenes, Total	**420**		25.6	5.79	mg/Kg		01/31/19 15:35	02/04/19 19:46	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*65*		*61 - 130*	*01/31/19 15:35*	*02/04/19 19:46*	*100*
Dibromofluoromethane	*93*		*68 - 140*	*01/31/19 15:35*	*02/04/19 19:46*	*100*
Toluene-d8 (Surr)	*111*		*50 - 130*	*01/31/19 15:35*	*02/04/19 19:46*	*100*
4-Bromofluorobenzene	*95*		*57 - 140*	*01/31/19 15:35*	*02/04/19 19:46*	*100*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	**3490**		5.76	2.88	mg/Kg	☼	02/04/19 11:08	02/05/19 19:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*81*		*50 - 150*	*02/04/19 11:08*	*02/05/19 19:35*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**100**		5.56	2.78	mg/Kg	☼	02/04/19 12:08	02/05/19 20:00	1
ORO C24-C40	**6.31**		5.56	2.78	mg/Kg	☼	02/04/19 12:08	02/05/19 20:00	1

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179991-1

Client Sample ID: SJRP-MW17-09-10-01302019

Lab Sample ID: 600-179991-5
Date Collected: 01/30/19 12:20
Matrix: Solid
Date Received: 01/31/19 11:08
Percent Solids: 90.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	106		50 - 150	02/04/19 12:08	02/05/19 20:00	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6510		27.5	0.330	mg/Kg	☼	02/08/19 14:20	02/11/19 15:12	1
Arsenic	2.34		1.10	0.240	mg/Kg	☼	02/08/19 14:20	02/11/19 15:12	1
Barium	83.2		1.10	0.0330	mg/Kg	☼	02/08/19 14:20	02/11/19 15:12	1
Boron	0.864	J	22.0	0.425	mg/Kg	☼	02/08/19 14:20	02/11/19 15:12	1
Cadmium	0.204	J	0.275	0.0282	mg/Kg	☼	02/08/19 14:20	02/11/19 15:12	1
Chromium	3.73		0.550	0.0557	mg/Kg	☼	02/08/19 14:20	02/11/19 15:12	1
Cobalt	13.2		0.550	0.0744	mg/Kg	☼	02/08/19 14:20	02/11/19 15:12	1
Iron	11000		22.0	2.78	mg/Kg	☼	02/08/19 14:20	02/11/19 15:12	1
Lead	7.32		0.550	0.116	mg/Kg	☼	02/08/19 14:20	02/11/19 15:12	1
Manganese	4090		16.5	0.419	mg/Kg	☼	02/08/19 14:20	02/12/19 15:26	10
Molybdenum	6.49		0.550	0.150	mg/Kg	☼	02/08/19 14:20	02/12/19 10:40	1
Nickel	10.9		1.10	0.129	mg/Kg	☼	02/08/19 14:20	02/11/19 15:12	1
Selenium	2.22		2.20	0.285	mg/Kg	☼	02/08/19 14:20	02/11/19 15:12	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00391	U	0.0186	0.00391	mg/Kg	☼	02/04/19 07:19	02/04/19 10:46	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.0		1.0	1.0	%			02/04/19 11:10	1
Percent Solids	90.0		1.0	1.0	%			02/04/19 11:10	1

Client Sample ID: SJRP-MW17-09-10-01302019-2

Lab Sample ID: 600-179991-6
Date Collected: 01/30/19 12:20
Matrix: Solid
Date Received: 01/31/19 11:08
Percent Solids: 90.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	7.79		2.87	0.361	mg/Kg		01/31/19 15:35	02/04/19 20:10	10
Toluene	91.5		2.87	0.791	mg/Kg		01/31/19 15:35	02/04/19 20:10	10
Ethylbenzene	16.6		2.87	0.585	mg/Kg		01/31/19 15:35	02/04/19 20:10	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	62		61 - 130	01/31/19 15:35	02/04/19 20:10	10
Dibromofluoromethane	90		68 - 140	01/31/19 15:35	02/04/19 20:10	10
Toluene-d8 (Surr)	104		50 - 130	01/31/19 15:35	02/04/19 20:10	10
4-Bromofluorobenzene	98		57 - 140	01/31/19 15:35	02/04/19 20:10	10

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	206		28.7	6.48	mg/Kg		01/31/19 15:35	02/04/19 20:35	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	63		61 - 130	01/31/19 15:35	02/04/19 20:35	100
Dibromofluoromethane	90		68 - 140	01/31/19 15:35	02/04/19 20:35	100
Toluene-d8 (Surr)	111		50 - 130	01/31/19 15:35	02/04/19 20:35	100

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179991-1

Client Sample ID: SJRP-MW17-09-10-01302019-2
Date Collected: 01/30/19 12:20
Date Received: 01/31/19 11:08

Lab Sample ID: 600-179991-6
Matrix: Solid
Percent Solids: 90.2

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		57 - 140	01/31/19 15:35	02/04/19 20:35	100

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3490		5.60	2.80	mg/Kg	☼	02/04/19 11:08	02/05/19 20:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	85		50 - 150	02/04/19 11:08	02/05/19 20:09	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ORO C24-C40	4.16	J	5.49	2.74	mg/Kg	☼	02/04/19 12:08	02/05/19 20:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	64		50 - 150	02/04/19 12:08	02/05/19 20:17	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1070		110	54.9	mg/Kg	☼	02/04/19 12:08	02/06/19 17:54	20

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6320		27.2	0.326	mg/Kg	☼	02/08/19 14:20	02/11/19 15:20	1
Arsenic	1.80		1.09	0.237	mg/Kg	☼	02/08/19 14:20	02/11/19 15:20	1
Barium	67.0		1.09	0.0326	mg/Kg	☼	02/08/19 14:20	02/11/19 15:20	1
Boron	0.777	J	21.7	0.419	mg/Kg	☼	02/08/19 14:20	02/11/19 15:20	1
Cadmium	0.196	J	0.272	0.0278	mg/Kg	☼	02/08/19 14:20	02/11/19 15:20	1
Chromium	3.67		0.543	0.0550	mg/Kg	☼	02/08/19 14:20	02/11/19 15:20	1
Cobalt	14.3		0.543	0.0735	mg/Kg	☼	02/08/19 14:20	02/11/19 15:20	1
Iron	9450		21.7	2.75	mg/Kg	☼	02/08/19 14:20	02/11/19 15:20	1
Lead	7.48		0.543	0.114	mg/Kg	☼	02/08/19 14:20	02/11/19 15:20	1
Manganese	2100		16.3	0.414	mg/Kg	☼	02/08/19 14:20	02/12/19 15:28	10
Molybdenum	6.06		0.543	0.148	mg/Kg	☼	02/08/19 14:20	02/11/19 15:20	1
Nickel	9.51		1.09	0.127	mg/Kg	☼	02/08/19 14:20	02/11/19 15:20	1
Selenium	0.331	J	2.17	0.281	mg/Kg	☼	02/08/19 14:20	02/11/19 15:20	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0156	J	0.0188	0.00397	mg/Kg	☼	02/04/19 07:19	02/04/19 10:48	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.8		1.0	1.0	%			02/04/19 11:10	1
Percent Solids	90.2		1.0	1.0	%			02/04/19 11:10	1

Definitions/Glossary

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-179991-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Surrogate Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179991-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(61-130)	(68-140)	(50-130)	(57-140)
600-179991-1	SJRP-MW19-10-11-01292019	75	80	79	79
600-179991-2	SJRP-MW19-18-19-01292019	87	90	79	101
600-179991-5	SJRP-MW17-09-10-01302019	61	87	96	85
600-179991-5 - DL	SJRP-MW17-09-10-01302019	65	93	111	95
600-179991-6	SJRP-MW17-09-10-01302019-2	62	90	104	98
600-179991-6 - DL	SJRP-MW17-09-10-01302019-2	63	90	111	100
LCS 600-257443/3	Lab Control Sample	84	91	87	105
LCS 600-257656/1-A	Lab Control Sample	65	95	105	86
LCSD 600-257443/4	Lab Control Sample Dup	85	91	83	102
LCSD 600-257656/2-A	Lab Control Sample Dup	63	88	103	85
MB 600-257443/6	Method Blank	96	90	76	97
MB 600-257656/3-A	Method Blank	63	92	104	90

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(50-134)	(62-130)	(70-130)	(67-139)
600-179991-3	SJRP-TB03-01302019	78	84	91	86
600-179991-4	SJRP-EB02-01302019	82	87	91	86
LCS 600-257558/3	Lab Control Sample	75	90	97	83
LCSD 600-257558/4	Lab Control Sample Dup	82	94	96	86
MB 600-257558/6	Method Blank	80	87	92	88

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(50-150)
600-179991-1	SJRP-MW19-10-11-01292019	87
600-179991-2	SJRP-MW19-18-19-01292019	88
600-179991-5	SJRP-MW17-09-10-01302019	81
600-179991-6	SJRP-MW17-09-10-01302019-2	85
LCS 490-573386/2-A	Lab Control Sample	103

Surrogate Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179991-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(50-150)
LCSD 490-573386/3-A	Lab Control Sample Dup	105
MB 490-573386/1-A	Method Blank	90

Surrogate Legend
TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(50-150)
600-179991-4	SJRP-EB02-01302019	102
LCS 490-573790/5	Lab Control Sample	104
LCSD 490-573790/6	Lab Control Sample Dup	88
MB 490-573790/8	Method Blank	103

Surrogate Legend
TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		OTPH1
Lab Sample ID	Client Sample ID	(50-150)
600-179991-1	SJRP-MW19-10-11-01292019	102
600-179991-2	SJRP-MW19-18-19-01292019	91
600-179991-5	SJRP-MW17-09-10-01302019	106
600-179991-6	SJRP-MW17-09-10-01302019-2	64
LCS 490-573463/2-A	Lab Control Sample	106
MB 490-573463/1-A	Method Blank	105

Surrogate Legend
OTPH = o-Terphenyl (Surr)

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		OTPH1
Lab Sample ID	Client Sample ID	(50-150)
600-179991-4	SJRP-EB02-01302019	94
LCS 490-573322/2-A	Lab Control Sample	91
MB 490-573322/1-A	Method Blank	95

Surrogate Legend
OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179991-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-257443/6
Matrix: Solid
Analysis Batch: 257443

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			01/31/19 12:10	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			01/31/19 12:10	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			01/31/19 12:10	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			01/31/19 12:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*61 - 130*		*01/31/19 12:10*	*1*
Dibromofluoromethane	*90*		*68 - 140*		*01/31/19 12:10*	*1*
Toluene-d8 (Surr)	*76*		*50 - 130*		*01/31/19 12:10*	*1*
4-Bromofluorobenzene	*97*		*57 - 140*		*01/31/19 12:10*	*1*

Lab Sample ID: LCS 600-257443/3
Matrix: Solid
Analysis Batch: 257443

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.05230		mg/Kg		105	70 - 131		
Ethylbenzene			0.0500	0.05303		mg/Kg		106	66 - 130		
Toluene			0.0500	0.05166		mg/Kg		103	67 - 130		
Xylenes, Total			0.100	0.1051		mg/Kg		105	63 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*84*		*61 - 130*
Dibromofluoromethane	*91*		*68 - 140*
Toluene-d8 (Surr)	*87*		*50 - 130*
4-Bromofluorobenzene	*105*		*57 - 140*

Lab Sample ID: LCSD 600-257443/4
Matrix: Solid
Analysis Batch: 257443

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.04320		mg/Kg		86	70 - 131	19	30
Ethylbenzene			0.0500	0.04184		mg/Kg		84	66 - 130	24	30
Toluene			0.0500	0.04193		mg/Kg		84	67 - 130	21	30
Xylenes, Total			0.100	0.08621		mg/Kg		86	63 - 130	20	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*61 - 130*
Dibromofluoromethane	*91*		*68 - 140*
Toluene-d8 (Surr)	*83*		*50 - 130*
4-Bromofluorobenzene	*102*		*57 - 140*

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179991-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-257558/6
Matrix: Water
Analysis Batch: 257558

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			02/01/19 15:02	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			02/01/19 15:02	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			02/01/19 15:02	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			02/01/19 15:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*50 - 134*		*02/01/19 15:02*	*1*
Dibromofluoromethane	*87*		*62 - 130*		*02/01/19 15:02*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*02/01/19 15:02*	*1*
4-Bromofluorobenzene	*88*		*67 - 139*		*02/01/19 15:02*	*1*

Lab Sample ID: LCS 600-257558/3
Matrix: Water
Analysis Batch: 257558

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0100	0.01009		mg/L		101	70 - 130		
Ethylbenzene			0.0100	0.01098		mg/L		110	70 - 130		
Toluene			0.0100	0.01153		mg/L		115	70 - 130		
Xylenes, Total			0.0200	0.02141		mg/L		107	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*75*		*50 - 134*
Dibromofluoromethane	*90*		*62 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*
4-Bromofluorobenzene	*83*		*67 - 139*

Lab Sample ID: LCSD 600-257558/4
Matrix: Water
Analysis Batch: 257558

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0100	0.009801		mg/L		98	70 - 130	3	20
Ethylbenzene			0.0100	0.01047		mg/L		105	70 - 130	5	20
Toluene			0.0100	0.01086		mg/L		109	70 - 130	6	20
Xylenes, Total			0.0200	0.02042		mg/L		102	70 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*82*		*50 - 134*
Dibromofluoromethane	*94*		*62 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*
4-Bromofluorobenzene	*86*		*67 - 139*

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179991-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-257656/3-A
Matrix: Solid
Analysis Batch: 257668

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 257656

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0788	U	0.625	0.0788	mg/Kg		02/04/19 10:45	02/04/19 15:37	1
Ethylbenzene	0.128	U	0.625	0.128	mg/Kg		02/04/19 10:45	02/04/19 15:37	1
Toluene	0.173	U	0.625	0.173	mg/Kg		02/04/19 10:45	02/04/19 15:37	1
Xylenes, Total	0.141	U	0.625	0.141	mg/Kg		02/04/19 10:45	02/04/19 15:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*63*		*61 - 130*	*02/04/19 10:45*	*02/04/19 15:37*	*1*
Dibromofluoromethane	*92*		*68 - 140*	*02/04/19 10:45*	*02/04/19 15:37*	*1*
Toluene-d8 (Surr)	*104*		*50 - 130*	*02/04/19 10:45*	*02/04/19 15:37*	*1*
4-Bromofluorobenzene	*90*		*57 - 140*	*02/04/19 10:45*	*02/04/19 15:37*	*1*

Lab Sample ID: LCS 600-257656/1-A
Matrix: Solid
Analysis Batch: 257668

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 257656

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	6.25	5.869		mg/Kg		94	70 - 131
Ethylbenzene	6.25	7.243		mg/Kg		116	66 - 130
Toluene	6.25	6.404		mg/Kg		102	67 - 130
Xylenes, Total	12.5	13.83		mg/Kg		111	63 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*65*		*61 - 130*
Dibromofluoromethane	*95*		*68 - 140*
Toluene-d8 (Surr)	*105*		*50 - 130*
4-Bromofluorobenzene	*86*		*57 - 140*

Lab Sample ID: LCSD 600-257656/2-A
Matrix: Solid
Analysis Batch: 257668

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 257656

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	6.25	6.245		mg/Kg		100	70 - 131	6	30
Ethylbenzene	6.25	7.824		mg/Kg		125	66 - 130	8	30
Toluene	6.25	7.057		mg/Kg		113	67 - 130	10	30
Xylenes, Total	12.5	14.99		mg/Kg		120	63 - 130	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*63*		*61 - 130*
Dibromofluoromethane	*88*		*68 - 140*
Toluene-d8 (Surr)	*103*		*50 - 130*
4-Bromofluorobenzene	*85*		*57 - 140*

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179991-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 490-573386/1-A
Matrix: Solid
Analysis Batch: 573402

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 573386

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		02/04/19 09:32	02/05/19 11:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*90*		*50 - 150*	*02/04/19 09:32*	*02/05/19 11:37*	*1*

Lab Sample ID: LCS 490-573386/2-A
Matrix: Solid
Analysis Batch: 573402

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 573386

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	500	549.6		mg/Kg		110	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*103*		*50 - 150*

Lab Sample ID: LCSD 490-573386/3-A
Matrix: Solid
Analysis Batch: 573402

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 573386

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	500	546.7		mg/Kg		109	70 - 130	1	21

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*105*		*50 - 150*

Lab Sample ID: MB 490-573790/8
Matrix: Water
Analysis Batch: 573790

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			02/06/19 12:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*103*		*50 - 150*		*02/06/19 12:57*	*1*

Lab Sample ID: LCS 490-573790/5
Matrix: Water
Analysis Batch: 573790

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	1.00	1.125		mg/L		113	66 - 140

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179991-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: LCS 490-573790/5
Matrix: Water
Analysis Batch: 573790

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	*104*		*50 - 150*

Lab Sample ID: LCSD 490-573790/6
Matrix: Water
Analysis Batch: 573790

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	1.00	1.117		mg/L		112	66 - 140	1	42

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	*88*		*50 - 150*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Lab Sample ID: MB 490-573322/1-A
Matrix: Water
Analysis Batch: 573663

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 573322

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0879	U	0.0966	0.0879	mg/L		02/02/19 17:10	02/05/19 13:33	1
ORO C24-C40	0.0879	U	0.0966	0.0879	mg/L		02/02/19 17:10	02/05/19 13:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	*95*		*50 - 150*	*02/02/19 17:10*	*02/05/19 13:33*	*1*

Lab Sample ID: LCS 490-573322/2-A
Matrix: Water
Analysis Batch: 573663

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 573322

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	0.778	0.8534		mg/L		110	46 - 132

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	*91*		*50 - 150*

Lab Sample ID: MB 490-573463/1-A
Matrix: Solid
Analysis Batch: 573659

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 573463

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.50	U	5.00	2.50	mg/Kg		02/04/19 12:08	02/05/19 14:29	1
ORO C24-C40	2.50	U	5.00	2.50	mg/Kg		02/04/19 12:08	02/05/19 14:29	1

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179991-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Lab Sample ID: MB 490-573463/1-A
Matrix: Solid
Analysis Batch: 573659

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 573463

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	105		50 - 150	02/04/19 12:08	02/05/19 14:29	1

Lab Sample ID: LCS 490-573463/2-A
Matrix: Solid
Analysis Batch: 573659

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 573463

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	40.0	46.05		mg/Kg		115	54 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	106		50 - 150

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-257945/1-A
Matrix: Water
Analysis Batch: 258058

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 257945

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		02/07/19 08:58	02/08/19 12:29	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		02/07/19 08:58	02/08/19 12:29	1
Barium	0.000530	U	0.0200	0.000530	mg/L		02/07/19 08:58	02/08/19 12:29	1
Boron	0.0116	U	0.200	0.0116	mg/L		02/07/19 08:58	02/08/19 12:29	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		02/07/19 08:58	02/08/19 12:29	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		02/07/19 08:58	02/08/19 12:29	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		02/07/19 08:58	02/08/19 12:29	1
Iron	0.0270	U	0.400	0.0270	mg/L		02/07/19 08:58	02/08/19 12:29	1
Lead	0.00219	U	0.0100	0.00219	mg/L		02/07/19 08:58	02/08/19 12:29	1
Manganese	0.000360	U	0.0100	0.000360	mg/L		02/07/19 08:58	02/08/19 12:29	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		02/07/19 08:58	02/08/19 12:29	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		02/07/19 08:58	02/08/19 12:29	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		02/07/19 08:58	02/08/19 12:29	1

Lab Sample ID: LCS 600-257945/2-A
Matrix: Water
Analysis Batch: 258058

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 257945

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	10.54		mg/L		105	80 - 120
Arsenic	1.00	1.029		mg/L		103	80 - 120
Barium	1.00	1.035		mg/L		104	80 - 120
Boron	1.00	1.029		mg/L		103	80 - 120
Cadmium	0.500	0.5170		mg/L		103	80 - 120
Chromium	1.00	1.056		mg/L		106	80 - 120
Cobalt	1.00	1.053		mg/L		105	80 - 120
Iron	10.0	10.59		mg/L		106	80 - 120

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179991-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCS 600-257945/2-A
Matrix: Water
Analysis Batch: 258058

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 257945

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	1.00	1.043		mg/L		104	80 - 120
Manganese	1.00	1.027		mg/L		103	80 - 120
Molybdenum	1.00	1.128		mg/L		113	80 - 120
Nickel	1.00	1.038		mg/L		104	80 - 120
Selenium	1.00	1.027		mg/L		103	80 - 120

Lab Sample ID: MB 600-258073/1-A
Matrix: Solid
Analysis Batch: 258199

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 258073

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.300	U	25.0	0.300	mg/Kg		02/08/19 14:20	02/11/19 15:01	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		02/08/19 14:20	02/11/19 15:01	1
Barium	0.0300	U	1.00	0.0300	mg/Kg		02/08/19 14:20	02/11/19 15:01	1
Boron	0.386	U	20.0	0.386	mg/Kg		02/08/19 14:20	02/11/19 15:01	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		02/08/19 14:20	02/11/19 15:01	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		02/08/19 14:20	02/11/19 15:01	1
Cobalt	0.0676	U	0.500	0.0676	mg/Kg		02/08/19 14:20	02/11/19 15:01	1
Iron	2.53	U	20.0	2.53	mg/Kg		02/08/19 14:20	02/11/19 15:01	1
Lead	0.105	U	0.500	0.105	mg/Kg		02/08/19 14:20	02/11/19 15:01	1
Manganese	0.0381	U	1.50	0.0381	mg/Kg		02/08/19 14:20	02/11/19 15:01	1
Nickel	0.117	U	1.00	0.117	mg/Kg		02/08/19 14:20	02/11/19 15:01	1
Selenium	0.259	U	2.00	0.259	mg/Kg		02/08/19 14:20	02/11/19 15:01	1

Lab Sample ID: MB 600-258073/1-A
Matrix: Solid
Analysis Batch: 258232

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 258073

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.300	U	25.0	0.300	mg/Kg		02/08/19 14:20	02/12/19 10:26	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		02/08/19 14:20	02/12/19 10:26	1
Barium	0.0300	U	1.00	0.0300	mg/Kg		02/08/19 14:20	02/12/19 10:26	1
Boron	0.386	U	20.0	0.386	mg/Kg		02/08/19 14:20	02/12/19 10:26	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		02/08/19 14:20	02/12/19 10:26	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		02/08/19 14:20	02/12/19 10:26	1
Cobalt	0.0676	U	0.500	0.0676	mg/Kg		02/08/19 14:20	02/12/19 10:26	1
Iron	2.53	U	20.0	2.53	mg/Kg		02/08/19 14:20	02/12/19 10:26	1
Lead	0.1400	J	0.500	0.105	mg/Kg		02/08/19 14:20	02/12/19 10:26	1
Molybdenum	0.136	U	0.500	0.136	mg/Kg		02/08/19 14:20	02/12/19 10:26	1
Nickel	0.117	U	1.00	0.117	mg/Kg		02/08/19 14:20	02/12/19 10:26	1
Selenium	0.259	U	2.00	0.259	mg/Kg		02/08/19 14:20	02/12/19 10:26	1

Lab Sample ID: LCS 600-258073/2-A
Matrix: Solid
Analysis Batch: 258199

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 258073

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	500	536.0		mg/Kg		107	42 - 158
Arsenic	50.0	52.40		mg/Kg		105	78 - 122

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179991-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCS 600-258073/2-A
Matrix: Solid
Analysis Batch: 258199

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 258073

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	50.0	52.05		mg/Kg		104	80 - 120
Boron	50.0	51.35		mg/Kg		103	68 - 133
Cadmium	25.0	26.36		mg/Kg		105	81 - 119
Chromium	50.0	52.75		mg/Kg		106	81 - 119
Cobalt	50.0	53.30		mg/Kg		107	82 - 118
Iron	500	527.5		mg/Kg		106	51 - 149
Lead	50.0	51.10		mg/Kg		102	79 - 121
Manganese	50.0	51.55		mg/Kg		103	81 - 119
Nickel	50.0	51.90		mg/Kg		104	81 - 119
Selenium	50.0	52.45		mg/Kg		105	80 - 120

Lab Sample ID: LCS 600-258073/2-A
Matrix: Solid
Analysis Batch: 258232

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 258073

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	500	535.5		mg/Kg		107	42 - 158
Arsenic	50.0	49.63		mg/Kg		99	78 - 122
Barium	50.0	53.80		mg/Kg		108	80 - 120
Boron	50.0	52.75		mg/Kg		106	68 - 133
Cadmium	25.0	25.14		mg/Kg		101	81 - 119
Chromium	50.0	55.85		mg/Kg		112	81 - 119
Cobalt	50.0	52.80		mg/Kg		106	82 - 118
Iron	500	523.5		mg/Kg		105	51 - 149
Lead	50.0	50.55		mg/Kg		101	79 - 121
Molybdenum	50.0	56.20		mg/Kg		112	75 - 125
Nickel	50.0	51.45		mg/Kg		103	81 - 119
Selenium	50.0	48.97		mg/Kg		98	80 - 120

Lab Sample ID: 600-179991-1 MS
Matrix: Solid
Analysis Batch: 258199

Client Sample ID: SJRP-MW19-10-11-01292019
Prep Type: Total/NA
Prep Batch: 258073

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	12600		563	17460	4	mg/Kg	☼	869	75 - 125
Arsenic	6.44		56.3	60.96		mg/Kg	☼	97	75 - 125
Barium	32.3	F1	56.3	122.1	F1	mg/Kg	☼	159	75 - 125
Boron	1.94	J F1	56.3	26.98	F1	mg/Kg	☼	44	75 - 125
Cadmium	0.287		28.2	29.45		mg/Kg	☼	104	75 - 125
Chromium	6.93		56.3	65.80		mg/Kg	☼	104	75 - 125
Cobalt	6.97		56.3	70.19		mg/Kg	☼	112	75 - 125
Iron	18700		563	22780	4	mg/Kg	☼	733	75 - 125
Lead	17.9		56.3	76.90		mg/Kg	☼	105	75 - 125
Manganese	75.1		56.3	130.9		mg/Kg	☼	99	75 - 125
Nickel	9.33		56.3	71.10		mg/Kg	☼	110	75 - 125
Selenium	0.292	U	56.3	54.47		mg/Kg	☼	97	75 - 125

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179991-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-179991-1 MS
Matrix: Solid
Analysis Batch: 258232

Client Sample ID: SJRP-MW19-10-11-01292019
Prep Type: Total/NA
Prep Batch: 258073

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	12800		563	15930	4	mg/Kg	☼	551	75 - 125
Arsenic	5.31		56.3	57.46		mg/Kg	☼	93	75 - 125
Barium	34.4	F1	56.3	116.5	F1	mg/Kg	☼	146	75 - 125
Boron	2.35	J F1	56.3	26.20	F1	mg/Kg	☼	42	75 - 125
Cadmium	0.310		28.2	28.32		mg/Kg	☼	99	75 - 125
Chromium	7.40		56.3	68.84		mg/Kg	☼	109	75 - 125
Cobalt	6.87		56.3	69.63		mg/Kg	☼	111	75 - 125
Iron	18800		563	20680	4	mg/Kg	☼	336	75 - 125
Lead	17.4	B	56.3	76.11		mg/Kg	☼	104	75 - 125
Molybdenum	0.411	J	56.3	50.38		mg/Kg	☼	89	75 - 125
Nickel	8.96		56.3	70.31		mg/Kg	☼	109	75 - 125
Selenium	0.292	U	56.3	51.64		mg/Kg	☼	92	75 - 125

Lab Sample ID: 600-179991-1 DU
Matrix: Solid
Analysis Batch: 258199

Client Sample ID: SJRP-MW19-10-11-01292019
Prep Type: Total/NA
Prep Batch: 258073

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	12600		12700		mg/Kg	☼	1	20
Arsenic	6.44		4.623	F3	mg/Kg	☼	33	20
Barium	32.3	F1	40.06	F3	mg/Kg	☼	21	20
Boron	1.94	J F1	1.820	J	mg/Kg	☼	6	20
Cadmium	0.287		0.2926	J	mg/Kg	☼	2	20
Chromium	6.93		6.906		mg/Kg	☼	0.4	20
Cobalt	6.97		6.174		mg/Kg	☼	12	20
Iron	18700		18030		mg/Kg	☼	3	20
Lead	17.9		16.49		mg/Kg	☼	8	20
Manganese	75.1		71.16		mg/Kg	☼	5	20
Nickel	9.33		8.445		mg/Kg	☼	10	20
Selenium	0.292	U	0.303	U	mg/Kg	☼	NC	20

Lab Sample ID: 600-179991-1 DU
Matrix: Solid
Analysis Batch: 258232

Client Sample ID: SJRP-MW19-10-11-01292019
Prep Type: Total/NA
Prep Batch: 258073

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	12800		12750		mg/Kg	☼	0.6	20
Arsenic	5.31		3.804	F3	mg/Kg	☼	33	20
Barium	34.4	F1	42.88	F3	mg/Kg	☼	22	20
Boron	2.35	J F1	2.329	J	mg/Kg	☼	1	20
Cadmium	0.310		0.2926	J	mg/Kg	☼	6	20
Chromium	7.40		7.280		mg/Kg	☼	2	20
Cobalt	6.87		6.057		mg/Kg	☼	13	20
Iron	18800		17970		mg/Kg	☼	4	20
Lead	17.4	B	16.52		mg/Kg	☼	5	20
Molybdenum	0.411	J	0.2985	J F5	mg/Kg	☼	32	20
Nickel	8.96		8.111		mg/Kg	☼	10	20
Selenium	0.292	U	0.303	U	mg/Kg	☼	NC	20

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179991-1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Lab Sample ID: LB 600-257650/1-B — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 257809 — **Prep Batch: 257699**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		02/04/19 13:32	02/05/19 11:56	1

Lab Sample ID: MB 600-257699/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 257809 — **Prep Batch: 257699**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		02/04/19 13:32	02/05/19 11:52	1

Lab Sample ID: LCS 600-257699/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 257809 — **Prep Batch: 257699**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00375	0.003315		mg/L		88	70 - 130

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-257624/7-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 257661 — **Prep Batch: 257624**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00330	U	0.0157	0.00330	mg/Kg		02/04/19 07:19	02/04/19 09:57	1

Lab Sample ID: LCSSRM 600-257624/8-A ^100 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 257661 — **Prep Batch: 257624**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	29.0	28.14		mg/Kg		97.0	59.7 - 115.2

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179991-1

GC/MS VOA

Analysis Batch: 257443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179991-1	SJRP-MW19-10-11-01292019	Total/NA	Solid	8260B	257522
600-179991-2	SJRP-MW19-18-19-01292019	Total/NA	Solid	8260B	257522
MB 600-257443/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-257443/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-257443/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Prep Batch: 257522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179991-1	SJRP-MW19-10-11-01292019	Total/NA	Solid	5035	
600-179991-2	SJRP-MW19-18-19-01292019	Total/NA	Solid	5035	

Analysis Batch: 257558

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179991-3	SJRP-TB03-01302019	Total/NA	Water	8260B	
600-179991-4	SJRP-EB02-01302019	Total/NA	Water	8260B	
MB 600-257558/6	Method Blank	Total/NA	Water	8260B	
LCS 600-257558/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-257558/4	Lab Control Sample Dup	Total/NA	Water	8260B	

Prep Batch: 257656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-257656/3-A	Method Blank	Total/NA	Solid	5030B	
LCS 600-257656/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 600-257656/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Prep Batch: 257657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179991-5	SJRP-MW17-09-10-01302019	Total/NA	Solid	5035	
600-179991-5 - DL	SJRP-MW17-09-10-01302019	Total/NA	Solid	5035	
600-179991-6	SJRP-MW17-09-10-01302019-2	Total/NA	Solid	5035	
600-179991-6 - DL	SJRP-MW17-09-10-01302019-2	Total/NA	Solid	5035	

Analysis Batch: 257668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179991-5	SJRP-MW17-09-10-01302019	Total/NA	Solid	8260B	257657
600-179991-5 - DL	SJRP-MW17-09-10-01302019	Total/NA	Solid	8260B	257657
600-179991-6	SJRP-MW17-09-10-01302019-2	Total/NA	Solid	8260B	257657
600-179991-6 - DL	SJRP-MW17-09-10-01302019-2	Total/NA	Solid	8260B	257657
MB 600-257656/3-A	Method Blank	Total/NA	Solid	8260B	257656
LCS 600-257656/1-A	Lab Control Sample	Total/NA	Solid	8260B	257656
LCSD 600-257656/2-A	Lab Control Sample Dup	Total/NA	Solid	8260B	257656

GC VOA

Prep Batch: 573386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179991-1	SJRP-MW19-10-11-01292019	Total/NA	Solid	5030B	
600-179991-2	SJRP-MW19-18-19-01292019	Total/NA	Solid	5030B	
600-179991-5	SJRP-MW17-09-10-01302019	Total/NA	Solid	5030B	
600-179991-6	SJRP-MW17-09-10-01302019-2	Total/NA	Solid	5030B	

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179991-1

GC VOA (Continued)

Prep Batch: 573386 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-573386/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 490-573386/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 490-573386/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 573402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179991-1	SJRP-MW19-10-11-01292019	Total/NA	Solid	8015C	573386
600-179991-2	SJRP-MW19-18-19-01292019	Total/NA	Solid	8015C	573386
600-179991-5	SJRP-MW17-09-10-01302019	Total/NA	Solid	8015C	573386
600-179991-6	SJRP-MW17-09-10-01302019-2	Total/NA	Solid	8015C	573386
MB 490-573386/1-A	Method Blank	Total/NA	Solid	8015C	573386
LCS 490-573386/2-A	Lab Control Sample	Total/NA	Solid	8015C	573386
LCSD 490-573386/3-A	Lab Control Sample Dup	Total/NA	Solid	8015C	573386

Analysis Batch: 573790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179991-4	SJRP-EB02-01302019	Total/NA	Water	8015C	
MB 490-573790/8	Method Blank	Total/NA	Water	8015C	
LCS 490-573790/5	Lab Control Sample	Total/NA	Water	8015C	
LCSD 490-573790/6	Lab Control Sample Dup	Total/NA	Water	8015C	

GC Semi VOA

Prep Batch: 573322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179991-4	SJRP-EB02-01302019	Total/NA	Water	3510C	
MB 490-573322/1-A	Method Blank	Total/NA	Water	3510C	
LCS 490-573322/2-A	Lab Control Sample	Total/NA	Water	3510C	

Prep Batch: 573463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179991-1	SJRP-MW19-10-11-01292019	Total/NA	Solid	3550C	
600-179991-2	SJRP-MW19-18-19-01292019	Total/NA	Solid	3550C	
600-179991-5	SJRP-MW17-09-10-01302019	Total/NA	Solid	3550C	
600-179991-6	SJRP-MW17-09-10-01302019-2	Total/NA	Solid	3550C	
600-179991-6 - DL	SJRP-MW17-09-10-01302019-2	Total/NA	Solid	3550C	
MB 490-573463/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-573463/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 573659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179991-1	SJRP-MW19-10-11-01292019	Total/NA	Solid	8015C	573463
600-179991-2	SJRP-MW19-18-19-01292019	Total/NA	Solid	8015C	573463
600-179991-5	SJRP-MW17-09-10-01302019	Total/NA	Solid	8015C	573463
600-179991-6	SJRP-MW17-09-10-01302019-2	Total/NA	Solid	8015C	573463
MB 490-573463/1-A	Method Blank	Total/NA	Solid	8015C	573463
LCS 490-573463/2-A	Lab Control Sample	Total/NA	Solid	8015C	573463

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179991-1

GC Semi VOA (Continued)

Analysis Batch: 573663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179991-4	SJRP-EB02-01302019	Total/NA	Water	8015C	573322
MB 490-573322/1-A	Method Blank	Total/NA	Water	8015C	573322
LCS 490-573322/2-A	Lab Control Sample	Total/NA	Water	8015C	573322

Analysis Batch: 573917

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179991-6 - DL	SJRP-MW17-09-10-01302019-2	Total/NA	Solid	8015C	573463

Metals

Prep Batch: 257624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179991-1	SJRP-MW19-10-11-01292019	Total/NA	Solid	7471A	
600-179991-2	SJRP-MW19-18-19-01292019	Total/NA	Solid	7471A	
600-179991-5	SJRP-MW17-09-10-01302019	Total/NA	Solid	7471A	
600-179991-6	SJRP-MW17-09-10-01302019-2	Total/NA	Solid	7471A	
MB 600-257624/7-A	Method Blank	Total/NA	Solid	7471A	
LCSSRM 600-257624/8-A ^100	Lab Control Sample	Total/NA	Solid	7471A	

Leach Batch: 257650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 600-257650/1-B	Method Blank	Total/NA	Water	1311	

Analysis Batch: 257661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179991-1	SJRP-MW19-10-11-01292019	Total/NA	Solid	7471A	257624
600-179991-2	SJRP-MW19-18-19-01292019	Total/NA	Solid	7471A	257624
600-179991-5	SJRP-MW17-09-10-01302019	Total/NA	Solid	7471A	257624
600-179991-6	SJRP-MW17-09-10-01302019-2	Total/NA	Solid	7471A	257624
MB 600-257624/7-A	Method Blank	Total/NA	Solid	7471A	257624
LCSSRM 600-257624/8-A ^100	Lab Control Sample	Total/NA	Solid	7471A	257624

Prep Batch: 257699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179991-4	SJRP-EB02-01302019	Total/NA	Water	7470A	
LB 600-257650/1-B	Method Blank	Total/NA	Water	7470A	257650
MB 600-257699/1-A	Method Blank	Total/NA	Water	7470A	
LCS 600-257699/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 257809

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179991-4	SJRP-EB02-01302019	Total/NA	Water	7470A	257699
LB 600-257650/1-B	Method Blank	Total/NA	Water	7470A	257699
MB 600-257699/1-A	Method Blank	Total/NA	Water	7470A	257699
LCS 600-257699/2-A	Lab Control Sample	Total/NA	Water	7470A	257699

Prep Batch: 257945

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179991-4	SJRP-EB02-01302019	Total/NA	Water	3010A	
MB 600-257945/1-A	Method Blank	Total/NA	Water	3010A	

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179991-1

Metals (Continued)

Prep Batch: 257945 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 600-257945/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 258058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179991-4	SJRP-EB02-01302019	Total/NA	Water	6010B	257945
MB 600-257945/1-A	Method Blank	Total/NA	Water	6010B	257945
LCS 600-257945/2-A	Lab Control Sample	Total/NA	Water	6010B	257945

Prep Batch: 258073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179991-1	SJRP-MW19-10-11-01292019	Total/NA	Solid	3050B	
600-179991-2	SJRP-MW19-18-19-01292019	Total/NA	Solid	3050B	
600-179991-5	SJRP-MW17-09-10-01302019	Total/NA	Solid	3050B	
600-179991-6	SJRP-MW17-09-10-01302019-2	Total/NA	Solid	3050B	
MB 600-258073/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 600-258073/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-179991-1 MS	SJRP-MW19-10-11-01292019	Total/NA	Solid	3050B	
600-179991-1 DU	SJRP-MW19-10-11-01292019	Total/NA	Solid	3050B	

Analysis Batch: 258199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179991-1	SJRP-MW19-10-11-01292019	Total/NA	Solid	6010B	258073
600-179991-2	SJRP-MW19-18-19-01292019	Total/NA	Solid	6010B	258073
600-179991-5	SJRP-MW17-09-10-01302019	Total/NA	Solid	6010B	258073
600-179991-6	SJRP-MW17-09-10-01302019-2	Total/NA	Solid	6010B	258073
MB 600-258073/1-A	Method Blank	Total/NA	Solid	6010B	258073
LCS 600-258073/2-A	Lab Control Sample	Total/NA	Solid	6010B	258073
600-179991-1 MS	SJRP-MW19-10-11-01292019	Total/NA	Solid	6010B	258073
600-179991-1 DU	SJRP-MW19-10-11-01292019	Total/NA	Solid	6010B	258073

Analysis Batch: 258232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179991-1	SJRP-MW19-10-11-01292019	Total/NA	Solid	6010B	258073
600-179991-2	SJRP-MW19-18-19-01292019	Total/NA	Solid	6010B	258073
600-179991-5	SJRP-MW17-09-10-01302019	Total/NA	Solid	6010B	258073
MB 600-258073/1-A	Method Blank	Total/NA	Solid	6010B	258073
LCS 600-258073/2-A	Lab Control Sample	Total/NA	Solid	6010B	258073
600-179991-1 MS	SJRP-MW19-10-11-01292019	Total/NA	Solid	6010B	258073
600-179991-1 DU	SJRP-MW19-10-11-01292019	Total/NA	Solid	6010B	258073

Analysis Batch: 258242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179991-5	SJRP-MW17-09-10-01302019	Total/NA	Solid	6010B	258073
600-179991-6	SJRP-MW17-09-10-01302019-2	Total/NA	Solid	6010B	258073

General Chemistry

Analysis Batch: 257666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179991-1	SJRP-MW19-10-11-01292019	Total/NA	Solid	2540B	

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179991-1

General Chemistry (Continued)

Analysis Batch: 257666 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179991-2	SJRP-MW19-18-19-01292019	Total/NA	Solid	2540B	
600-179991-5	SJRP-MW17-09-10-01302019	Total/NA	Solid	2540B	
600-179991-6	SJRP-MW17-09-10-01302019-2	Total/NA	Solid	2540B	

Lab Chronicle

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179991-1

Client Sample ID: SJRP-MW19-10-11-01292019 — **Lab Sample ID: 600-179991-1**
Date Collected: 01/29/19 17:20 — **Matrix: Solid**
Date Received: 01/31/19 11:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			257666	02/04/19 11:10	DTN	TAL HOU

Client Sample ID: SJRP-MW19-10-11-01292019 — **Lab Sample ID: 600-179991-1**
Date Collected: 01/29/19 17:20 — **Matrix: Solid**
Date Received: 01/31/19 11:08 — **Percent Solids: 82.9**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.1 g	5 mL	257522	01/31/19 15:35	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	257443	01/31/19 17:10	WS1	TAL HOU
Total/NA	Prep	5030B			5.71 g	5.0 mL	573386	02/04/19 11:08	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	573402	02/05/19 18:27	S1S	TAL NSH
Total/NA	Prep	3550C			25.14 g	1 mL	573463	02/04/19 12:08	EDS	TAL NSH
Total/NA	Analysis	8015C		1			573659	02/05/19 18:47	LOJ	TAL NSH
Total/NA	Prep	3050B			1.07 g	50.0 mL	258073	02/08/19 14:20	AML	TAL HOU
Total/NA	Analysis	6010B		1			258199	02/11/19 15:05	DCL	TAL HOU
Total/NA	Prep	3050B			1.07 g	50.0 mL	258073	02/08/19 14:20	AML	TAL HOU
Total/NA	Analysis	6010B		1			258232	02/12/19 10:32	KP1	TAL HOU
Total/NA	Prep	7471A			0.60 g	50 mL	257624	02/04/19 07:19	KP1	TAL HOU
Total/NA	Analysis	7471A		1			257661	02/04/19 10:42	KP1	TAL HOU

Client Sample ID: SJRP-MW19-18-19-01292019 — **Lab Sample ID: 600-179991-2**
Date Collected: 01/29/19 17:30 — **Matrix: Solid**
Date Received: 01/31/19 11:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			257666	02/04/19 11:10	DTN	TAL HOU

Client Sample ID: SJRP-MW19-18-19-01292019 — **Lab Sample ID: 600-179991-2**
Date Collected: 01/29/19 17:30 — **Matrix: Solid**
Date Received: 01/31/19 11:08 — **Percent Solids: 83.7**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.18 g	5 mL	257522	01/31/19 15:35	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	257443	01/31/19 17:34	WS1	TAL HOU
Total/NA	Prep	5030B			5.19 g	5.0 mL	573386	02/04/19 11:08	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	573402	02/05/19 19:01	S1S	TAL NSH
Total/NA	Prep	3550C			25.22 g	1 mL	573463	02/04/19 12:08	EDS	TAL NSH
Total/NA	Analysis	8015C		1			573659	02/05/19 19:42	LOJ	TAL NSH
Total/NA	Prep	3050B			1.02 g	50.0 mL	258073	02/08/19 14:20	AML	TAL HOU
Total/NA	Analysis	6010B		1			258199	02/11/19 15:10	DCL	TAL HOU
Total/NA	Prep	3050B			1.02 g	50.0 mL	258073	02/08/19 14:20	AML	TAL HOU
Total/NA	Analysis	6010B		1			258232	02/12/19 10:38	KP1	TAL HOU
Total/NA	Prep	7471A			0.62 g	50 mL	257624	02/04/19 07:19	KP1	TAL HOU

Lab Chronicle

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179991-1

Client Sample ID: SJRP-MW19-18-19-01292019 — Lab Sample ID: 600-179991-2

Date Collected: 01/29/19 17:30 — **Matrix: Solid**
Date Received: 01/31/19 11:08 — **Percent Solids: 83.7**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1			257661	02/04/19 10:44	KP1	TAL HOU

Client Sample ID: SJRP-TB03-01302019 — Lab Sample ID: 600-179991-3

Date Collected: 01/30/19 09:45 — **Matrix: Water**
Date Received: 01/31/19 11:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	257558	02/01/19 15:26	YX1	TAL HOU

Client Sample ID: SJRP-EB02-01302019 — Lab Sample ID: 600-179991-4

Date Collected: 01/30/19 11:00 — **Matrix: Water**
Date Received: 01/31/19 11:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	257558	02/01/19 15:50	YX1	TAL HOU
Total/NA	Analysis	8015C		1	5 mL	5 mL	573790	02/06/19 15:20	S1S	TAL NSH
Total/NA	Prep	3510C			255.7 mL	1 mL	573322	02/02/19 17:10	KWS	TAL NSH
Total/NA	Analysis	8015C		1			573663	02/05/19 15:08	S1S	TAL NSH
Total/NA	Prep	3010A			50.0 mL	50.0 mL	257945	02/07/19 08:58	AML	TAL HOU
Total/NA	Analysis	6010B		1			258058	02/08/19 13:31	DCL	TAL HOU
Total/NA	Prep	7470A			40 mL	50 mL	257699	02/04/19 13:40	KP1	TAL HOU
Total/NA	Analysis	7470A		1			257809	02/05/19 12:55	SOT	TAL HOU

Client Sample ID: SJRP-MW17-09-10-01302019 — Lab Sample ID: 600-179991-5

Date Collected: 01/30/19 12:20 — **Matrix: Solid**
Date Received: 01/31/19 11:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.88 g	5 mL	257657	01/31/19 15:35	KLV	TAL HOU
Total/NA	Analysis	8260B		10	100 uL	5 mL	257668	02/04/19 19:21	KLV	TAL HOU
Total/NA	Prep	5035	DL		4.88 g	5 mL	257657	01/31/19 15:35	KLV	TAL HOU
Total/NA	Analysis	8260B	DL	100	100 uL	5 mL	257668	02/04/19 19:46	KLV	TAL HOU
Total/NA	Analysis	2540B		1			257666	02/04/19 11:10	DTN	TAL HOU

Client Sample ID: SJRP-MW17-09-10-01302019 — Lab Sample ID: 600-179991-5

Date Collected: 01/30/19 12:20 — **Matrix: Solid**
Date Received: 01/31/19 11:08 — **Percent Solids: 90.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.34 g	5.0 mL	573386	02/04/19 11:08	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	573402	02/05/19 19:35	S1S	TAL NSH
Total/NA	Prep	3550C			25 g	1 mL	573463	02/04/19 12:08	EDS	TAL NSH

Lab Chronicle

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179991-1

Client Sample ID: SJRP-MW17-09-10-01302019

Lab Sample ID: 600-179991-5

Date Collected: 01/30/19 12:20
Matrix: Solid
Date Received: 01/31/19 11:08
Percent Solids: 90.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015C		1			573659	02/05/19 20:00	LOJ	TAL NSH
Total/NA	Prep	3050B			1.01 g	50.0 mL	258073	02/08/19 14:20	AML	TAL HOU
Total/NA	Analysis	6010B		10			258242	02/12/19 15:26	DCL	TAL HOU
Total/NA	Prep	3050B			1.01 g	50.0 mL	258073	02/08/19 14:20	AML	TAL HOU
Total/NA	Analysis	6010B		1			258199	02/11/19 15:12	DCL	TAL HOU
Total/NA	Prep	3050B			1.01 g	50.0 mL	258073	02/08/19 14:20	AML	TAL HOU
Total/NA	Analysis	6010B		1			258232	02/12/19 10:40	KP1	TAL HOU
Total/NA	Prep	7471A			0.61 g	50 mL	257624	02/04/19 07:19	KP1	TAL HOU
Total/NA	Analysis	7471A		1			257661	02/04/19 10:46	KP1	TAL HOU

Client Sample ID: SJRP-MW17-09-10-01302019-2

Lab Sample ID: 600-179991-6

Date Collected: 01/30/19 12:20
Matrix: Solid
Date Received: 01/31/19 11:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.36 g	5 mL	257657	01/31/19 15:35	KLV	TAL HOU
Total/NA	Analysis	8260B		10	100 uL	5 mL	257668	02/04/19 20:10	KLV	TAL HOU
Total/NA	Prep	5035	DL		4.36 g	5 mL	257657	01/31/19 15:35	KLV	TAL HOU
Total/NA	Analysis	8260B	DL	100	100 uL	5 mL	257668	02/04/19 20:35	KLV	TAL HOU
Total/NA	Analysis	2540B		1			257666	02/04/19 11:10	DTN	TAL HOU

Client Sample ID: SJRP-MW17-09-10-01302019-2

Lab Sample ID: 600-179991-6

Date Collected: 01/30/19 12:20
Matrix: Solid
Date Received: 01/31/19 11:08
Percent Solids: 90.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.48 g	5.0 mL	573386	02/04/19 11:08	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	573402	02/05/19 20:09	S1S	TAL NSH
Total/NA	Prep	3550C			25.25 g	1 mL	573463	02/04/19 12:08	EDS	TAL NSH
Total/NA	Analysis	8015C		1			573659	02/05/19 20:17	LOJ	TAL NSH
Total/NA	Prep	3550C	DL		25.25 g	1 mL	573463	02/04/19 12:08	EDS	TAL NSH
Total/NA	Analysis	8015C	DL	20			573917	02/06/19 17:54	S1S	TAL NSH
Total/NA	Prep	3050B			1.02 g	50.0 mL	258073	02/08/19 14:20	AML	TAL HOU
Total/NA	Analysis	6010B		10			258242	02/12/19 15:28	DCL	TAL HOU
Total/NA	Prep	3050B			1.02 g	50.0 mL	258073	02/08/19 14:20	AML	TAL HOU
Total/NA	Analysis	6010B		1			258199	02/11/19 15:20	DCL	TAL HOU
Total/NA	Prep	7471A			0.60 g	50 mL	257624	02/04/19 07:19	KP1	TAL HOU
Total/NA	Analysis	7471A		1			257661	02/04/19 10:48	KP1	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179991-1

Laboratory: TestAmerica Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	18-061-0	08-04-19
Louisiana	NELAP	6	01967	06-30-19
Oklahoma	State Program	6	2018-052	08-31-19
Texas	NELAP	6	T104704223-18-23	10-31-19
USDA	Federal		P330-18-00130	04-30-21

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-19
Alaska (UST)	State Program	10	UST-087	06-30-19
Arizona	State Program	9	AZ0473	05-05-19
Arkansas DEQ	State Program	6	88-0737	04-25-19
California	State Program	9	2938	06-30-19 *
Connecticut	State Program	1	PH-0220	12-31-19
Florida	NELAP	4	E87358	06-30-19
Georgia	State Program	4	NA: NELAP & A2LA	12-31-19
Illinois	NELAP	5	200010	12-09-18 *
Iowa	State Program	7	131	04-01-20
Kansas	NELAP	7	E-10229	10-31-19
Kentucky (UST)	State Program	4	19	06-30-19
Kentucky (WW)	State Program	4	90038	12-31-19
Louisiana	NELAP	6	30613	06-30-19
Maine	State Program	1	TN00032	11-03-19
Maryland	State Program	3	316	03-31-19
Massachusetts	State Program	1	M-TN032	06-30-19
Minnesota	NELAP	5	047-999-345	12-31-19
Mississippi	State Program	4	N/A	06-30-19
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-19
New Hampshire	NELAP	1	2963	10-09-19
New Jersey	NELAP	2	TN965	06-30-19
New York	NELAP	2	11342	03-31-19
North Carolina (WW/SW)	State Program	4	387	12-31-19
North Dakota	State Program	8	R-146	06-30-19
Ohio VAP	State Program	5	CL0033	07-06-19
Oklahoma	State Program	6	9412	08-31-19
Oregon	NELAP	10	TN200001	04-26-19
Pennsylvania	NELAP	3	68-00585	07-31-19
Rhode Island	State Program	1	LAO00268	12-30-19
South Carolina	State Program	4	84009 (001)	02-28-19
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-19
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-19
Virginia	NELAP	3	460152	06-14-19
Washington	State Program	10	C789	07-19-19
West Virginia DEP	State Program	3	219	02-28-19
Wisconsin	State Program	5	998020430	08-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-179991-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Laboratory: TestAmerica Nashville (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wyoming (UST)	A2LA	8	453.07	12-31-19

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: A. Jurkasz	Lab PM: McDaniel, Bethany	Carrier Tracking No(s): 7455 1172 8730	COC No: 03
Client Contact: Aleeca Forsberg	Phone:	E-Mail: bethany.mcdaniel@testamericainc.com		Page: 1 of 1
Company: CH2M Hill, Inc.				Job #:
Address: 3721 Rutledge Road NE Suite B-1	Due Date Requested:			
City: Albuquerque	TAT Requested (days): See ARF			
State, Zip: NM, 87109				
Phone: 505-855-5239	PO #: WD794541			
Email: Aleeca.Forsberg@CH2M.com	WO #: WD794541			
Project Name: Kinder Morgan San Juan River Plant RWIP	Project #: 60005961			
Site: San Juan River Gas Plant	ARF#: ERG ARF_CH2M_01-15-2019			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260 - BTEX	8015 - GRO Range (C6-C10)	8015 - DRO/ORO Range	6010/7470 - NMWQCC Metals with Hg	TCLP VOA (TCL)/TCLP SVOA (TCL List)	TCLP RCRA 8 Metals w /Hg	Total VOA 8260	Total SVOA 8270	Flashpoint and pH	Moisture	Total Number of containers	Special Instructions/Note:
Preservation Code:																		
SJRP-MW19-10-11-01292019	1/29/19	1720	G	~~Water~~ S	N	N	X	X	X	X						X		
SJRP-MW19-12-13-01292019	1	1730	G	~~Water~~ S	N	N	X	X	X	X						X		
~~SJRP-MW19-29-30-01292019~~	~~1/29/19~~	~~1745~~	~~G~~	~~Water~~ S	N	N	X	X	X	X						X		AT
SJRP-TB03-01302019	1/30/19	0945	G	Water	N	N	X	X	X	X						X		
SJRP-EB02-01302019	1/30/19	1100	G	Water	N	N	X	X	X	X						X		
SJRP-MW17-09-10-01302019	1/30/19	1220	G	~~Water~~ S	N	N	X	X	X	X						X		
SJRP-MW17-09-10-01302019-2	1/30/19	1220	G	~~Water~~ S	N	N	X	X	X	X						X		
			G	Water														
			G	Water														
			G	Water														
			G	Water														AT

600-179991 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	1/30/19 1630	Jacobs		1/31/19 1108	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Receipt Checklist

Loc: 600
179991

Date/Time Received: '19 JAN 31 11:08

JOB NUMBER: _____ CLIENT: CH2M Hill

UNPACKED BY: J.A. CARRIER/DRIVER: Fed EX

Custody Seal Present: ☒ YES ☐ NO Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Them CF	Corrected Temp (°C)
BW	Y / N	Y / N	5.9	0706	+0.1	6.0
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

1/31/19

Samples received on ice? ☒ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☐ YES ☐ NO

pH paper Lot #_____

VOA headspace acceptable (5-6mm): ☒ YES ☐ NO ☐ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	☒	☐

COMMENTS:

1/31/19

HS-SA-WI-013 Rev. 3; 07/01/2014

600-179991 Vayt



TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

600-179991 Chain of Custody

Cooler Received/Opened On 2/2/2019 @ 1020

Time Samples Removed From Cooler 11:05 Time Samples Placed In Storage 11:40 (2 Hour Window)

1. Tracking # 8784 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 17610176 pH Strip Lot _____ Chlorine Strip Lot _____

2. Temperature of rep. sample or temp blank when opened: 1.9 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 (Front)

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) DJ

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

● ⬅ Larger than this.

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (intial) D.X

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) D.X

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) D.X

I certify that I attached a label with the unique LIMS number to each container (intial) D.X

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...# _____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 8/23/17

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

600-179991

TestAmerica — LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: McDaniel, Bethany A		lo: 7474.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: bethany.mcdaniel@testamericainc.com	State of Origin: New Mexico	Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):		Job #: 600-179991-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 2/12/2019			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: San Juan Kinder Morgan Bloomfield, NM	Project #: 60005961			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO/3550C DRO/ORO	8015C_GRO/5030B_H Standard GRO Range (C6-C10)	8015C_GRO/5030B GRO Range (C6-C10)	8015C_DRO/3510C_LVI DRO/ORO	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
SJRP-MW19-10-11-01292019 (600-179991-1)	1/29/19	17:20 Central		Solid			X	X			2	
SJRP-MW19-18-19-01292019 (600-179991-2)	1/29/19	17:30 Central		Solid			X	X			2	
SJRP-EB02-01302019 (600-179991-4)	1/30/19	11:00 Central		Water					X	X	5	
SJRP-MW17-09-10-01302019 (600-179991-5)	1/30/19	12:20 Central		Solid			X	X			2	
SJRP-MW17-09-10-01302019-2 (600-179991-6)	1/30/19	12:20 Central		Solid			X	X			2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 2/1/19 1700	Company	Received by:	Date/Time: 02/02/19 10:20	Company TA-NAS
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 1.9	

Ver: 09/20/2016

Login Sample Receipt Checklist

Client: CH2M Hill, Inc.

Job Number: 600-179991-1

Login Number: 179991

List Source: TestAmerica Houston

List Number: 1

Creator: Snow, Tiffany B

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	6.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

eurofins | Environment Testing America



ANALYTICAL REPORT

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-179997-1
Client Project/Site: San Juan Kinder Morgan Bloomfield, NM
Revision: 1

For:
CH2M Hill, Inc.
3721 Rutledge Rd. NE
Suite B-1
Albuquerque, New Mexico 87109

Attn: Aleeca Forsberg

Steve A Stepanski

Authorized for release by:
12/7/2020 4:59:26 PM
Steve Stepanski, Project Mgmt. Assistant
(713)690-4444
steve.stepanski@Eurofinset.com

Designee for

Bethany McDaniel, Senior Project Manager
(713)358-2005
bethany.mcdaniel@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Laboratory Job ID: 600-179997-1

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Case Narrative

Client: CH2M Hill, Inc. Job ID: 600-179997-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Job ID: 600-179997-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-179997-1

Comments
This report was revised to a Level 2 deliverable per client's request.

Receipt
The samples were received on 1/31/2019 11:08 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 6.0º C.

Receipt Exceptions
The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. Samples SJRP-MW17-04-05-01302019 and SJRP-MW17-09-10-01302019 were not marked for analysis on the COC. The client was contacted and the lab was instructed to analyze the samples for chloride, sulfate, and moisture.

General Chemistry
Method(s) 9056: The method blank for preparation batch 600-258059 and analytical batch 600-258115 contained Chloride above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Industrial Hygiene
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Method Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179997-1

Method	Method Description	Protocol	Laboratory
9056A	Anions, Ion Chromatography	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU
DI Leach	Deionized Water Leaching Procedure (Routine)	ASTM	TAL HOU

Protocol References:

ASTM = ASTM International

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179997-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-179997-1	SJRP-MW19-10-11-01292019	Solid	01/29/19 17:20	01/31/19 11:08
600-179997-2	SJRP-MW19-18-19-01292019	Solid	01/29/19 17:30	01/31/19 11:08
600-179997-3	SJRP-MW17-04-05-01302019	Solid	01/30/19 12:10	01/31/19 11:08
600-179997-4	SJRP-MW17-09-10-01302019	Solid	01/30/19 12:40	01/31/19 11:08

Client Sample Results

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-179997-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Client Sample ID: SJRP-MW19-10-11-01292019 **Lab Sample ID: 600-179997-1**
Date Collected: 01/29/19 17:20 **Matrix: Solid**
Date Received: 01/31/19 11:08

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18.3		1.0	1.0	%			02/04/19 11:10	1
Percent Solids	81.7		1.0	1.0	%			02/04/19 11:10	1

Client Sample ID: SJRP-MW19-10-11-01292019 **Lab Sample ID: 600-179997-1**
Date Collected: 01/29/19 17:20 **Matrix: Solid**
Date Received: 01/31/19 11:08 **Percent Solids: 81.7**

Method: 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	215	B	4.89	0.653	mg/Kg	☼		02/08/19 17:52	1
Sulfate	1730		61.2	11.7	mg/Kg	☼		02/12/19 12:12	10

Client Sample ID: SJRP-MW19-18-19-01292019 **Lab Sample ID: 600-179997-2**
Date Collected: 01/29/19 17:30 **Matrix: Solid**
Date Received: 01/31/19 11:08

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.9		1.0	1.0	%			02/04/19 11:10	1
Percent Solids	84.1		1.0	1.0	%			02/04/19 11:10	1

Client Sample ID: SJRP-MW19-18-19-01292019 **Lab Sample ID: 600-179997-2**
Date Collected: 01/29/19 17:30 **Matrix: Solid**
Date Received: 01/31/19 11:08 **Percent Solids: 84.1**

Method: 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	78.6	B	4.76	0.635	mg/Kg	☼		02/08/19 18:10	1
Sulfate	1050		59.5	11.4	mg/Kg	☼		02/12/19 12:32	10

Client Sample ID: SJRP-MW17-04-05-01302019 **Lab Sample ID: 600-179997-3**
Date Collected: 01/30/19 12:10 **Matrix: Solid**
Date Received: 01/31/19 11:08

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18.1		1.0	1.0	%			02/04/19 11:10	1
Percent Solids	81.9		1.0	1.0	%			02/04/19 11:10	1

Client Sample ID: SJRP-MW17-04-05-01302019 **Lab Sample ID: 600-179997-3**
Date Collected: 01/30/19 12:10 **Matrix: Solid**
Date Received: 01/31/19 11:08 **Percent Solids: 81.9**

Method: 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	986	B	488	65.1	mg/Kg	☼		02/08/19 18:28	100
Sulfate	21200		610	117	mg/Kg	☼		02/08/19 18:28	100

Client Sample Results

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-179997-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Client Sample ID: SJRP-MW17-09-10-01302019 **Lab Sample ID: 600-179997-4**
Date Collected: 01/30/19 12:40 **Matrix: Solid**
Date Received: 01/31/19 11:08

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.3		1.0	1.0	%			02/04/19 11:10	1
Percent Solids	87.7		1.0	1.0	%			02/04/19 11:10	1

Client Sample ID: SJRP-MW17-09-10-01302019 **Lab Sample ID: 600-179997-4**
Date Collected: 01/30/19 12:40 **Matrix: Solid**
Date Received: 01/31/19 11:08 **Percent Solids: 87.7**

Method: 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	113	B	22.8	3.04	mg/Kg	☼		02/08/19 18:46	5
Sulfate	3750		56.9	10.9	mg/Kg	☼		02/12/19 12:52	10

Definitions/Glossary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179997-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179997-1

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 600-258059/1-A
Matrix: Solid
Analysis Batch: 258115

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.9457	J	4.00	0.534	mg/Kg			02/11/19 13:30	1
Sulfate	0.957	U	5.00	0.957	mg/Kg			02/11/19 13:30	1

Lab Sample ID: LCS 600-258059/2-A
Matrix: Solid
Analysis Batch: 258115

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	200	203.6		mg/Kg		102	90 - 110
Sulfate	200	204.6		mg/Kg		102	90 - 110

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179997-1

HPLC/IC

Analysis Batch: 258048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179997-1	SJRP-MW19-10-11-01292019	Soluble	Solid	9056A	258059
600-179997-2	SJRP-MW19-18-19-01292019	Soluble	Solid	9056A	258059
600-179997-3	SJRP-MW17-04-05-01302019	Soluble	Solid	9056A	258059
600-179997-4	SJRP-MW17-09-10-01302019	Soluble	Solid	9056A	258059

Leach Batch: 258059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179997-1	SJRP-MW19-10-11-01292019	Soluble	Solid	DI Leach	
600-179997-2	SJRP-MW19-18-19-01292019	Soluble	Solid	DI Leach	
600-179997-3	SJRP-MW17-04-05-01302019	Soluble	Solid	DI Leach	
600-179997-4	SJRP-MW17-09-10-01302019	Soluble	Solid	DI Leach	
MB 600-258059/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 600-258059/2-A	Lab Control Sample	Soluble	Solid	DI Leach	

Analysis Batch: 258115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-258059/1-A	Method Blank	Soluble	Solid	9056A	258059
LCS 600-258059/2-A	Lab Control Sample	Soluble	Solid	9056A	258059

Analysis Batch: 258189

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179997-1	SJRP-MW19-10-11-01292019	Soluble	Solid	9056A	258059
600-179997-2	SJRP-MW19-18-19-01292019	Soluble	Solid	9056A	258059
600-179997-4	SJRP-MW17-09-10-01302019	Soluble	Solid	9056A	258059

General Chemistry

Analysis Batch: 257666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-179997-1	SJRP-MW19-10-11-01292019	Total/NA	Solid	2540B	
600-179997-2	SJRP-MW19-18-19-01292019	Total/NA	Solid	2540B	
600-179997-3	SJRP-MW17-04-05-01302019	Total/NA	Solid	2540B	
600-179997-4	SJRP-MW17-09-10-01302019	Total/NA	Solid	2540B	

Lab Chronicle

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179997-1

Client Sample ID: SJRP-MW19-10-11-01292019 — **Lab Sample ID: 600-179997-1**
Date Collected: 01/29/19 17:20 — **Matrix: Solid**
Date Received: 01/31/19 11:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			257666	02/04/19 11:10	DTN	TAL HOU

Client Sample ID: SJRP-MW19-10-11-01292019 — **Lab Sample ID: 600-179997-1**
Date Collected: 01/29/19 17:20 — **Matrix: Solid**
Date Received: 01/31/19 11:08 — **Percent Solids: 81.7**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.00 g	50 mL	258059	02/08/19 12:50	SKR	TAL HOU
Soluble	Analysis	9056A		10			258189	02/12/19 12:12	SKR	TAL HOU
Soluble	Leach	DI Leach			5.00 g	50 mL	258059	02/08/19 12:50	SKR	TAL HOU
Soluble	Analysis	9056A		1			258048	02/08/19 17:52	SKR	TAL HOU

Client Sample ID: SJRP-MW19-18-19-01292019 — **Lab Sample ID: 600-179997-2**
Date Collected: 01/29/19 17:30 — **Matrix: Solid**
Date Received: 01/31/19 11:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			257666	02/04/19 11:10	DTN	TAL HOU

Client Sample ID: SJRP-MW19-18-19-01292019 — **Lab Sample ID: 600-179997-2**
Date Collected: 01/29/19 17:30 — **Matrix: Solid**
Date Received: 01/31/19 11:08 — **Percent Solids: 84.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.00 g	50 mL	258059	02/08/19 12:50	SKR	TAL HOU
Soluble	Analysis	9056A		10			258189	02/12/19 12:32	SKR	TAL HOU
Soluble	Leach	DI Leach			5.00 g	50 mL	258059	02/08/19 12:50	SKR	TAL HOU
Soluble	Analysis	9056A		1			258048	02/08/19 18:10	SKR	TAL HOU

Client Sample ID: SJRP-MW17-04-05-01302019 — **Lab Sample ID: 600-179997-3**
Date Collected: 01/30/19 12:10 — **Matrix: Solid**
Date Received: 01/31/19 11:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			257666	02/04/19 11:10	DTN	TAL HOU

Client Sample ID: SJRP-MW17-04-05-01302019 — **Lab Sample ID: 600-179997-3**
Date Collected: 01/30/19 12:10 — **Matrix: Solid**
Date Received: 01/31/19 11:08 — **Percent Solids: 81.9**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	258059	02/08/19 12:50	SKR	TAL HOU

Lab Chronicle

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-179997-1

Client Sample ID: SJRP-MW17-04-05-01302019 — **Lab Sample ID: 600-179997-3**
Date Collected: 01/30/19 12:10 — **Matrix: Solid**
Date Received: 01/31/19 11:08 — **Percent Solids: 81.9**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Analysis	9056A		100			258048	02/08/19 18:28	SKR	TAL HOU

Client Sample ID: SJRP-MW17-09-10-01302019 — **Lab Sample ID: 600-179997-4**
Date Collected: 01/30/19 12:40 — **Matrix: Solid**
Date Received: 01/31/19 11:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			257666	02/04/19 11:10	DTN	TAL HOU

Client Sample ID: SJRP-MW17-09-10-01302019 — **Lab Sample ID: 600-179997-4**
Date Collected: 01/30/19 12:40 — **Matrix: Solid**
Date Received: 01/31/19 11:08 — **Percent Solids: 87.7**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	258059	02/08/19 12:50	SKR	TAL HOU
Soluble	Analysis	9056A		10			258189	02/12/19 12:52	SKR	TAL HOU
Soluble	Leach	DI Leach			5.01 g	50 mL	258059	02/08/19 12:50	SKR	TAL HOU
Soluble	Analysis	9056A		5			258048	02/08/19 18:46	SKR	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Accreditation/Certification Summary

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-179997-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Laboratory: TestAmerica Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	18-061-0	08-04-19
Louisiana	NELAP	6	01967	06-30-19
Oklahoma	State Program	6	2018-052	08-31-19
Texas	NELAP	6	T104704223-18-23	10-31-19
USDA	Federal		P330-18-00130	04-30-21

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: A. Tuckas7	Lab PM: McDaniel, Bethany	Carrier Tracking No(s): 7455 1177 8730	COC No: 04
Client Contact: Aleeca Forsberg	Phone:	E-Mail: bethany.mcdaniel@testamericainc.com		Page: 1 of 1
Company: CH2M Hill, Inc.				Job #:
Address: 3721 Rutledge Road NE Suite B-1	Due Date Requested:			
City: Albuquerque	TAT Requested (days): See ARF			
State, Zip: NM, 87109				
Phone: 505-855-5239	PO #: WD794541			
Email: Aleeca.Forsberg@CH2M.com	WO #: WD794541			
Project Name: Kinder Morgan San Juan River Plant RWIP	Project #: 60005961			
Site: San Juan River Gas Plant	ARF#: ERG ARF_CH2M_01-15-2019			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Chloride and sulfate	Moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
SJRP-MW19-10-11-01292019	1/29/19	1720	G	Soil	N	N	X	X		
SJRP-MW19-10-19-01292019	1/29/19	1730	G	Soil	N	N	X	X		
SJRP-MW17-04-05-01302019	1/30/19	1210	G	Soil						
SJRP-MW17-09-10-01302019	1/30/19	1240	G	Soil						
			G	Soil						
			G	Soil						
			G	Soil						
			G	Soil						
			G	Soil						
			G	Soil						
			G	Soil						

(BT)

600-179997 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Mont

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		1/30/2019 1630	Jacobs			
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 1/31/19 1108	Company TA
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

S Loc: 600 179997 eipt Checklist

Date/Time Received: '19 JAN 31 11:05

JOB NUMBER: ___ ___ CLIENT: CH2M Hill

UNPACKED BY: J.A. CARRIER/DRIVER: Fed EX

Custody Seal Present: ☒ YES ☐ NO Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Them CF	Corrected Temp (°C)
BW	Y / N	Y / N	5.9	0706	+0.1	6.0
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

1/31/19

Samples received on ice? ☒ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☐ YES ☐ NO

pH paper Lot #_____ J.A.

VOA headspace acceptable (5-6mm): ☒ YES ☐ NO ☒ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	☒	☐

COMMENTS:

1/31/19

HS-SA-WI-013 Rev. 3; 07/01/2014



600-179997 Wayt

Login Sample Receipt Checklist

Client: CH2M Hill, Inc.

Job Number: 600-179997-1

Login Number: 179997

List Source: TestAmerica Houston

List Number: 1

Creator: Snow, Tiffany B

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	6.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	Refer to Job Narrative for details.
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

eurofins | Environment Testing America



ANALYTICAL REPORT

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-180009-1
Client Project/Site: San Juan Kinder Morgan Bloomfield, NM
Revision: 1

For:
CH2M Hill, Inc.
3721 Rutledge Rd. NE
Suite B-1
Albuquerque, New Mexico 87109

Attn: Aleeca Forsberg

Steve A Stepanski

Authorized for release by:
12/7/2020 5:00:47 PM
Steve Stepanski, Project Mgmt. Assistant
(713)690-4444
steve.stepanski@Eurofinset.com

Designee for

Bethany McDaniel, Senior Project Manager
(713)358-2005
bethany.mcdaniel@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Laboratory Job ID: 600-180009-1

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Case Narrative

Client: CH2M Hill, Inc. Job ID: 600-180009-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Job ID: 600-180009-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-180009-1

Comments
This report was revised to a Level 2 deliverable per client's request.

Receipt
The samples were received on 2/1/2019 9:51 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.0º C.

Receipt Exceptions
Trip Blank Sample SJRP-TB-04-01312019 (600-180009-1) marked for multiple analyses on COC, however analyzed for Method 8260B only.

GC/MS VOA
Method(s) 8260B: The following samples were diluted due to the nature of the sample matrix: SJRP-MW21-19-20-01312019 (600-180009-3) and SJRP-MW22-10-11-01312019 (600-180009-5). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: SJRP-MW21-10-11-01312019 (600-180009-2), SJRP-MW21-19-20-01312019 (600-180009-3), SJRP-MW22-10-11-01312019 (600-180009-5), SJRP-MW22-18-19-01312019 (600-180009-6), and SJRP-MW22-18-19-01312019-2 (600-180009-7). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA
Method(s) 8015C-GRO: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with analytical batch 490-573790.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8015C-DRO: The following samples were diluted to bring the concentration of target analytes within the calibration range: SJRP-MW21-19-20-01312019 (600-180009-3), SJRP-MW22-18-19-01312019 (600-180009-6), and SJRP-MW22-18-19-01312019-2 (600-180009-7). Elevated reporting limits (RLs) are provided.

Method(s) 8015C-DRO: Surrogate recovery for o-Terphenyl failed low for the following sample and extraction batch QC: SJRP-EB03-01312019 (600-180009-4), (LCS 490-574009/2-A), (MB 490-574009/1-A) and (600-180009-A-4-A DU). There was insufficient sample to perform a re-extraction due to the sample being used for batch DUP QC; therefore, the data have been reported.

Method(s) 8015C-DRO: The laboratory control sample (LCS) for batch 490-574009 failed the recovery criteria low for Diesel Range Organics C10-C28. There was insufficient sample to perform a re-extraction or re-analysis; therefore, the data have been reported.

Method(s) 8015C-DRO: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with 490-574009

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 6010B: The method blank for preparation batch 600-258174 and analytical batch 600-258351 contained Barium, Cobalt, Manganese and Molybdenum above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged

Method(s) 6010B: The method blank for preparation batch 600-258153 and analytical batch 600-258351 contained Barium, Chromium and Molybdenum above the method detection limit but below the reporting limit. The values should be considered estimates, and have

Case Narrative

Client: CH2M Hill, Inc. Job ID: 600-180009-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Job ID: 600-180009-1 (Continued)

Laboratory: TestAmerica Houston (Continued)

been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged

Method(s) 6010B: The matrix spike (MS) of sample SJRP-MW22-18-19-01312019-2MS (600-180009-7) for preparation batch 600-258153 and analytical batch 600-258351 failed the recovery criteria low for Boron. and high for Aluminum and Iron. The presence of the '4' qualifier for aluminum and iron indicates the concentration in the unspiked sample exceeded four times the spiking amount.

Method(s) 6010B: The RPD of the duplicate of sample SJRP-MW22-18-19-01312019-2DU (600-180009-7) for preparation batch 600-258153 and analytical batch 600-258232 recovered outside control limits for the following analytes: Boron and Molybdenum.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Method Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL NSH
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL NSH
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU
3010A	Acid Digestion of Aqueous Samples and Extracts for Total Metals	SW846	TAL HOU
3050B	Acid Digestion of Sediments, Sludges, and Soils	SW846	TAL HOU
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL NSH
3550C	Ultrasonic Extraction	SW846	TAL NSH
5030B	Purge and Trap	SW846	TAL HOU
5030B	Purge and Trap	SW846	TAL NSH
5035	Closed System Purge & Trap/Field Methanol	SW846	TAL HOU
5035	Closed System Purge & Trap/Laboratory Preservation	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)/Preparation	SW846	TAL HOU
7471A	Mercury in Solid or Semi-Solid Waste (Manual Cold Vapor Technique)/Preparation	SW846	TAL HOU

Protocol References:

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-180009-1	SJRP-TB04-01312019	Water	01/31/19 08:30	02/01/19 09:51
600-180009-2	SJRP-MW21-10-11-01312019	Solid	01/31/19 09:00	02/01/19 09:51
600-180009-3	SJRP-MW21-19-20-01312019	Solid	01/31/19 09:30	02/01/19 09:51
600-180009-4	SJRP-EB03-01312019	Water	01/31/19 12:45	02/01/19 09:51
600-180009-5	SJRP-MW22-10-11-01312019	Solid	01/31/19 15:15	02/01/19 09:51
600-180009-6	SJRP-MW22-18-19-01312019	Solid	01/31/19 15:40	02/01/19 09:51
600-180009-7	SJRP-MW22-18-19-01312019-2	Solid	01/31/19 15:40	02/01/19 09:51

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

Client Sample ID: SJRP-TB04-01312019

Lab Sample ID: 600-180009-1
Matrix: Water
Date Collected: 01/31/19 08:30
Date Received: 02/01/19 09:51

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			02/01/19 21:23	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			02/01/19 21:23	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			02/01/19 21:23	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			02/01/19 21:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*50 - 134*		*02/01/19 21:23*	*1*
Dibromofluoromethane	*99*		*62 - 130*		*02/01/19 21:23*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*02/01/19 21:23*	*1*
4-Bromofluorobenzene	*119*		*67 - 139*		*02/01/19 21:23*	*1*

Client Sample ID: SJRP-MW21-10-11-01312019

Lab Sample ID: 600-180009-2
Matrix: Solid
Date Collected: 01/31/19 09:00
Percent Solids: 85.0
Date Received: 02/01/19 09:51

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00473**	**J**	0.00563	0.000710	mg/Kg	☼	02/01/19 11:40	02/04/19 11:35	1
Toluene	0.00155	U	0.00563	0.00155	mg/Kg	☼	02/01/19 11:40	02/04/19 11:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*61 - 130*	*02/01/19 11:40*	*02/04/19 11:35*	*1*
Dibromofluoromethane	*92*		*68 - 140*	*02/01/19 11:40*	*02/04/19 11:35*	*1*
Toluene-d8 (Surr)	*84*		*50 - 130*	*02/01/19 11:40*	*02/04/19 11:35*	*1*
4-Bromofluorobenzene	*88*		*57 - 140*	*02/01/19 11:40*	*02/04/19 11:35*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	**0.769**		0.313	0.0638	mg/Kg	☼	02/01/19 11:40	02/05/19 22:51	1
Xylenes, Total	**7.96**		0.313	0.0707	mg/Kg	☼	02/01/19 11:40	02/05/19 22:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*61 - 130*	*02/01/19 11:40*	*02/05/19 22:51*	*1*
Dibromofluoromethane	*88*		*68 - 140*	*02/01/19 11:40*	*02/05/19 22:51*	*1*
Toluene-d8 (Surr)	*101*		*50 - 130*	*02/01/19 11:40*	*02/05/19 22:51*	*1*
4-Bromofluorobenzene	*91*		*57 - 140*	*02/01/19 11:40*	*02/05/19 22:51*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	**134**		6.34	3.17	mg/Kg	☼	02/06/19 09:22	02/07/19 16:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*87*		*50 - 150*	*02/06/19 09:22*	*02/07/19 16:17*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**20.8**		5.87	2.93	mg/Kg	☼	02/06/19 18:45	02/08/19 02:28	1
ORO C24-C40	**6.18**		5.87	2.93	mg/Kg	☼	02/06/19 18:45	02/08/19 02:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*94*		*50 - 150*	*02/06/19 18:45*	*02/08/19 02:28*	*1*

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	14300		28.3	0.339	mg/Kg	☼	02/11/19 12:42	02/12/19 11:58	1
Arsenic	3.17		1.13	0.247	mg/Kg	☼	02/11/19 12:42	02/12/19 11:58	1
Barium	72.7		1.13	0.0339	mg/Kg	☼	02/11/19 12:42	02/12/19 11:58	1
Boron	2.66	J	22.6	0.437	mg/Kg	☼	02/11/19 12:42	02/12/19 11:58	1
Cadmium	0.345		0.283	0.0290	mg/Kg	☼	02/11/19 12:42	02/12/19 11:58	1
Chromium	6.21	B	0.565	0.0572	mg/Kg	☼	02/11/19 12:42	02/13/19 13:03	1
Cobalt	9.14		0.565	0.0765	mg/Kg	☼	02/11/19 12:42	02/12/19 11:58	1
Iron	25000		22.6	2.86	mg/Kg	☼	02/11/19 12:42	02/12/19 11:58	1
Lead	21.4		0.565	0.119	mg/Kg	☼	02/11/19 12:42	02/12/19 11:58	1
Manganese	121		1.70	0.0431	mg/Kg	☼	02/11/19 12:42	02/13/19 13:03	1
Molybdenum	1.35		0.565	0.154	mg/Kg	☼	02/11/19 12:42	02/12/19 11:58	1
Nickel	6.11		1.13	0.132	mg/Kg	☼	02/11/19 12:42	02/12/19 11:58	1
Selenium	0.305	J	2.26	0.293	mg/Kg	☼	02/11/19 12:42	02/12/19 11:58	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0476		0.0176	0.00372	mg/Kg	☼	02/07/19 11:54	02/07/19 15:29	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.0		1.0	1.0	%			02/04/19 11:10	1
Percent Solids	85.0		1.0	1.0	%			02/04/19 11:10	1

Client Sample ID: SJRP-MW21-19-20-01312019

Lab Sample ID: 600-180009-3

Date Collected: 01/31/19 09:30

Matrix: Solid

Date Received: 02/01/19 09:51

Percent Solids: 80.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	3.43		0.370	0.0467	mg/Kg	☼	02/01/19 11:40	02/05/19 23:15	1
Toluene	0.222	J	0.370	0.102	mg/Kg	☼	02/01/19 11:40	02/05/19 23:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*74*		*61 - 130*	*02/01/19 11:40*	*02/05/19 23:15*	*1*
Dibromofluoromethane	*88*		*68 - 140*	*02/01/19 11:40*	*02/05/19 23:15*	*1*
Toluene-d8 (Surr)	*102*		*50 - 130*	*02/01/19 11:40*	*02/05/19 23:15*	*1*
4-Bromofluorobenzene	*103*		*57 - 140*	*02/01/19 11:40*	*02/05/19 23:15*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	141		37.0	7.56	mg/Kg	☼	02/01/19 11:40	02/05/19 23:40	100
Xylenes, Total	1460		37.0	8.37	mg/Kg	☼	02/01/19 11:40	02/05/19 23:40	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*78*		*61 - 130*	*02/01/19 11:40*	*02/05/19 23:40*	*100*
Dibromofluoromethane	*91*		*68 - 140*	*02/01/19 11:40*	*02/05/19 23:40*	*100*
Toluene-d8 (Surr)	*110*		*50 - 130*	*02/01/19 11:40*	*02/05/19 23:40*	*100*
4-Bromofluorobenzene	*84*		*57 - 140*	*02/01/19 11:40*	*02/05/19 23:40*	*100*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3280		6.95	3.48	mg/Kg	☼	02/06/19 09:22	02/07/19 16:52	1

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

Client Sample ID: SJRP-MW21-19-20-01312019

Lab Sample ID: 600-180009-3
Date Collected: 01/31/19 09:30
Matrix: Solid
Date Received: 02/01/19 09:51
Percent Solids: 80.4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	85		50 - 150	02/06/19 09:22	02/07/19 16:52	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1560		154	76.8	mg/Kg	☼	02/06/19 18:45	02/08/19 16:17	25
ORO C24-C40	7.80		6.15	3.07	mg/Kg	☼	02/06/19 18:45	02/08/19 02:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	119		50 - 150	02/06/19 18:45	02/08/19 02:45	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6320		29.9	0.359	mg/Kg	☼	02/11/19 12:42	02/12/19 12:00	1
Arsenic	0.974	J	1.20	0.261	mg/Kg	☼	02/11/19 12:42	02/12/19 12:00	1
Barium	43.9		1.20	0.0359	mg/Kg	☼	02/11/19 12:42	02/12/19 12:00	1
Boron	1.88	J	23.9	0.461	mg/Kg	☼	02/11/19 12:42	02/12/19 12:00	1
Cadmium	0.203	J	0.299	0.0306	mg/Kg	☼	02/11/19 12:42	02/12/19 12:00	1
Chromium	1.97	B	0.598	0.0605	mg/Kg	☼	02/11/19 12:42	02/13/19 13:05	1
Cobalt	3.13		0.598	0.0808	mg/Kg	☼	02/11/19 12:42	02/12/19 12:00	1
Iron	11900		23.9	3.02	mg/Kg	☼	02/11/19 12:42	02/12/19 12:00	1
Lead	14.5		0.598	0.126	mg/Kg	☼	02/11/19 12:42	02/12/19 12:00	1
Manganese	74.8		1.79	0.0455	mg/Kg	☼	02/11/19 12:42	02/13/19 13:05	1
Molybdenum	0.532	J	0.598	0.163	mg/Kg	☼	02/11/19 12:42	02/12/19 12:00	1
Nickel	2.01		1.20	0.140	mg/Kg	☼	02/11/19 12:42	02/12/19 12:00	1
Selenium	0.310	U	2.39	0.310	mg/Kg	☼	02/11/19 12:42	02/12/19 12:00	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0328		0.0208	0.00438	mg/Kg	☼	02/07/19 11:54	02/07/19 15:31	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19.6		1.0	1.0	%			02/04/19 11:10	1
Percent Solids	80.4		1.0	1.0	%			02/04/19 11:10	1

Client Sample ID: SJRP-EB03-01312019

Lab Sample ID: 600-180009-4
Date Collected: 01/31/19 12:45
Matrix: Water
Date Received: 02/01/19 09:51

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			02/04/19 15:17	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			02/04/19 15:17	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			02/04/19 15:17	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			02/04/19 15:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	78		50 - 134		02/04/19 15:17	1
Dibromofluoromethane	81		62 - 130		02/04/19 15:17	1
Toluene-d8 (Surr)	91		70 - 130		02/04/19 15:17	1
4-Bromofluorobenzene	98		67 - 139		02/04/19 15:17	1

Client Sample Results

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-180009-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Client Sample ID: SJRP-EB03-01312019 — Lab Sample ID: 600-180009-4

Date Collected: 01/31/19 12:45 **Matrix: Water**
Date Received: 02/01/19 09:51

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			02/06/19 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*102*		*50 - 150*		*02/06/19 15:58*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0898	U *	0.0987	0.0898	mg/L		02/06/19 16:10	02/07/19 15:14	1
ORO C24-C40	0.0898	U	0.0987	0.0898	mg/L		02/06/19 16:10	02/07/19 15:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*0.4*	*X*	*50 - 150*	*02/06/19 16:10*	*02/07/19 15:14*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		02/11/19 16:08	02/13/19 15:10	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		02/11/19 16:08	02/13/19 15:10	1
Barium	**0.00180**	**J B**	0.0200	0.000530	mg/L		02/11/19 16:08	02/13/19 15:10	1
Boron	0.0116	U	0.200	0.0116	mg/L		02/11/19 16:08	02/13/19 15:10	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		02/11/19 16:08	02/13/19 15:10	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		02/11/19 16:08	02/13/19 15:10	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		02/11/19 16:08	02/13/19 15:10	1
Iron	**0.207**	**J**	0.400	0.0270	mg/L		02/11/19 16:08	02/13/19 15:10	1
Lead	0.00219	U	0.0100	0.00219	mg/L		02/11/19 16:08	02/13/19 15:10	1
Manganese	**0.00910**	**J B**	0.0100	0.000360	mg/L		02/11/19 16:08	02/13/19 15:10	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		02/11/19 16:08	02/13/19 15:10	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		02/11/19 16:08	02/13/19 15:10	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		02/11/19 16:08	02/13/19 15:10	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		02/06/19 10:28	02/06/19 15:31	1

Client Sample ID: SJRP-MW22-10-11-01312019 — Lab Sample ID: 600-180009-5

Date Collected: 01/31/19 15:15 **Matrix: Solid**
Date Received: 02/01/19 09:51 **Percent Solids: 87.8**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1.76**		0.323	0.0407	mg/Kg	☼	02/01/19 11:40	02/06/19 16:44	1
Toluene	**0.189**	**J**	0.323	0.0892	mg/Kg	☼	02/01/19 11:40	02/06/19 16:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*61 - 130*	*02/01/19 11:40*	*02/06/19 16:44*	*1*
Dibromofluoromethane	*92*		*68 - 140*	*02/01/19 11:40*	*02/06/19 16:44*	*1*
Toluene-d8 (Surr)	*110*		*50 - 130*	*02/01/19 11:40*	*02/06/19 16:44*	*1*
4-Bromofluorobenzene	*84*		*57 - 140*	*02/01/19 11:40*	*02/06/19 16:44*	*1*

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

Client Sample ID: SJRP-MW22-10-11-01312019
Date Collected: 01/31/19 15:15
Date Received: 02/01/19 09:51

Lab Sample ID: 600-180009-5
Matrix: Solid
Percent Solids: 87.8

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	13.4		3.23	0.660	mg/Kg	☼	02/01/19 11:40	02/06/19 17:10	10
Xylenes, Total	53.8		3.23	0.731	mg/Kg	☼	02/01/19 11:40	02/06/19 17:10	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*78*		*61 - 130*	*02/01/19 11:40*	*02/06/19 17:10*	*10*
Dibromofluoromethane	*94*		*68 - 140*	*02/01/19 11:40*	*02/06/19 17:10*	*10*
Toluene-d8 (Surr)	*105*		*50 - 130*	*02/01/19 11:40*	*02/06/19 17:10*	*10*
4-Bromofluorobenzene	*94*		*57 - 140*	*02/01/19 11:40*	*02/06/19 17:10*	*10*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	804		5.67	2.83	mg/Kg	☼	02/06/19 09:22	02/07/19 17:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*85*		*50 - 150*	*02/06/19 09:22*	*02/07/19 17:26*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	89.6		5.50	2.75	mg/Kg	☼	02/06/19 18:45	02/08/19 03:01	1
ORO C24-C40	3.21	J	5.50	2.75	mg/Kg	☼	02/06/19 18:45	02/08/19 03:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*76*		*50 - 150*	*02/06/19 18:45*	*02/08/19 03:01*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	10800		27.9	0.335	mg/Kg	☼	02/11/19 12:42	02/12/19 12:07	1
Arsenic	2.30		1.12	0.243	mg/Kg	☼	02/11/19 12:42	02/12/19 12:07	1
Barium	49.4		1.12	0.0335	mg/Kg	☼	02/11/19 12:42	02/12/19 12:07	1
Boron	1.72	J	22.3	0.431	mg/Kg	☼	02/11/19 12:42	02/12/19 12:07	1
Cadmium	0.525		0.279	0.0286	mg/Kg	☼	02/11/19 12:42	02/12/19 12:07	1
Chromium	5.74	B	0.558	0.0565	mg/Kg	☼	02/11/19 12:42	02/13/19 13:06	1
Cobalt	6.98		0.558	0.0755	mg/Kg	☼	02/11/19 12:42	02/12/19 12:07	1
Iron	33100		22.3	2.82	mg/Kg	☼	02/11/19 12:42	02/12/19 12:07	1
Lead	7.34		0.558	0.117	mg/Kg	☼	02/11/19 12:42	02/12/19 12:07	1
Manganese	97.1		1.67	0.0425	mg/Kg	☼	02/11/19 12:42	02/13/19 13:06	1
Molybdenum	0.592		0.558	0.152	mg/Kg	☼	02/11/19 12:42	02/12/19 12:07	1
Nickel	4.99		1.12	0.131	mg/Kg	☼	02/11/19 12:42	02/12/19 12:07	1
Selenium	0.289	U	2.23	0.289	mg/Kg	☼	02/11/19 12:42	02/12/19 12:07	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0218		0.0184	0.00388	mg/Kg	☼	02/07/19 11:54	02/07/19 15:33	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.2		1.0	1.0	%			02/04/19 11:10	1
Percent Solids	87.8		1.0	1.0	%			02/04/19 11:10	1

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

Client Sample ID: SJRP-MW22-18-19-01312019
Date Collected: 01/31/19 15:40
Date Received: 02/01/19 09:51

Lab Sample ID: 600-180009-6
Matrix: Solid
Percent Solids: 88.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	13.4		5.85	0.737	mg/Kg	☼	02/01/19 11:40	02/06/19 17:36	20
Toluene	29.6		5.85	1.62	mg/Kg	☼	02/01/19 11:40	02/06/19 17:36	20
Ethylbenzene	19.8		5.85	1.19	mg/Kg	☼	02/01/19 11:40	02/06/19 17:36	20
Xylenes, Total	251		5.85	1.32	mg/Kg	☼	02/01/19 11:40	02/06/19 17:36	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*76*		*61 - 130*	*02/01/19 11:40*	*02/06/19 17:36*	*20*
Dibromofluoromethane	*89*		*68 - 140*	*02/01/19 11:40*	*02/06/19 17:36*	*20*
Toluene-d8 (Surr)	*108*		*50 - 130*	*02/01/19 11:40*	*02/06/19 17:36*	*20*
4-Bromofluorobenzene	*84*		*57 - 140*	*02/01/19 11:40*	*02/06/19 17:36*	*20*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2560		6.24	3.12	mg/Kg	☼	02/06/19 09:22	02/07/19 18:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*84*		*50 - 150*	*02/06/19 09:22*	*02/07/19 18:00*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	430		140	70.1	mg/Kg	☼	02/06/19 18:45	02/08/19 16:34	25
ORO C24-C40	4.03	J	5.61	2.80	mg/Kg	☼	02/06/19 18:45	02/08/19 03:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*85*		*50 - 150*	*02/06/19 18:45*	*02/08/19 03:18*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9370		27.6	0.331	mg/Kg	☼	02/11/19 12:42	02/12/19 12:09	1
Arsenic	1.48		1.10	0.240	mg/Kg	☼	02/11/19 12:42	02/12/19 12:09	1
Barium	77.4		1.10	0.0331	mg/Kg	☼	02/11/19 12:42	02/12/19 12:09	1
Boron	2.41	J	22.1	0.426	mg/Kg	☼	02/11/19 12:42	02/12/19 12:09	1
Cadmium	0.303		0.276	0.0282	mg/Kg	☼	02/11/19 12:42	02/12/19 12:09	1
Chromium	3.87	B	0.551	0.0558	mg/Kg	☼	02/11/19 12:42	02/13/19 13:08	1
Cobalt	7.34		0.551	0.0746	mg/Kg	☼	02/11/19 12:42	02/12/19 12:09	1
Iron	17000		22.1	2.79	mg/Kg	☼	02/11/19 12:42	02/12/19 12:09	1
Lead	9.30		0.551	0.116	mg/Kg	☼	02/11/19 12:42	02/12/19 12:09	1
Manganese	98.3		1.65	0.0420	mg/Kg	☼	02/11/19 12:42	02/13/19 13:08	1
Molybdenum	0.932		0.551	0.150	mg/Kg	☼	02/11/19 12:42	02/12/19 12:09	1
Nickel	6.41		1.10	0.129	mg/Kg	☼	02/11/19 12:42	02/12/19 12:09	1
Selenium	0.286	U	2.21	0.286	mg/Kg	☼	02/11/19 12:42	02/12/19 12:09	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00387	U	0.0184	0.00387	mg/Kg	☼	02/07/19 11:54	02/07/19 15:39	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.0		1.0	1.0	%			02/04/19 11:10	1
Percent Solids	88.0		1.0	1.0	%			02/04/19 11:10	1

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

Client Sample ID: SJRP-MW22-18-19-01312019-2
Date Collected: 01/31/19 15:40
Date Received: 02/01/19 09:51

Lab Sample ID: 600-180009-7
Matrix: Solid
Percent Solids: 87.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	6.61		3.40	0.428	mg/Kg	☼	02/01/19 11:40	02/06/19 18:27	10
Toluene	10.2		3.40	0.937	mg/Kg	☼	02/01/19 11:40	02/06/19 18:27	10
Ethylbenzene	8.91		3.40	0.693	mg/Kg	☼	02/01/19 11:40	02/06/19 18:27	10
Xylenes, Total	108		3.40	0.767	mg/Kg	☼	02/01/19 11:40	02/06/19 18:27	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*61 - 130*	*02/01/19 11:40*	*02/06/19 18:27*	*10*
Dibromofluoromethane	*94*		*68 - 140*	*02/01/19 11:40*	*02/06/19 18:27*	*10*
Toluene-d8 (Surr)	*109*		*50 - 130*	*02/01/19 11:40*	*02/06/19 18:27*	*10*
4-Bromofluorobenzene	*94*		*57 - 140*	*02/01/19 11:40*	*02/06/19 18:27*	*10*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2930		5.98	2.99	mg/Kg	☼	02/06/19 09:22	02/07/19 18:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*83*		*50 - 150*	*02/06/19 09:22*	*02/07/19 18:34*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	290		142	71.0	mg/Kg	☼	02/06/19 18:45	02/08/19 16:51	25
ORO C24-C40	6.10		5.68	2.84	mg/Kg	☼	02/06/19 18:45	02/08/19 03:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*63*		*50 - 150*	*02/06/19 18:45*	*02/08/19 03:35*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9440		27.5	0.330	mg/Kg	☼	02/11/19 12:42	02/12/19 12:11	1
Arsenic	1.70		1.10	0.240	mg/Kg	☼	02/11/19 12:42	02/12/19 12:11	1
Barium	82.9		1.10	0.0330	mg/Kg	☼	02/11/19 12:42	02/12/19 12:11	1
Boron	1.81	J F1	22.0	0.425	mg/Kg	☼	02/11/19 12:42	02/12/19 12:11	1
Cadmium	0.286		0.275	0.0282	mg/Kg	☼	02/11/19 12:42	02/12/19 12:11	1
Chromium	3.62	B	0.550	0.0557	mg/Kg	☼	02/11/19 12:42	02/13/19 13:10	1
Cobalt	4.53		0.550	0.0744	mg/Kg	☼	02/11/19 12:42	02/12/19 12:11	1
Iron	17100		22.0	2.78	mg/Kg	☼	02/11/19 12:42	02/12/19 12:11	1
Lead	9.00		0.550	0.115	mg/Kg	☼	02/11/19 12:42	02/12/19 12:11	1
Manganese	92.7		1.65	0.0419	mg/Kg	☼	02/11/19 12:42	02/13/19 13:10	1
Molybdenum	0.814		0.550	0.150	mg/Kg	☼	02/11/19 12:42	02/12/19 12:11	1
Nickel	5.95		1.10	0.129	mg/Kg	☼	02/11/19 12:42	02/12/19 12:11	1
Selenium	0.285	U	2.20	0.285	mg/Kg	☼	02/11/19 12:42	02/12/19 12:11	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00396	U	0.0188	0.00396	mg/Kg	☼	02/07/19 11:54	02/07/19 15:41	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.6		1.0	1.0	%			02/04/19 11:10	1
Percent Solids	87.4		1.0	1.0	%			02/04/19 11:10	1

TestAmerica Houston

Definitions/Glossary

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-180009-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Surrogate Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCA (61-130)	DBFM (68-140)	TOL (50-130)	BFB (57-140)
600-180009-2	SJRP-MW21-10-11-01312019	89	92	84	88
600-180009-2 - DL	SJRP-MW21-10-11-01312019	82	88	101	91
600-180009-3	SJRP-MW21-19-20-01312019	74	88	102	103
600-180009-3 - DL	SJRP-MW21-19-20-01312019	78	91	110	84
600-180009-5	SJRP-MW22-10-11-01312019	81	92	110	84
600-180009-5 - DL	SJRP-MW22-10-11-01312019	78	94	105	94
600-180009-6	SJRP-MW22-18-19-01312019	76	89	108	84
600-180009-7	SJRP-MW22-18-19-01312019-2	81	94	109	94
LCS 600-257633/3	Lab Control Sample	94	95	86	106
LCS 600-257767/1-A	Lab Control Sample	82	95	97	91
LCSD 600-257633/4	Lab Control Sample Dup	92	95	86	128
LCSD 600-257767/2-A	Lab Control Sample Dup	81	92	100	89
MB 600-257633/6	Method Blank	100	92	76	97
MB 600-257767/3-A	Method Blank	89	103	124	105

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCA (50-134)	DBFM (62-130)	TOL (70-130)	BFB (67-139)
600-180009-1	SJRP-TB04-01312019	93	99	106	119
600-180009-4	SJRP-EB03-01312019	78	81	91	98
LCS 600-257563/3	Lab Control Sample	97	101	102	122
LCS 600-257670/4	Lab Control Sample	79	84	96	103
LCSD 600-257563/4	Lab Control Sample Dup	99	99	103	121
LCSD 600-257670/5	Lab Control Sample Dup	78	83	92	101
MB 600-257563/6	Method Blank	95	100	105	119
MB 600-257670/7	Method Blank	79	80	91	101

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	TFT2 (50-150)
600-180009-2	SJRP-MW21-10-11-01312019	87

Surrogate Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(50-150)
600-180009-3	SJRP-MW21-19-20-01312019	85
600-180009-5	SJRP-MW22-10-11-01312019	85
600-180009-6	SJRP-MW22-18-19-01312019	84
600-180009-7	SJRP-MW22-18-19-01312019-2	83
LCS 490-573807/2-A	Lab Control Sample	99
LCSD 490-573807/3-A	Lab Control Sample Dup	98
MB 490-573807/1-A	Method Blank	86

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(50-150)
600-180009-4	SJRP-EB03-01312019	102
LCS 490-573790/5	Lab Control Sample	104
LCSD 490-573790/6	Lab Control Sample Dup	88
MB 490-573790/8	Method Blank	103

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		OTPH1
Lab Sample ID	Client Sample ID	(50-150)
600-180009-2	SJRP-MW21-10-11-01312019	94
600-180009-3	SJRP-MW21-19-20-01312019	119
600-180009-5	SJRP-MW22-10-11-01312019	76
600-180009-6	SJRP-MW22-18-19-01312019	85
600-180009-7	SJRP-MW22-18-19-01312019-2	63
LCS 490-574045/2-A	Lab Control Sample	83
MB 490-574045/1-A	Method Blank	104

Surrogate Legend

OTPH = o-Terphenyl (Surr)

Surrogate Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	OTPH1 (50-150)								
600-180009-4	SJRP-EB03-01312019	0.4 X								
600-180009-4 DU	SJRP-EB03-01312019	0.9 X								
LCS 490-574009/2-A	Lab Control Sample	0.06 X								
MB 490-574009/1-A	Method Blank	0.06 X								

Surrogate Legend

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-257563/6
Matrix: Water
Analysis Batch: 257563

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			02/01/19 11:50	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			02/01/19 11:50	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			02/01/19 11:50	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			02/01/19 11:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*50 - 134*		*02/01/19 11:50*	*1*
Dibromofluoromethane	*100*		*62 - 130*		*02/01/19 11:50*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*02/01/19 11:50*	*1*
4-Bromofluorobenzene	*119*		*67 - 139*		*02/01/19 11:50*	*1*

Lab Sample ID: LCS 600-257563/3
Matrix: Water
Analysis Batch: 257563

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0100	0.009808		mg/L		98	70 - 130		
Ethylbenzene			0.0100	0.009640		mg/L		96	70 - 130		
Toluene			0.0100	0.009654		mg/L		97	70 - 130		
Xylenes, Total			0.0200	0.01915		mg/L		96	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*50 - 134*
Dibromofluoromethane	*101*		*62 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*
4-Bromofluorobenzene	*122*		*67 - 139*

Lab Sample ID: LCSD 600-257563/4
Matrix: Water
Analysis Batch: 257563

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0100	0.009514		mg/L		95	70 - 130	3	20
Ethylbenzene			0.0100	0.009284		mg/L		93	70 - 130	4	20
Toluene			0.0100	0.009343		mg/L		93	70 - 130	3	20
Xylenes, Total			0.0200	0.01858		mg/L		93	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*50 - 134*
Dibromofluoromethane	*99*		*62 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*
4-Bromofluorobenzene	*121*		*67 - 139*

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-257633/6
Matrix: Solid
Analysis Batch: 257633

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			02/04/19 11:00	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			02/04/19 11:00	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			02/04/19 11:00	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			02/04/19 11:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*61 - 130*		*02/04/19 11:00*	*1*
Dibromofluoromethane	*92*		*68 - 140*		*02/04/19 11:00*	*1*
Toluene-d8 (Surr)	*76*		*50 - 130*		*02/04/19 11:00*	*1*
4-Bromofluorobenzene	*97*		*57 - 140*		*02/04/19 11:00*	*1*

Lab Sample ID: LCS 600-257633/3
Matrix: Solid
Analysis Batch: 257633

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.04701		mg/Kg		94	70 - 131		
Ethylbenzene			0.0500	0.04660		mg/Kg		93	66 - 130		
Toluene			0.0500	0.04584		mg/Kg		92	67 - 130		
Xylenes, Total			0.100	0.09449		mg/Kg		94	63 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*61 - 130*
Dibromofluoromethane	*95*		*68 - 140*
Toluene-d8 (Surr)	*86*		*50 - 130*
4-Bromofluorobenzene	*106*		*57 - 140*

Lab Sample ID: LCSD 600-257633/4
Matrix: Solid
Analysis Batch: 257633

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.05272		mg/Kg		105	70 - 131	11	30
Ethylbenzene			0.0500	0.05411		mg/Kg		108	66 - 130	15	30
Toluene			0.0500	0.05226		mg/Kg		105	67 - 130	13	30
Xylenes, Total			0.100	0.1073		mg/Kg		107	63 - 130	13	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*61 - 130*
Dibromofluoromethane	*95*		*68 - 140*
Toluene-d8 (Surr)	*86*		*50 - 130*
4-Bromofluorobenzene	*128*		*57 - 140*

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-257670/7
Matrix: Water
Analysis Batch: 257670

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			02/04/19 14:20	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			02/04/19 14:20	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			02/04/19 14:20	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			02/04/19 14:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*79*		*50 - 134*		*02/04/19 14:20*	*1*
Dibromofluoromethane	*80*		*62 - 130*		*02/04/19 14:20*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*02/04/19 14:20*	*1*
4-Bromofluorobenzene	*101*		*67 - 139*		*02/04/19 14:20*	*1*

Lab Sample ID: LCS 600-257670/4
Matrix: Water
Analysis Batch: 257670

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0100	0.01115		mg/L		111	70 - 130		
Ethylbenzene			0.0100	0.01088		mg/L		109	70 - 130		
Toluene			0.0100	0.01159		mg/L		116	70 - 130		
Xylenes, Total			0.0200	0.02188		mg/L		109	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*79*		*50 - 134*
Dibromofluoromethane	*84*		*62 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*
4-Bromofluorobenzene	*103*		*67 - 139*

Lab Sample ID: LCSD 600-257670/5
Matrix: Water
Analysis Batch: 257670

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0100	0.01002		mg/L		100	70 - 130	11	20
Ethylbenzene			0.0100	0.009716		mg/L		97	70 - 130	11	20
Toluene			0.0100	0.01027		mg/L		103	70 - 130	12	20
Xylenes, Total			0.0200	0.01958		mg/L		98	70 - 130	11	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*78*		*50 - 134*
Dibromofluoromethane	*83*		*62 - 130*
Toluene-d8 (Surr)	*92*		*70 - 130*
4-Bromofluorobenzene	*101*		*67 - 139*

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-257767/3-A
Matrix: Solid
Analysis Batch: 257772

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 257767

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0788	U	0.625	0.0788	mg/Kg		02/05/19 11:00	02/05/19 14:07	1
Ethylbenzene	0.128	U	0.625	0.128	mg/Kg		02/05/19 11:00	02/05/19 14:07	1
Toluene	0.173	U	0.625	0.173	mg/Kg		02/05/19 11:00	02/05/19 14:07	1
Xylenes, Total	0.141	U	0.625	0.141	mg/Kg		02/05/19 11:00	02/05/19 14:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*61 - 130*	*02/05/19 11:00*	*02/05/19 14:07*	*1*
Dibromofluoromethane	*103*		*68 - 140*	*02/05/19 11:00*	*02/05/19 14:07*	*1*
Toluene-d8 (Surr)	*124*		*50 - 130*	*02/05/19 11:00*	*02/05/19 14:07*	*1*
4-Bromofluorobenzene	*105*		*57 - 140*	*02/05/19 11:00*	*02/05/19 14:07*	*1*

Lab Sample ID: LCS 600-257767/1-A
Matrix: Solid
Analysis Batch: 257772

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 257767

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	6.25	6.056		mg/Kg		97	70 - 131
Ethylbenzene	6.25	6.824		mg/Kg		109	66 - 130
Toluene	6.25	6.312		mg/Kg		101	67 - 130
Xylenes, Total	12.5	13.02		mg/Kg		104	63 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*82*		*61 - 130*
Dibromofluoromethane	*95*		*68 - 140*
Toluene-d8 (Surr)	*97*		*50 - 130*
4-Bromofluorobenzene	*91*		*57 - 140*

Lab Sample ID: LCSD 600-257767/2-A
Matrix: Solid
Analysis Batch: 257772

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 257767

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	6.25	5.054		mg/Kg		81	70 - 131	18	30
Ethylbenzene	6.25	5.652		mg/Kg		90	66 - 130	19	30
Toluene	6.25	5.437		mg/Kg		87	67 - 130	15	30
Xylenes, Total	12.5	11.15		mg/Kg		89	63 - 130	15	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*81*		*61 - 130*
Dibromofluoromethane	*92*		*68 - 140*
Toluene-d8 (Surr)	*100*		*50 - 130*
4-Bromofluorobenzene	*89*		*57 - 140*

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 490-573790/8
Matrix: Water
Analysis Batch: 573790

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			02/06/19 12:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*103*		*50 - 150*		*02/06/19 12:57*	*1*

Lab Sample ID: LCS 490-573790/5
Matrix: Water
Analysis Batch: 573790

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	1.00	1.125		mg/L		113	66 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*104*		*50 - 150*

Lab Sample ID: LCSD 490-573790/6
Matrix: Water
Analysis Batch: 573790

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	1.00	1.117		mg/L		112	66 - 140	1	42

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*88*		*50 - 150*

Lab Sample ID: MB 490-573807/1-A
Matrix: Solid
Analysis Batch: 574162

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 573807

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		02/06/19 09:15	02/07/19 15:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*86*		*50 - 150*	*02/06/19 09:15*	*02/07/19 15:43*	*1*

Lab Sample ID: LCS 490-573807/2-A
Matrix: Solid
Analysis Batch: 574162

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 573807

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	500	507.0		mg/Kg		101	70 - 130

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: LCS 490-573807/2-A
Matrix: Solid
Analysis Batch: 574162

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 573807

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	*99*		*50 - 150*

Lab Sample ID: LCSD 490-573807/3-A
Matrix: Solid
Analysis Batch: 574162

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 573807

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10			500	494.0		mg/Kg		99	70 - 130	3	21

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	*98*		*50 - 150*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Lab Sample ID: MB 490-574009/1-A
Matrix: Water
Analysis Batch: 574181

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 574009

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0867	U	0.0953	0.0867	mg/L		02/06/19 16:10	02/07/19 18:04	1
ORO C24-C40	0.0867	U	0.0953	0.0867	mg/L		02/06/19 16:10	02/07/19 18:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	*0.06*	*X*	*50 - 150*	*02/06/19 16:10*	*02/07/19 18:04*	*1*

Lab Sample ID: LCS 490-574009/2-A
Matrix: Water
Analysis Batch: 574181

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 574009

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]			0.754	0.0858	U *	mg/L		2	46 - 132

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	*0.06*	*X*	*50 - 150*

Lab Sample ID: 600-180009-4 DU
Matrix: Water
Analysis Batch: 574181

Client Sample ID: SJRP-EB03-01312019
Prep Type: Total/NA
Prep Batch: 574009

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Diesel Range Organics [C10-C28]	0.0898	U *	0.0909	U *	mg/L		NC	31
ORO C24-C40	0.0898	U	0.0909	U	mg/L		NC	41

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Lab Sample ID: 600-180009-4 DU
Matrix: Water
Analysis Batch: 574181

Client Sample ID: SJRP-EB03-01312019
Prep Type: Total/NA
Prep Batch: 574009

Surrogate	DU %Recovery	DU Qualifier	Limits
o-Terphenyl (Surr)	*0.9*	*X*	*50 - 150*

Lab Sample ID: MB 490-574045/1-A
Matrix: Solid
Analysis Batch: 574177

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 574045

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.50	U	5.00	2.50	mg/Kg		02/06/19 18:45	02/07/19 21:54	1
ORO C24-C40	2.50	U	5.00	2.50	mg/Kg		02/06/19 18:45	02/07/19 21:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	*104*		*50 - 150*	*02/06/19 18:45*	*02/07/19 21:54*	*1*

Lab Sample ID: LCS 490-574045/2-A
Matrix: Solid
Analysis Batch: 574177

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 574045

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	40.0	33.78		mg/Kg		84	54 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	*83*		*50 - 150*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-258153/1-A
Matrix: Solid
Analysis Batch: 258232

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 258153

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.300	U	25.0	0.300	mg/Kg		02/11/19 12:42	02/12/19 11:28	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		02/11/19 12:42	02/12/19 11:28	1
Barium	0.0300	U	1.00	0.0300	mg/Kg		02/11/19 12:42	02/12/19 11:28	1
Boron	0.386	U	20.0	0.386	mg/Kg		02/11/19 12:42	02/12/19 11:28	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		02/11/19 12:42	02/12/19 11:28	1
Cobalt	0.0676	U	0.500	0.0676	mg/Kg		02/11/19 12:42	02/12/19 11:28	1
Iron	2.53	U	20.0	2.53	mg/Kg		02/11/19 12:42	02/12/19 11:28	1
Lead	0.105	U	0.500	0.105	mg/Kg		02/11/19 12:42	02/12/19 11:28	1
Molybdenum	0.136	U	0.500	0.136	mg/Kg		02/11/19 12:42	02/12/19 11:28	1
Nickel	0.117	U	1.00	0.117	mg/Kg		02/11/19 12:42	02/12/19 11:28	1
Selenium	0.259	U	2.00	0.259	mg/Kg		02/11/19 12:42	02/12/19 11:28	1

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: MB 600-258153/1-A
Matrix: Solid
Analysis Batch: 258351

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 258153

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.300	U	25.0	0.300	mg/Kg		02/11/19 12:42	02/13/19 12:47	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		02/11/19 12:42	02/13/19 12:47	1
Barium	0.03000	J	1.00	0.0300	mg/Kg		02/11/19 12:42	02/13/19 12:47	1
Boron	0.386	U	20.0	0.386	mg/Kg		02/11/19 12:42	02/13/19 12:47	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		02/11/19 12:42	02/13/19 12:47	1
Chromium	0.06000	J	0.500	0.0506	mg/Kg		02/11/19 12:42	02/13/19 12:47	1
Cobalt	0.0676	U	0.500	0.0676	mg/Kg		02/11/19 12:42	02/13/19 12:47	1
Iron	2.53	U	20.0	2.53	mg/Kg		02/11/19 12:42	02/13/19 12:47	1
Lead	0.105	U	0.500	0.105	mg/Kg		02/11/19 12:42	02/13/19 12:47	1
Manganese	0.0381	U	1.50	0.0381	mg/Kg		02/11/19 12:42	02/13/19 12:47	1
Molybdenum	0.1700	J	0.500	0.136	mg/Kg		02/11/19 12:42	02/13/19 12:47	1
Selenium	0.259	U	2.00	0.259	mg/Kg		02/11/19 12:42	02/13/19 12:47	1

Lab Sample ID: LCS 600-258153/2-A
Matrix: Solid
Analysis Batch: 258232

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 258153

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	500	553.0		mg/Kg		111	42 - 158
Arsenic	50.0	48.21		mg/Kg		96	78 - 122
Barium	50.0	54.45		mg/Kg		109	80 - 120
Boron	50.0	53.55		mg/Kg		107	68 - 133
Cadmium	25.0	24.59		mg/Kg		98	81 - 119
Cobalt	50.0	52.00		mg/Kg		104	82 - 118
Iron	500	536.5		mg/Kg		107	51 - 149
Lead	50.0	49.14		mg/Kg		98	79 - 121
Molybdenum	50.0	54.70		mg/Kg		109	75 - 125
Nickel	50.0	50.50		mg/Kg		101	81 - 119
Selenium	50.0	48.14		mg/Kg		96	80 - 120

Lab Sample ID: LCS 600-258153/2-A
Matrix: Solid
Analysis Batch: 258351

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 258153

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	500	516.0		mg/Kg		103	42 - 158
Arsenic	50.0	49.55		mg/Kg		99	78 - 122
Barium	50.0	51.00		mg/Kg		102	80 - 120
Boron	50.0	50.15		mg/Kg		100	68 - 133
Cadmium	25.0	24.65		mg/Kg		99	81 - 119
Chromium	50.0	48.73		mg/Kg		97	81 - 119
Cobalt	50.0	51.45		mg/Kg		103	82 - 118
Iron	500	512.5		mg/Kg		103	51 - 149
Lead	50.0	50.30		mg/Kg		101	79 - 121
Manganese	50.0	49.97		mg/Kg		100	81 - 119
Molybdenum	50.0	54.20		mg/Kg		108	75 - 125
Nickel	50.0	50.50		mg/Kg		101	81 - 119
Selenium	50.0	48.59		mg/Kg		97	80 - 120

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-180009-7 MS
Matrix: Solid
Analysis Batch: 258232

Client Sample ID: SJRP-MW22-18-19-01312019-2
Prep Type: Total/NA
Prep Batch: 258153

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	9440		545	11520	4	mg/Kg	☼	382	75 - 125
Arsenic	1.70		54.5	50.59		mg/Kg	☼	90	75 - 125
Barium	82.9		54.5	140.0		mg/Kg	☼	105	75 - 125
Boron	1.81	J F1	54.5	35.56	F1	mg/Kg	☼	62	75 - 125
Cadmium	0.286		27.2	25.85		mg/Kg	☼	94	75 - 125
Cobalt	4.53		54.5	63.13		mg/Kg	☼	108	75 - 125
Iron	17100		545	18990	4	mg/Kg	☼	352	75 - 125
Lead	9.00		54.5	63.95		mg/Kg	☼	101	75 - 125
Molybdenum	0.814		54.5	48.78		mg/Kg	☼	88	75 - 125
Nickel	5.95		54.5	63.29		mg/Kg	☼	105	75 - 125
Selenium	0.285	U	54.5	48.79		mg/Kg	☼	90	75 - 125

Lab Sample ID: 600-180009-7 MS
Matrix: Solid
Analysis Batch: 258351

Client Sample ID: SJRP-MW22-18-19-01312019-2
Prep Type: Total/NA
Prep Batch: 258153

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	9190		545	11180	4	mg/Kg	☼	365	75 - 125
Arsenic	3.39		54.5	53.76		mg/Kg	☼	92	75 - 125
Barium	81.9	B	54.5	138.8		mg/Kg	☼	104	75 - 125
Boron	1.79	J F1	54.5	35.13	F1	mg/Kg	☼	61	75 - 125
Cadmium	0.275		27.2	25.89		mg/Kg	☼	94	75 - 125
Chromium	3.62	B	54.5	54.21		mg/Kg	☼	93	75 - 125
Cobalt	4.52		54.5	62.48		mg/Kg	☼	106	75 - 125
Iron	17100		545	18910	4	mg/Kg	☼	330	75 - 125
Lead	10.2		54.5	66.18		mg/Kg	☼	103	75 - 125
Manganese	92.7		54.5	146.7		mg/Kg	☼	99	75 - 125
Molybdenum	0.742	B	54.5	47.30		mg/Kg	☼	85	75 - 125
Nickel	5.87	B	54.5	63.08		mg/Kg	☼	105	75 - 125
Selenium	0.285	U	54.5	48.48		mg/Kg	☼	89	75 - 125

Lab Sample ID: 600-180009-7 DU
Matrix: Solid
Analysis Batch: 258232

Client Sample ID: SJRP-MW22-18-19-01312019-2
Prep Type: Total/NA
Prep Batch: 258153

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	9440		9596		mg/Kg	☼	2	20
Arsenic	1.70		1.881		mg/Kg	☼	10	20
Barium	82.9		84.25		mg/Kg	☼	2	20
Boron	1.81	J F1	2.425	J F5	mg/Kg	☼	29	20
Cadmium	0.286		0.2970		mg/Kg	☼	4	20
Cobalt	4.53		4.834		mg/Kg	☼	6	20
Iron	17100		17860		mg/Kg	☼	5	20
Lead	9.00		10.12		mg/Kg	☼	12	20
Molybdenum	0.814		1.078	F5	mg/Kg	☼	28	20
Nickel	5.95		6.781		mg/Kg	☼	13	20
Selenium	0.285	U	0.285	U	mg/Kg	☼	NC	20

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-180009-7 DU
Matrix: Solid
Analysis Batch: 258351

Client Sample ID: SJRP-MW22-18-19-01312019-2
Prep Type: Total/NA
Prep Batch: 258153

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Aluminum	9190			9415		mg/Kg	☼			2	20
Arsenic	3.39			3.740		mg/Kg	☼			10	20
Barium	81.9	B		83.04		mg/Kg	☼			1	20
Boron	1.79	J F1		2.007	J	mg/Kg	☼			11	20
Cadmium	0.275			0.2860		mg/Kg	☼			4	20
Chromium	3.62	B		3.778		mg/Kg	☼			4	20
Cobalt	4.52			4.790		mg/Kg	☼			6	20
Iron	17100			17970		mg/Kg	☼			5	20
Lead	10.2			11.43		mg/Kg	☼			11	20
Manganese	92.7			94.81		mg/Kg	☼			2	20
Molybdenum	0.742	B		0.9734	F5	mg/Kg	☼			27	20
Selenium	0.285	U		0.285	U	mg/Kg	☼			NC	20

Lab Sample ID: MB 600-258174/1-A
Matrix: Water
Analysis Batch: 258351

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 258174

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		02/11/19 16:08	02/13/19 14:51	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		02/11/19 16:08	02/13/19 14:51	1
Barium	0.001300	J	0.0200	0.000530	mg/L		02/11/19 16:08	02/13/19 14:51	1
Boron	0.0116	U	0.200	0.0116	mg/L		02/11/19 16:08	02/13/19 14:51	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		02/11/19 16:08	02/13/19 14:51	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		02/11/19 16:08	02/13/19 14:51	1
Cobalt	0.0006000	J	0.0100	0.000310	mg/L		02/11/19 16:08	02/13/19 14:51	1
Iron	0.0270	U	0.400	0.0270	mg/L		02/11/19 16:08	02/13/19 14:51	1
Lead	0.00219	U	0.0100	0.00219	mg/L		02/11/19 16:08	02/13/19 14:51	1
Manganese	0.002000	J	0.0100	0.000360	mg/L		02/11/19 16:08	02/13/19 14:51	1
Molybdenum	0.001300	J	0.0100	0.000540	mg/L		02/11/19 16:08	02/13/19 14:51	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		02/11/19 16:08	02/13/19 14:51	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		02/11/19 16:08	02/13/19 14:51	1

Lab Sample ID: LCS 600-258174/2-A
Matrix: Water
Analysis Batch: 258351

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 258174

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aluminum			10.0	10.37		mg/L		104	80 - 120		
Arsenic			1.00	1.009		mg/L		101	80 - 120		
Barium			1.00	1.032		mg/L		103	80 - 120		
Boron			1.00	1.025		mg/L		103	80 - 120		
Cadmium			0.500	0.5100		mg/L		102	80 - 120		
Chromium			1.00	0.9975		mg/L		100	80 - 120		
Cobalt			1.00	1.020		mg/L		102	80 - 120		
Iron			10.0	10.31		mg/L		103	80 - 120		
Lead			1.00	1.011		mg/L		101	80 - 120		
Manganese			1.00	1.003		mg/L		100	80 - 120		
Molybdenum			1.00	1.096		mg/L		110	80 - 120		

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCS 600-258174/2-A
Matrix: Water
Analysis Batch: 258351

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 258174

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nickel	1.00	1.007		mg/L		101	80 - 120
Selenium	1.00	1.008		mg/L		101	80 - 120

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-257855/1-A
Matrix: Water
Analysis Batch: 257882

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 257855

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		02/06/19 10:28	02/06/19 14:41	1

Lab Sample ID: LCS 600-257855/2-A
Matrix: Water
Analysis Batch: 257882

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 257855

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00375	0.003951		mg/L		105	70 - 130

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-257992/1-B
Matrix: Solid
Analysis Batch: 258008

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 257992

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00325	U	0.0155	0.00325	mg/Kg		02/07/19 11:54	02/07/19 14:50	1

Lab Sample ID: LCSSRM 600-257992/2-B
Matrix: Solid
Analysis Batch: 258008

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 257992

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	29.0	26.07		mg/Kg		89.9	59.7 - 115.2

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

GC/MS VOA

Analysis Batch: 257563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180009-1	SJRP-TB04-01312019	Total/NA	Water	8260B	
MB 600-257563/6	Method Blank	Total/NA	Water	8260B	
LCS 600-257563/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-257563/4	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 257633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180009-2	SJRP-MW21-10-11-01312019	Total/NA	Solid	8260B	257687
MB 600-257633/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-257633/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-257633/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 257670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180009-4	SJRP-EB03-01312019	Total/NA	Water	8260B	
MB 600-257670/7	Method Blank	Total/NA	Water	8260B	
LCS 600-257670/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-257670/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Prep Batch: 257687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180009-2	SJRP-MW21-10-11-01312019	Total/NA	Solid	5035	

Prep Batch: 257767

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-257767/3-A	Method Blank	Total/NA	Solid	5030B	
LCS 600-257767/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 600-257767/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Prep Batch: 257768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180009-2 - DL	SJRP-MW21-10-11-01312019	Total/NA	Solid	5035	
600-180009-3 - DL	SJRP-MW21-19-20-01312019	Total/NA	Solid	5035	
600-180009-3	SJRP-MW21-19-20-01312019	Total/NA	Solid	5035	
600-180009-5	SJRP-MW22-10-11-01312019	Total/NA	Solid	5035	
600-180009-5 - DL	SJRP-MW22-10-11-01312019	Total/NA	Solid	5035	
600-180009-6	SJRP-MW22-18-19-01312019	Total/NA	Solid	5035	
600-180009-7	SJRP-MW22-18-19-01312019-2	Total/NA	Solid	5035	

Analysis Batch: 257772

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180009-2 - DL	SJRP-MW21-10-11-01312019	Total/NA	Solid	8260B	257768
600-180009-3	SJRP-MW21-19-20-01312019	Total/NA	Solid	8260B	257768
600-180009-3 - DL	SJRP-MW21-19-20-01312019	Total/NA	Solid	8260B	257768
MB 600-257767/3-A	Method Blank	Total/NA	Solid	8260B	257767
LCS 600-257767/1-A	Lab Control Sample	Total/NA	Solid	8260B	257767
LCSD 600-257767/2-A	Lab Control Sample Dup	Total/NA	Solid	8260B	257767

Analysis Batch: 257869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180009-5	SJRP-MW22-10-11-01312019	Total/NA	Solid	8260B	257768

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

GC/MS VOA (Continued)

Analysis Batch: 257869 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180009-5 - DL	SJRP-MW22-10-11-01312019	Total/NA	Solid	8260B	257768
600-180009-6	SJRP-MW22-18-19-01312019	Total/NA	Solid	8260B	257768
600-180009-7	SJRP-MW22-18-19-01312019-2	Total/NA	Solid	8260B	257768

GC VOA

Analysis Batch: 573790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180009-4	SJRP-EB03-01312019	Total/NA	Water	8015C	
MB 490-573790/8	Method Blank	Total/NA	Water	8015C	
LCS 490-573790/5	Lab Control Sample	Total/NA	Water	8015C	
LCSD 490-573790/6	Lab Control Sample Dup	Total/NA	Water	8015C	

Prep Batch: 573807

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180009-2	SJRP-MW21-10-11-01312019	Total/NA	Solid	5030B	
600-180009-3	SJRP-MW21-19-20-01312019	Total/NA	Solid	5030B	
600-180009-5	SJRP-MW22-10-11-01312019	Total/NA	Solid	5030B	
600-180009-6	SJRP-MW22-18-19-01312019	Total/NA	Solid	5030B	
600-180009-7	SJRP-MW22-18-19-01312019-2	Total/NA	Solid	5030B	
MB 490-573807/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 490-573807/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 490-573807/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 574162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180009-2	SJRP-MW21-10-11-01312019	Total/NA	Solid	8015C	573807
600-180009-3	SJRP-MW21-19-20-01312019	Total/NA	Solid	8015C	573807
600-180009-5	SJRP-MW22-10-11-01312019	Total/NA	Solid	8015C	573807
600-180009-6	SJRP-MW22-18-19-01312019	Total/NA	Solid	8015C	573807
600-180009-7	SJRP-MW22-18-19-01312019-2	Total/NA	Solid	8015C	573807
MB 490-573807/1-A	Method Blank	Total/NA	Solid	8015C	573807
LCS 490-573807/2-A	Lab Control Sample	Total/NA	Solid	8015C	573807
LCSD 490-573807/3-A	Lab Control Sample Dup	Total/NA	Solid	8015C	573807

GC Semi VOA

Prep Batch: 574009

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180009-4	SJRP-EB03-01312019	Total/NA	Water	3510C	
MB 490-574009/1-A	Method Blank	Total/NA	Water	3510C	
LCS 490-574009/2-A	Lab Control Sample	Total/NA	Water	3510C	
600-180009-4 DU	SJRP-EB03-01312019	Total/NA	Water	3510C	

Prep Batch: 574045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180009-2	SJRP-MW21-10-11-01312019	Total/NA	Solid	3550C	
600-180009-3	SJRP-MW21-19-20-01312019	Total/NA	Solid	3550C	
600-180009-5	SJRP-MW22-10-11-01312019	Total/NA	Solid	3550C	
600-180009-6	SJRP-MW22-18-19-01312019	Total/NA	Solid	3550C	

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

GC Semi VOA (Continued)

Prep Batch: 574045 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180009-7	SJRP-MW22-18-19-01312019-2	Total/NA	Solid	3550C	
MB 490-574045/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-574045/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 574177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180009-2	SJRP-MW21-10-11-01312019	Total/NA	Solid	8015C	574045
600-180009-3	SJRP-MW21-19-20-01312019	Total/NA	Solid	8015C	574045
600-180009-5	SJRP-MW22-10-11-01312019	Total/NA	Solid	8015C	574045
600-180009-6	SJRP-MW22-18-19-01312019	Total/NA	Solid	8015C	574045
600-180009-7	SJRP-MW22-18-19-01312019-2	Total/NA	Solid	8015C	574045
MB 490-574045/1-A	Method Blank	Total/NA	Solid	8015C	574045
LCS 490-574045/2-A	Lab Control Sample	Total/NA	Solid	8015C	574045

Analysis Batch: 574181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180009-4	SJRP-EB03-01312019	Total/NA	Water	8015C	574009
MB 490-574009/1-A	Method Blank	Total/NA	Water	8015C	574009
LCS 490-574009/2-A	Lab Control Sample	Total/NA	Water	8015C	574009
600-180009-4 DU	SJRP-EB03-01312019	Total/NA	Water	8015C	574009

Analysis Batch: 574384

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180009-3	SJRP-MW21-19-20-01312019	Total/NA	Solid	8015C	574045
600-180009-6	SJRP-MW22-18-19-01312019	Total/NA	Solid	8015C	574045
600-180009-7	SJRP-MW22-18-19-01312019-2	Total/NA	Solid	8015C	574045

Metals

Prep Batch: 257855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180009-4	SJRP-EB03-01312019	Total/NA	Water	7470A	
MB 600-257855/1-A	Method Blank	Total/NA	Water	7470A	
LCS 600-257855/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 257882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180009-4	SJRP-EB03-01312019	Total/NA	Water	7470A	257855
MB 600-257855/1-A	Method Blank	Total/NA	Water	7470A	257855
LCS 600-257855/2-A	Lab Control Sample	Total/NA	Water	7470A	257855

Prep Batch: 257992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180009-2	SJRP-MW21-10-11-01312019	Total/NA	Solid	7471A	
600-180009-3	SJRP-MW21-19-20-01312019	Total/NA	Solid	7471A	
600-180009-5	SJRP-MW22-10-11-01312019	Total/NA	Solid	7471A	
600-180009-6	SJRP-MW22-18-19-01312019	Total/NA	Solid	7471A	
600-180009-7	SJRP-MW22-18-19-01312019-2	Total/NA	Solid	7471A	
MB 600-257992/1-B	Method Blank	Total/NA	Solid	7471A	
LCSSRM 600-257992/2-B	Lab Control Sample	Total/NA	Solid	7471A	

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

Metals (Continued)

Analysis Batch: 258008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180009-2	SJRP-MW21-10-11-01312019	Total/NA	Solid	7471A	257992
600-180009-3	SJRP-MW21-19-20-01312019	Total/NA	Solid	7471A	257992
600-180009-5	SJRP-MW22-10-11-01312019	Total/NA	Solid	7471A	257992
600-180009-6	SJRP-MW22-18-19-01312019	Total/NA	Solid	7471A	257992
600-180009-7	SJRP-MW22-18-19-01312019-2	Total/NA	Solid	7471A	257992
MB 600-257992/1-B	Method Blank	Total/NA	Solid	7471A	257992
LCSSRM 600-257992/2-B	Lab Control Sample	Total/NA	Solid	7471A	257992

Prep Batch: 258153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180009-2	SJRP-MW21-10-11-01312019	Total/NA	Solid	3050B	
600-180009-3	SJRP-MW21-19-20-01312019	Total/NA	Solid	3050B	
600-180009-5	SJRP-MW22-10-11-01312019	Total/NA	Solid	3050B	
600-180009-6	SJRP-MW22-18-19-01312019	Total/NA	Solid	3050B	
600-180009-7	SJRP-MW22-18-19-01312019-2	Total/NA	Solid	3050B	
MB 600-258153/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 600-258153/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-180009-7 MS	SJRP-MW22-18-19-01312019-2	Total/NA	Solid	3050B	
600-180009-7 DU	SJRP-MW22-18-19-01312019-2	Total/NA	Solid	3050B	

Prep Batch: 258174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180009-4	SJRP-EB03-01312019	Total/NA	Water	3010A	
MB 600-258174/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-258174/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 258232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180009-2	SJRP-MW21-10-11-01312019	Total/NA	Solid	6010B	258153
600-180009-3	SJRP-MW21-19-20-01312019	Total/NA	Solid	6010B	258153
600-180009-5	SJRP-MW22-10-11-01312019	Total/NA	Solid	6010B	258153
600-180009-6	SJRP-MW22-18-19-01312019	Total/NA	Solid	6010B	258153
600-180009-7	SJRP-MW22-18-19-01312019-2	Total/NA	Solid	6010B	258153
MB 600-258153/1-A	Method Blank	Total/NA	Solid	6010B	258153
LCS 600-258153/2-A	Lab Control Sample	Total/NA	Solid	6010B	258153
600-180009-7 MS	SJRP-MW22-18-19-01312019-2	Total/NA	Solid	6010B	258153
600-180009-7 DU	SJRP-MW22-18-19-01312019-2	Total/NA	Solid	6010B	258153

Analysis Batch: 258351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180009-2	SJRP-MW21-10-11-01312019	Total/NA	Solid	6010B	258153
600-180009-3	SJRP-MW21-19-20-01312019	Total/NA	Solid	6010B	258153
600-180009-4	SJRP-EB03-01312019	Total/NA	Water	6010B	258174
600-180009-5	SJRP-MW22-10-11-01312019	Total/NA	Solid	6010B	258153
600-180009-6	SJRP-MW22-18-19-01312019	Total/NA	Solid	6010B	258153
600-180009-7	SJRP-MW22-18-19-01312019-2	Total/NA	Solid	6010B	258153
MB 600-258153/1-A	Method Blank	Total/NA	Solid	6010B	258153
MB 600-258174/1-A	Method Blank	Total/NA	Water	6010B	258174
LCS 600-258153/2-A	Lab Control Sample	Total/NA	Solid	6010B	258153
LCS 600-258174/2-A	Lab Control Sample	Total/NA	Water	6010B	258174
600-180009-7 MS	SJRP-MW22-18-19-01312019-2	Total/NA	Solid	6010B	258153

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

Metals (Continued)

Analysis Batch: 258351 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180009-7 DU	SJRP-MW22-18-19-01312019-2	Total/NA	Solid	6010B	258153

General Chemistry

Analysis Batch: 257666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180009-2	SJRP-MW21-10-11-01312019	Total/NA	Solid	2540B	
600-180009-3	SJRP-MW21-19-20-01312019	Total/NA	Solid	2540B	
600-180009-5	SJRP-MW22-10-11-01312019	Total/NA	Solid	2540B	
600-180009-6	SJRP-MW22-18-19-01312019	Total/NA	Solid	2540B	
600-180009-7	SJRP-MW22-18-19-01312019-2	Total/NA	Solid	2540B	

Lab Chronicle

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

Client Sample ID: SJRP-TB04-01312019 — **Lab Sample ID: 600-180009-1**
Date Collected: 01/31/19 08:30 — **Matrix: Water**
Date Received: 02/01/19 09:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	257563	02/01/19 21:23	YX1	TAL HOU

Client Sample ID: SJRP-MW21-10-11-01312019 — **Lab Sample ID: 600-180009-2**
Date Collected: 01/31/19 09:00 — **Matrix: Solid**
Date Received: 02/01/19 09:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			257666	02/04/19 11:10	DTN	TAL HOU

Client Sample ID: SJRP-MW21-10-11-01312019 — **Lab Sample ID: 600-180009-2**
Date Collected: 01/31/19 09:00 — **Matrix: Solid**
Date Received: 02/01/19 09:51 — **Percent Solids: 85.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035	DL		5.47 g	5 mL	257768	02/01/19 11:40	KLV	TAL HOU
Total/NA	Analysis	8260B	DL	1	100 uL	5 mL	257772	02/05/19 22:51	KLV	TAL HOU
Total/NA	Prep	5035			5.22 g	5 mL	257687	02/01/19 11:40	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	257633	02/04/19 11:35	WS1	TAL HOU
Total/NA	Prep	5030B			5.39 g	5.0 mL	573807	02/06/19 09:22	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	574162	02/07/19 16:17	FKG	TAL NSH
Total/NA	Prep	3550C			25.06 g	1 mL	574045	02/06/19 18:45	AMD	TAL NSH
Total/NA	Analysis	8015C		1			574177	02/08/19 02:28	JDJ	TAL NSH
Total/NA	Prep	3050B			1.04 g	50.0 mL	258153	02/11/19 12:42	AML	TAL HOU
Total/NA	Analysis	6010B		1			258232	02/12/19 11:58	KP1	TAL HOU
Total/NA	Prep	3050B			1.04 g	50.0 mL	258153	02/11/19 12:42	AML	TAL HOU
Total/NA	Analysis	6010B		1			258351	02/13/19 13:03	KP1	TAL HOU
Total/NA	Prep	7471A			0.68 g	50 mL	257992	02/07/19 11:54	SOT	TAL HOU
Total/NA	Analysis	7471A		1			258008	02/07/19 15:29	SOT	TAL HOU

Client Sample ID: SJRP-MW21-19-20-01312019 — **Lab Sample ID: 600-180009-3**
Date Collected: 01/31/19 09:30 — **Matrix: Solid**
Date Received: 02/01/19 09:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			257666	02/04/19 11:10	DTN	TAL HOU

Client Sample ID: SJRP-MW21-19-20-01312019 — **Lab Sample ID: 600-180009-3**
Date Collected: 01/31/19 09:30 — **Matrix: Solid**
Date Received: 02/01/19 09:51 — **Percent Solids: 80.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	257768	02/01/19 11:40	KLV	TAL HOU

Lab Chronicle

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

Client Sample ID: SJRP-MW21-19-20-01312019

Lab Sample ID: 600-180009-3
Date Collected: 01/31/19 09:30
Matrix: Solid
Date Received: 02/01/19 09:51
Percent Solids: 80.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	100 uL	5 mL	257772	02/05/19 23:15	KLV	TAL HOU
Total/NA	Prep	5035	DL		5.02 g	5 mL	257768	02/01/19 11:40	KLV	TAL HOU
Total/NA	Analysis	8260B	DL	100	100 uL	5 mL	257772	02/05/19 23:40	KLV	TAL HOU
Total/NA	Prep	5030B			5.42 g	5.0 mL	573807	02/06/19 09:22	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	574162	02/07/19 16:52	FKG	TAL NSH
Total/NA	Prep	3550C			25.28 g	1 mL	574045	02/06/19 18:45	AMD	TAL NSH
Total/NA	Analysis	8015C		1			574177	02/08/19 02:45	JDJ	TAL NSH
Total/NA	Prep	3550C			25.28 g	1 mL	574045	02/06/19 18:45	AMD	TAL NSH
Total/NA	Analysis	8015C		25			574384	02/08/19 16:17	LOJ	TAL NSH
Total/NA	Prep	3050B			1.04 g	50.0 mL	258153	02/11/19 12:42	AML	TAL HOU
Total/NA	Analysis	6010B		1			258232	02/12/19 12:00	KP1	TAL HOU
Total/NA	Prep	3050B			1.04 g	50.0 mL	258153	02/11/19 12:42	AML	TAL HOU
Total/NA	Analysis	6010B		1			258351	02/13/19 13:05	KP1	TAL HOU
Total/NA	Prep	7471A			0.61 g	50 mL	257992	02/07/19 11:54	SOT	TAL HOU
Total/NA	Analysis	7471A		1			258008	02/07/19 15:31	SOT	TAL HOU

Client Sample ID: SJRP-EB03-01312019

Lab Sample ID: 600-180009-4
Date Collected: 01/31/19 12:45
Matrix: Water
Date Received: 02/01/19 09:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	257670	02/04/19 15:17	KLV	TAL HOU
Total/NA	Analysis	8015C		1	5 mL	5 mL	573790	02/06/19 15:58	S1S	TAL NSH
Total/NA	Prep	3510C			253.3 mL	1 mL	574009	02/06/19 16:10	TJB	TAL NSH
Total/NA	Analysis	8015C		1			574181	02/07/19 15:14	S1S	TAL NSH
Total/NA	Prep	3010A			50.0 mL	50.0 mL	258174	02/11/19 16:08	AML	TAL HOU
Total/NA	Analysis	6010B		1			258351	02/13/19 15:10	KP1	TAL HOU
Total/NA	Prep	7470A			40 mL	50 mL	257855	02/06/19 10:28	SOT	TAL HOU
Total/NA	Analysis	7470A		1			257882	02/06/19 15:31	SOT	TAL HOU

Client Sample ID: SJRP-MW22-10-11-01312019

Lab Sample ID: 600-180009-5
Date Collected: 01/31/19 15:15
Matrix: Solid
Date Received: 02/01/19 09:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			257666	02/04/19 11:10	DTN	TAL HOU

Client Sample ID: SJRP-MW22-10-11-01312019

Lab Sample ID: 600-180009-5
Date Collected: 01/31/19 15:15
Matrix: Solid
Date Received: 02/01/19 09:51
Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.93 g	5 mL	257768	02/01/19 11:40	KLV	TAL HOU

Lab Chronicle

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

Client Sample ID: SJRP-MW22-10-11-01312019

Lab Sample ID: 600-180009-5

Date Collected: 01/31/19 15:15
Matrix: Solid
Date Received: 02/01/19 09:51
Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	100 uL	5 mL	257869	02/06/19 16:44	KLV	TAL HOU
Total/NA	Prep	5035	DL		4.93 g	5 mL	257768	02/01/19 11:40	KLV	TAL HOU
Total/NA	Analysis	8260B	DL	10	100 uL	5 mL	257869	02/06/19 17:10	KLV	TAL HOU
Total/NA	Prep	5030B			5.72 g	5.0 mL	573807	02/06/19 09:22	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	574162	02/07/19 17:26	FKG	TAL NSH
Total/NA	Prep	3550C			25.86 g	1 mL	574045	02/06/19 18:45	AMD	TAL NSH
Total/NA	Analysis	8015C		1			574177	02/08/19 03:01	JDJ	TAL NSH
Total/NA	Prep	3050B			1.02 g	50.0 mL	258153	02/11/19 12:42	AML	TAL HOU
Total/NA	Analysis	6010B		1			258232	02/12/19 12:07	KP1	TAL HOU
Total/NA	Prep	3050B			1.02 g	50.0 mL	258153	02/11/19 12:42	AML	TAL HOU
Total/NA	Analysis	6010B		1			258351	02/13/19 13:06	KP1	TAL HOU
Total/NA	Prep	7471A			0.63 g	50 mL	257992	02/07/19 11:54	SOT	TAL HOU
Total/NA	Analysis	7471A		1			258008	02/07/19 15:33	SOT	TAL HOU

Client Sample ID: SJRP-MW22-18-19-01312019

Lab Sample ID: 600-180009-6

Date Collected: 01/31/19 15:40
Matrix: Solid
Date Received: 02/01/19 09:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			257666	02/04/19 11:10	DTN	TAL HOU

Client Sample ID: SJRP-MW22-18-19-01312019

Lab Sample ID: 600-180009-6

Date Collected: 01/31/19 15:40
Matrix: Solid
Date Received: 02/01/19 09:51
Percent Solids: 88.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.49 g	5 mL	257768	02/01/19 11:40	KLV	TAL HOU
Total/NA	Analysis	8260B		20	100 uL	5 mL	257869	02/06/19 17:36	KLV	TAL HOU
Total/NA	Prep	5030B			5.11 g	5.0 mL	573807	02/06/19 09:22	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	574162	02/07/19 18:00	FKG	TAL NSH
Total/NA	Prep	3550C			25.33 g	1 mL	574045	02/06/19 18:45	AMD	TAL NSH
Total/NA	Analysis	8015C		1			574177	02/08/19 03:18	JDJ	TAL NSH
Total/NA	Prep	3550C			25.33 g	1 mL	574045	02/06/19 18:45	AMD	TAL NSH
Total/NA	Analysis	8015C		25			574384	02/08/19 16:34	LOJ	TAL NSH
Total/NA	Prep	3050B			1.03 g	50.0 mL	258153	02/11/19 12:42	AML	TAL HOU
Total/NA	Analysis	6010B		1			258232	02/12/19 12:09	KP1	TAL HOU
Total/NA	Prep	3050B			1.03 g	50.0 mL	258153	02/11/19 12:42	AML	TAL HOU
Total/NA	Analysis	6010B		1			258351	02/13/19 13:08	KP1	TAL HOU
Total/NA	Prep	7471A			0.63 g	50 mL	257992	02/07/19 11:54	SOT	TAL HOU
Total/NA	Analysis	7471A		1			258008	02/07/19 15:39	SOT	TAL HOU

Lab Chronicle

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180009-1

Client Sample ID: SJRP-MW22-18-19-01312019-2 **Lab Sample ID: 600-180009-7**
Date Collected: 01/31/19 15:40 **Matrix: Solid**
Date Received: 02/01/19 09:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			257666	02/04/19 11:10	DTN	TAL HOU

Client Sample ID: SJRP-MW22-18-19-01312019-2 **Lab Sample ID: 600-180009-7**
Date Collected: 01/31/19 15:40 **Matrix: Solid**
Date Received: 02/01/19 09:51 **Percent Solids: 87.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.71 g	5 mL	257768	02/01/19 11:40	KLV	TAL HOU
Total/NA	Analysis	8260B		10	100 uL	5 mL	257869	02/06/19 18:27	KLV	TAL HOU
Total/NA	Prep	5030B			5.44 g	5.0 mL	573807	02/06/19 09:22	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	574162	02/07/19 18:34	FKG	TAL NSH
Total/NA	Prep	3550C			25.17 g	1 mL	574045	02/06/19 18:45	AMD	TAL NSH
Total/NA	Analysis	8015C		1			574177	02/08/19 03:35	JDJ	TAL NSH
Total/NA	Prep	3550C			25.17 g	1 mL	574045	02/06/19 18:45	AMD	TAL NSH
Total/NA	Analysis	8015C		25			574384	02/08/19 16:51	LOJ	TAL NSH
Total/NA	Prep	3050B			1.04 g	50.0 mL	258153	02/11/19 12:42	AML	TAL HOU
Total/NA	Analysis	6010B		1			258232	02/12/19 12:11	KP1	TAL HOU
Total/NA	Prep	3050B			1.04 g	50.0 mL	258153	02/11/19 12:42	AML	TAL HOU
Total/NA	Analysis	6010B		1			258351	02/13/19 13:10	KP1	TAL HOU
Total/NA	Prep	7471A			0.62 g	50 mL	257992	02/07/19 11:54	SOT	TAL HOU
Total/NA	Analysis	7471A		1			258008	02/07/19 15:41	SOT	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-180009-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Laboratory: TestAmerica Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	18-061-0	08-04-19
Louisiana	NELAP	6	01967	06-30-19
Oklahoma	State Program	6	2018-052	08-31-19
Texas	NELAP	6	T104704223-18-23	10-31-19
USDA	Federal		P330-18-00130	04-30-21

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-19
Alaska (UST)	State Program	10	UST-087	06-30-19
Arizona	State Program	9	AZ0473	05-05-19
Arkansas DEQ	State Program	6	88-0737	04-25-19
California	State Program	9	2938	06-30-19 *
Connecticut	State Program	1	PH-0220	12-31-19
Florida	NELAP	4	E87358	06-30-19
Georgia	State Program	4	NA: NELAP & A2LA	12-31-19
Illinois	NELAP	5	200010	12-09-18 *
Iowa	State Program	7	131	04-01-20
Kansas	NELAP	7	E-10229	10-31-19
Kentucky (UST)	State Program	4	19	06-30-19
Kentucky (WW)	State Program	4	90038	12-31-19
Louisiana	NELAP	6	30613	06-30-19
Maine	State Program	1	TN00032	11-03-19
Maryland	State Program	3	316	03-31-19
Massachusetts	State Program	1	M-TN032	06-30-19
Minnesota	NELAP	5	047-999-345	12-31-19
Mississippi	State Program	4	N/A	06-30-19
Montana (UST)	State Program	8	NA	02-17-19
Nevada	State Program	9	TN00032	07-31-19
New Hampshire	NELAP	1	2963	10-09-19
New Jersey	NELAP	2	TN965	06-30-19
New York	NELAP	2	11342	03-31-19
North Carolina (WW/SW)	State Program	4	387	12-31-19
North Dakota	State Program	8	R-146	06-30-19
Ohio VAP	State Program	5	CL0033	07-06-19
Oklahoma	State Program	6	9412	08-31-19
Oregon	NELAP	10	TN200001	04-26-19
Pennsylvania	NELAP	3	68-00585	07-31-19
Rhode Island	State Program	1	LAO00268	12-30-19
South Carolina	State Program	4	84009 (001)	02-28-19
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-19
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-19
Virginia	NELAP	3	460152	06-14-19
Washington	State Program	10	C789	07-19-19
West Virginia DEP	State Program	3	219	02-28-19
Wisconsin	State Program	5	998020430	08-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-180009-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Laboratory: TestAmerica Nashville (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wyoming (UST)	A2LA	8	453.07	12-31-19

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: A. Turkasz	Lab PM: McDaniel, Bethany	Carrier Tracking No(s): 7455 1172 8729	COC No: 05
Client Contact: Aleeca Forsberg	Phone:	E-Mail: bethany.mcdaniel@testamericainc.com		Page: 1 of 1
Company: CH2M Hill, Inc.				Job #:
Address: 3721 Rutledge Road NE Suite B-1	Due Date Requested:			
City: Albuquerque	TAT Requested (days):			
State, Zip: NM, 87109				
Phone: 505-855-5239	PO #: WD794541			
Email: Aleeca.Forsberg@CH2M.com	WO #: WD794541			
Project Name: Kinder Morgan San Juan River Plant RWIP	Project #: 60005961			
Site: San Juan River Gas Plant	ARF#: ERG ARF_CH2M_01-15-2019			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260 - BTEX	8015 - GRO Range (C6-C10)	8015 - DRO/ORO Range	6010/7470 - NMWQCC Metals with Hg	TCLP VOA (TCL)/TCLP SVOA (TCL List)	TCLP RCRA 8 Metals w /Hg	Total VOA 8260	Total SVOA 8270	Flashpoint and pH	Moisture				Total Number of containers	Special Instructi
Preservation Code:																					
SJRP-TB04-01312019	1/31/19	0830	G	W ~~Water~~ S	N	N	X	X	X	X						X					
SJRP-MW21-10-11-01312019	1/31/19	0900	G	~~Water~~ S	N	N	X	X	X	X						X					
SJRP-MW21-R-20-01312019	1/31/19	0930	G	~~Water~~ S	N	N	X	X	X	X						X					
SJRP-EB03-01312019	1/31/19	1245	G	Water	N	N	X	X	X	X						X					
SJRP-MW22-10-11-01312019	1/31/19	1515	G	~~Water~~ S	N	N	X	X	X	X						X					
SJRP-MW22-18-19-01312019	1/31/19	1540	G	~~Water~~ S	N	N	X	X	X	X						X					
SJRP-MW22-18-19-01312019-2	1/31/19	1540	G	~~Water~~ S	N	N	X	X	X	X						X					
			G	Water																	
			G	Water																	
			G	Water																	
			G	Water																	

600-180009 Chain of Custody

AP

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	1/31/2019 1630	Jacobs		2-1-19 / 0951	TA Houston
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Loc: 600 eipt Checklist
180009

'19FEB 1 9:51

Date/Time Received: _____

JOB NUMBER: _ ___ CLIENT: Cit Zen Hill

UNPACKED BY: J. L. CARRIER/DRIVER: Fedex

Custody Seal Present: ☒ YES ☐ NO Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Them CF	Corrected Temp (°C)
BW	Y / N	Y / N	4.9	IR676	+0.1	5.0
~~Y / N~~	~~Y / N~~	~~Y / N~~				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N	J. L. 2-1-19			
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☒ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☐ YES ☐ NO

pH paper Lot #_____

VOA headspace acceptable (5-6mm): ☒ YES ☐ NO ☐ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?		☒

COMMENTS: 1 broken voa vial for sample SJRP-EB03-01312019

J. L. 2-1-19

HS-SA-WI-013 Rev. 3; 07/01/2014


600-180009 Wayt
FedEx
TRK# 0221 7455 1172 8729
FRI – 01 FEB 10:30A
PRIORITY OVERNIGHT
XH LKSA
77040
TX – US IAH
*5135550 01/31 565J2/0E3D/23AD

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

600-180009 Chain of Custody

Cooler Received/Opened On 2/5/2019 @ 08:55

Time Samples Removed From Cooler 13:41 Time Samples Placed In Storage 14:08 (2 Hour Window)

1. Tracking # 8865 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 17960358 pH Strip Lot _____ Chlorine Strip Lot _____

2. Temperature of rep. sample or temp blank when opened: 1.2 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where: 1 front

5. Were the seals intact, signed, and dated correctly? YES NO NA

6. Were custody papers inside cooler? YES NO NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES NO and Intact YES NO NA

Were these signed and dated correctly? YES NO NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES NO NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES NO NA

12. Did all container labels and tags agree with custody papers? YES NO NA

13a. Were VOA vials received? YES NO NA

b. Was there any observable headspace present in any VOA vial? YES NO NA

● ← Larger than this.

14. Was there a Trip Blank in this cooler? YES NO NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (intial) 2.7

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES NO NA

b. Did the bottle labels indicate that the correct preservatives were used YES NO NA

16. Was residual chlorine present? YES NO NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) 2.7

17. Were custody papers properly filled out (ink, signed, etc)? YES NO NA

18. Did you sign the custody papers in the appropriate place? YES NO NA

19. Were correct containers used for the analysis requested? YES NO NA

20. Was sufficient amount of sample sent in each container? YES NO NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) 2.7

I certify that I attached a label with the unique LIMS number to each container (intial) 2.7

21. Were there Non-Conformance issues at login? YES NO Was a NCM generated? YES NO #_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 8/23/17

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

600-180009

estAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: McDaniel, Bethany A	C No: 0-37504.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: bethany.mcdaniel@testamericainc.com	State: New Mexico
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):	Page: Page 1 of 1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 2/13/2019		Job #: 600-180009-1
City: Nashville	TAT Requested (days):		
State, Zip: TN, 37204			
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:		
Email:	WO #:		
Project Name: San Juan Kinder Morgan Bloomfield, NM	Project #: 60005961		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO/3550C DRO/ORO	8015C_GRO/5030B_H Standard GRO Range (C6-C10)	8015C_GRO/5030B GRO Range (C6-C10)	8015C_DRO/3510C_LVI DRO/ORO	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
SJRP-MW21-10-11-01312019 (600-180009-2)	1/31/19	09:00 Central		Solid			X	X			2	
SJRP-MW21-19-20-01312019 (600-180009-3)	1/31/19	09:30 Central		Solid			X	X			2	
SJRP-EB03-01312019 (600-180009-4)	1/31/19	12:45 Central		Water					X	X	5	
SJRP-MW22-10-11-01312019 (600-180009-5)	1/31/19	15:15 Central		Solid			X	X			2	
SJRP-MW22-18-19-01312019 (600-180009-6)	1/31/19	15:40 Central		Solid			X	X			2	
SJRP-MW22-18-19-01312019-2 (600-180009-7)	1/31/19	15:40 Central		Solid			X	X			2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 12-4-19 1800	Company	Received by: Andrew Jordan	Date/Time: 08:55 12/05/19	Company TA-NAS
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.2

Ver: 09/20/2016

Login Sample Receipt Checklist

Client: CH2M Hill, Inc. Job Number: 600-180009-1

Login Number: 180009 **List Source: TestAmerica Houston**
List Number: 1
Creator: Snow, Tiffany B

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	Containers recd broken. Sufficient sample in remaining containers for analysis.
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

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ANALYTICAL REPORT

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-180048-1
Client Project/Site: San Juan Kinder Morgan Bloomfield, NM
Revision: 1

For:
CH2M Hill, Inc.
3721 Rutledge Rd. NE
Suite B-1
Albuquerque, New Mexico 87109

Attn: Aleeca Forsberg

Steve A Stepanski

Authorized for release by:
12/7/2020 5:02:10 PM
Steve Stepanski, Project Mgmt. Assistant
(713)690-4444
steve.stepanski@Eurofinset.com

Designee for

Bethany McDaniel, Senior Project Manager
(713)358-2005
bethany.mcdaniel@testamericainc.com

LINKS

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Have a Question? Ask The Expert

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Laboratory Job ID: 600-180048-1

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Case Narrative

Client: CH2M Hill, Inc. Job ID: 600-180048-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Job ID: 600-180048-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-180048-1

Comments
This report was revised to a Level 2 deliverable per client's request.

Receipt
The samples were received on 2/2/2019 10:54 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.5º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 600-258222 and analytical batch 600-258351 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Method Summary

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-180048-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL NSH
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL NSH
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU
3050B	Acid Digestion of Sediments, Sludges, and Soils	SW846	TAL HOU
3550C	Ultrasonic Extraction	SW846	TAL NSH
5030B	Purge and Trap	SW846	TAL HOU
5030B	Purge and Trap	SW846	TAL NSH
5035	Closed System Purge & Trap/Laboratory Preservation	SW846	TAL HOU
7471A	Mercury in Solid or Semi-Solid Waste (Manual Cold Vapor Technique)/Preparation	SW846	TAL HOU

Protocol References:

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180048-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-180048-1	SJRP-TB05-02012019	Water	02/01/19 09:30	02/02/19 10:54
600-180048-2	SJRP-MW20-10-11-02012019	Solid	02/01/19 13:00	02/02/19 10:54
600-180048-3	SJRP-MW20-19-20-02012019	Solid	02/01/19 13:15	02/02/19 10:54
600-180048-4	SJRP-MW20-29-30-02012019	Solid	02/01/19 15:00	02/02/19 10:54

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180048-1

Client Sample ID: SJRP-TB05-02012019

Lab Sample ID: 600-180048-1
Date Collected: 02/01/19 09:30
Matrix: Water
Date Received: 02/02/19 10:54

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			02/04/19 14:48	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			02/04/19 14:48	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			02/04/19 14:48	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			02/04/19 14:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*79*		*50 - 134*		*02/04/19 14:48*	*1*
Dibromofluoromethane	*82*		*62 - 130*		*02/04/19 14:48*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*02/04/19 14:48*	*1*
4-Bromofluorobenzene	*100*		*67 - 139*		*02/04/19 14:48*	*1*

Client Sample ID: SJRP-MW20-10-11-02012019

Lab Sample ID: 600-180048-2
Date Collected: 02/01/19 13:00
Matrix: Solid
Date Received: 02/02/19 10:54
Percent Solids: 89.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000653	U	0.00518	0.000653	mg/Kg	☼	02/02/19 14:10	02/04/19 11:59	1
Ethylbenzene	0.00106	U	0.00518	0.00106	mg/Kg	☼	02/02/19 14:10	02/04/19 11:59	1
Toluene	0.00143	U	0.00518	0.00143	mg/Kg	☼	02/02/19 14:10	02/04/19 11:59	1
Xylenes, Total	0.00117	U	0.00518	0.00117	mg/Kg	☼	02/02/19 14:10	02/04/19 11:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*61 - 130*	*02/02/19 14:10*	*02/04/19 11:59*	*1*
Dibromofluoromethane	*89*		*68 - 140*	*02/02/19 14:10*	*02/04/19 11:59*	*1*
Toluene-d8 (Surr)	*75*		*50 - 130*	*02/02/19 14:10*	*02/04/19 11:59*	*1*
4-Bromofluorobenzene	*110*		*57 - 140*	*02/02/19 14:10*	*02/04/19 11:59*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.91	U	5.81	2.91	mg/Kg	☼	02/06/19 09:22	02/07/19 23:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*91*		*50 - 150*	*02/06/19 09:22*	*02/07/19 23:39*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.78	U	5.56	2.78	mg/Kg	☼	02/11/19 14:47	02/14/19 21:29	1
ORO C24-C40	**3.58**	**J**	5.56	2.78	mg/Kg	☼	02/11/19 14:47	02/14/19 21:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*72*		*50 - 150*	*02/11/19 14:47*	*02/14/19 21:29*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8100**		27.1	0.325	mg/Kg	☼	02/12/19 10:42	02/13/19 15:41	1
Arsenic	**4.29**		1.08	0.236	mg/Kg	☼	02/12/19 10:42	02/13/19 15:41	1
Barium	**80.0**		1.08	0.0325	mg/Kg	☼	02/12/19 10:42	02/13/19 15:41	1
Boron	**1.28**	**J B**	21.6	0.418	mg/Kg	☼	02/12/19 10:42	02/13/19 15:41	1
Cadmium	**0.211**	**J**	0.271	0.0277	mg/Kg	☼	02/12/19 10:42	02/13/19 15:41	1

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180048-1

Client Sample ID: SJRP-MW20-10-11-02012019

Lab Sample ID: 600-180048-2
Date Collected: 02/01/19 13:00
Matrix: Solid
Date Received: 02/02/19 10:54
Percent Solids: 89.7

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**4.42**		0.541	0.0548	mg/Kg	☼	02/12/19 10:42	02/13/19 15:41	1
Cobalt	**4.70**		0.541	0.0732	mg/Kg	☼	02/12/19 10:42	02/13/19 15:41	1
Iron	**15100**		21.6	2.74	mg/Kg	☼	02/12/19 10:42	02/13/19 15:41	1
Lead	**8.37**		0.541	0.114	mg/Kg	☼	02/12/19 10:42	02/13/19 15:41	1
Manganese	**57.1**		1.62	0.0412	mg/Kg	☼	02/12/19 10:42	02/13/19 15:41	1
Molybdenum	**1.42**		0.541	0.147	mg/Kg	☼	02/12/19 10:42	02/13/19 15:41	1
Nickel	**5.35**		1.08	0.127	mg/Kg	☼	02/12/19 10:42	02/13/19 15:41	1
Selenium	0.280	U	2.16	0.280	mg/Kg	☼	02/12/19 10:42	02/13/19 15:41	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00392	U	0.0186	0.00392	mg/Kg	☼	02/11/19 08:19	02/11/19 13:05	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**10.3**		1.0	1.0	%			02/04/19 11:10	1
Percent Solids	**89.7**		1.0	1.0	%			02/04/19 11:10	1

Client Sample ID: SJRP-MW20-19-20-02012019

Lab Sample ID: 600-180048-3
Date Collected: 02/01/19 13:15
Matrix: Solid
Date Received: 02/02/19 10:54
Percent Solids: 88.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000668	U	0.00530	0.000668	mg/Kg	☼	02/02/19 14:10	02/04/19 12:22	1
Ethylbenzene	0.00108	U	0.00530	0.00108	mg/Kg	☼	02/02/19 14:10	02/04/19 12:22	1
Toluene	0.00146	U	0.00530	0.00146	mg/Kg	☼	02/02/19 14:10	02/04/19 12:22	1
Xylenes, Total	0.00120	U	0.00530	0.00120	mg/Kg	☼	02/02/19 14:10	02/04/19 12:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*61 - 130*	*02/02/19 14:10*	*02/04/19 12:22*	*1*
Dibromofluoromethane	*85*		*68 - 140*	*02/02/19 14:10*	*02/04/19 12:22*	*1*
Toluene-d8 (Surr)	*75*		*50 - 130*	*02/02/19 14:10*	*02/04/19 12:22*	*1*
4-Bromofluorobenzene	*115*		*57 - 140*	*02/02/19 14:10*	*02/04/19 12:22*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.05	U	6.10	3.05	mg/Kg	☼	02/06/19 09:26	02/08/19 00:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*90*		*50 - 150*	*02/06/19 09:26*	*02/08/19 00:13*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.81	U	5.63	2.81	mg/Kg	☼	02/11/19 14:47	02/14/19 21:46	1
ORO C24-C40	**3.68**	**J**	5.63	2.81	mg/Kg	☼	02/11/19 14:47	02/14/19 21:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*83*		*50 - 150*	*02/11/19 14:47*	*02/14/19 21:46*	*1*

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180048-1

Client Sample ID: SJRP-MW20-19-20-02012019

Lab Sample ID: 600-180048-3
Date Collected: 02/01/19 13:15
Matrix: Solid
Date Received: 02/02/19 10:54
Percent Solids: 88.0

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	13400		26.8	0.322	mg/Kg	☼	02/12/19 10:42	02/13/19 15:43	1
Arsenic	4.14		1.07	0.234	mg/Kg	☼	02/12/19 10:42	02/13/19 15:43	1
Barium	29.8		1.07	0.0322	mg/Kg	☼	02/12/19 10:42	02/13/19 15:43	1
Boron	1.67	J B	21.4	0.414	mg/Kg	☼	02/12/19 10:42	02/13/19 15:43	1
Cadmium	0.450		0.268	0.0274	mg/Kg	☼	02/12/19 10:42	02/13/19 15:43	1
Chromium	6.46		0.536	0.0542	mg/Kg	☼	02/12/19 10:42	02/13/19 15:43	1
Cobalt	4.69		0.536	0.0725	mg/Kg	☼	02/12/19 10:42	02/13/19 15:43	1
Iron	19500		21.4	2.71	mg/Kg	☼	02/12/19 10:42	02/13/19 15:43	1
Lead	13.4		0.536	0.113	mg/Kg	☼	02/12/19 10:42	02/13/19 15:43	1
Manganese	169		1.61	0.0408	mg/Kg	☼	02/12/19 10:42	02/13/19 15:43	1
Molybdenum	0.252	J	0.536	0.146	mg/Kg	☼	02/12/19 10:42	02/13/19 15:43	1
Nickel	12.8		1.07	0.125	mg/Kg	☼	02/12/19 10:42	02/13/19 15:43	1
Selenium	0.278	U	2.14	0.278	mg/Kg	☼	02/12/19 10:42	02/13/19 15:43	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00394	U	0.0187	0.00394	mg/Kg	☼	02/11/19 08:19	02/11/19 13:07	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.0		1.0	1.0	%			02/04/19 11:10	1
Percent Solids	88.0		1.0	1.0	%			02/04/19 11:10	1

Client Sample ID: SJRP-MW20-29-30-02012019

Lab Sample ID: 600-180048-4
Date Collected: 02/01/19 15:00
Matrix: Solid
Date Received: 02/02/19 10:54
Percent Solids: 90.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000685	U	0.00543	0.000685	mg/Kg	☼	02/02/19 14:10	02/04/19 12:46	1
Ethylbenzene	0.00111	U	0.00543	0.00111	mg/Kg	☼	02/02/19 14:10	02/04/19 12:46	1
Toluene	0.00150	U	0.00543	0.00150	mg/Kg	☼	02/02/19 14:10	02/04/19 12:46	1
Xylenes, Total	0.00123	U	0.00543	0.00123	mg/Kg	☼	02/02/19 14:10	02/04/19 12:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*61 - 130*	*02/02/19 14:10*	*02/04/19 12:46*	*1*
Dibromofluoromethane	*88*		*68 - 140*	*02/02/19 14:10*	*02/04/19 12:46*	*1*
Toluene-d8 (Surr)	*76*		*50 - 130*	*02/02/19 14:10*	*02/04/19 12:46*	*1*
4-Bromofluorobenzene	*97*		*57 - 140*	*02/02/19 14:10*	*02/04/19 12:46*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.19	J	5.85	2.93	mg/Kg	☼	02/06/19 09:26	02/08/19 00:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*86*		*50 - 150*	*02/06/19 09:26*	*02/08/19 00:46*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3.18	J	5.47	2.73	mg/Kg	☼	02/11/19 14:47	02/13/19 22:52	1

Client Sample Results

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-180048-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Client Sample ID: SJRP-MW20-29-30-02012019 **Lab Sample ID: 600-180048-4**
Date Collected: 02/01/19 15:00 **Matrix: Solid**
Date Received: 02/02/19 10:54 **Percent Solids: 90.9**

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ORO C24-C40	4.76	J	5.47	2.73	mg/Kg	☼	02/11/19 14:47	02/13/19 22:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*82*		*50 - 150*	*02/11/19 14:47*	*02/13/19 22:52*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7640		26.4	0.317	mg/Kg	☼	02/12/19 10:42	02/13/19 15:45	1
Arsenic	7.93	F1 F2	1.06	0.231	mg/Kg	☼	02/12/19 10:42	02/13/19 15:45	1
Barium	30.8		1.06	0.0317	mg/Kg	☼	02/12/19 10:42	02/13/19 15:45	1
Boron	1.48	J B F1 F2	21.2	0.408	mg/Kg	☼	02/12/19 10:42	02/13/19 15:45	1
Cadmium	0.301	F1 F2	0.264	0.0271	mg/Kg	☼	02/12/19 10:42	02/13/19 15:45	1
Chromium	5.15	F1 F2	0.529	0.0535	mg/Kg	☼	02/12/19 10:42	02/13/19 15:45	1
Cobalt	6.06		0.529	0.0715	mg/Kg	☼	02/12/19 10:42	02/13/19 15:45	1
Iron	20500		21.2	2.68	mg/Kg	☼	02/12/19 10:42	02/13/19 15:45	1
Lead	8.53		0.529	0.111	mg/Kg	☼	02/12/19 10:42	02/13/19 15:45	1
Manganese	82.2	F1 F2	1.59	0.0403	mg/Kg	☼	02/12/19 10:42	02/13/19 15:45	1
Molybdenum	1.43	F1 F2	0.529	0.144	mg/Kg	☼	02/12/19 10:42	02/13/19 15:45	1
Nickel	4.40		1.06	0.124	mg/Kg	☼	02/12/19 10:42	02/13/19 15:45	1
Selenium	0.274	U F1 F2	2.12	0.274	mg/Kg	☼	02/12/19 10:42	02/13/19 15:45	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00882	J	0.0181	0.00381	mg/Kg	☼	02/11/19 08:19	02/11/19 13:09	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.1		1.0	1.0	%			02/04/19 11:10	1
Percent Solids	90.9		1.0	1.0	%			02/04/19 11:10	1

Definitions/Glossary

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-180048-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Surrogate Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180048-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(61-130)	(68-140)	(50-130)	(57-140)
600-180048-2	SJRP-MW20-10-11-02012019	86	89	75	110
600-180048-3	SJRP-MW20-19-20-02012019	86	85	75	115
600-180048-4	SJRP-MW20-29-30-02012019	86	88	76	97
600-180048-4 MS	SJRP-MW20-29-30-02012019	78	90	83	101
600-180048-4 MSD	SJRP-MW20-29-30-02012019	79	92	84	102
LCS 600-257633/3	Lab Control Sample	94	95	86	106
LCSD 600-257633/4	Lab Control Sample Dup	92	95	86	128
MB 600-257633/6	Method Blank	100	92	76	97

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(50-134)	(62-130)	(70-130)	(67-139)
600-180048-1	SJRP-TB05-02012019	79	82	92	100
LCS 600-257670/4	Lab Control Sample	79	84	96	103
LCSD 600-257670/5	Lab Control Sample Dup	78	83	92	101
MB 600-257670/7	Method Blank	79	80	91	101

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(50-150)
600-180048-2	SJRP-MW20-10-11-02012019	91
600-180048-3	SJRP-MW20-19-20-02012019	90
600-180048-4	SJRP-MW20-29-30-02012019	86
600-180048-4 MS	SJRP-MW20-29-30-02012019	102
600-180048-4 MSD	SJRP-MW20-29-30-02012019	122
LCS 490-573807/2-A	Lab Control Sample	99
LCSD 490-573807/3-A	Lab Control Sample Dup	98
MB 490-573807/1-A	Method Blank	86

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Surrogate Summary

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-180048-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	OTPH1 (50-150)								
600-180048-2	SJRP-MW20-10-11-02012019	72								
600-180048-3	SJRP-MW20-19-20-02012019	83								
600-180048-4	SJRP-MW20-29-30-02012019	82								
600-180048-4 MS	SJRP-MW20-29-30-02012019	90								
600-180048-4 MSD	SJRP-MW20-29-30-02012019	85								
LCS 490-574793/2-A	Lab Control Sample	90								
MB 490-574793/1-A	Method Blank	97								

Surrogate Legend

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180048-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-257633/6
Matrix: Solid
Analysis Batch: 257633

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			02/04/19 11:00	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			02/04/19 11:00	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			02/04/19 11:00	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			02/04/19 11:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*61 - 130*		*02/04/19 11:00*	*1*
Dibromofluoromethane	*92*		*68 - 140*		*02/04/19 11:00*	*1*
Toluene-d8 (Surr)	*76*		*50 - 130*		*02/04/19 11:00*	*1*
4-Bromofluorobenzene	*97*		*57 - 140*		*02/04/19 11:00*	*1*

Lab Sample ID: LCS 600-257633/3
Matrix: Solid
Analysis Batch: 257633

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.04701		mg/Kg		94	70 - 131		
Ethylbenzene			0.0500	0.04660		mg/Kg		93	66 - 130		
Toluene			0.0500	0.04584		mg/Kg		92	67 - 130		
Xylenes, Total			0.100	0.09449		mg/Kg		94	63 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*61 - 130*
Dibromofluoromethane	*95*		*68 - 140*
Toluene-d8 (Surr)	*86*		*50 - 130*
4-Bromofluorobenzene	*106*		*57 - 140*

Lab Sample ID: LCSD 600-257633/4
Matrix: Solid
Analysis Batch: 257633

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.05272		mg/Kg		105	70 - 131	11	30
Ethylbenzene			0.0500	0.05411		mg/Kg		108	66 - 130	15	30
Toluene			0.0500	0.05226		mg/Kg		105	67 - 130	13	30
Xylenes, Total			0.100	0.1073		mg/Kg		107	63 - 130	13	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*61 - 130*
Dibromofluoromethane	*95*		*68 - 140*
Toluene-d8 (Surr)	*86*		*50 - 130*
4-Bromofluorobenzene	*128*		*57 - 140*

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180048-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-257670/7
Matrix: Water
Analysis Batch: 257670

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			02/04/19 14:20	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			02/04/19 14:20	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			02/04/19 14:20	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			02/04/19 14:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*79*		*50 - 134*		*02/04/19 14:20*	*1*
Dibromofluoromethane	*80*		*62 - 130*		*02/04/19 14:20*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*02/04/19 14:20*	*1*
4-Bromofluorobenzene	*101*		*67 - 139*		*02/04/19 14:20*	*1*

Lab Sample ID: LCS 600-257670/4
Matrix: Water
Analysis Batch: 257670

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0100	0.01115		mg/L		111	70 - 130		
Ethylbenzene			0.0100	0.01088		mg/L		109	70 - 130		
Toluene			0.0100	0.01159		mg/L		116	70 - 130		
Xylenes, Total			0.0200	0.02188		mg/L		109	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*79*		*50 - 134*
Dibromofluoromethane	*84*		*62 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*
4-Bromofluorobenzene	*103*		*67 - 139*

Lab Sample ID: LCSD 600-257670/5
Matrix: Water
Analysis Batch: 257670

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0100	0.01002		mg/L		100	70 - 130	11	20
Ethylbenzene			0.0100	0.009716		mg/L		97	70 - 130	11	20
Toluene			0.0100	0.01027		mg/L		103	70 - 130	12	20
Xylenes, Total			0.0200	0.01958		mg/L		98	70 - 130	11	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*78*		*50 - 134*
Dibromofluoromethane	*83*		*62 - 130*
Toluene-d8 (Surr)	*92*		*70 - 130*
4-Bromofluorobenzene	*101*		*67 - 139*

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180048-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 600-180048-4 MS — **Client Sample ID: SJRP-MW20-29-30-02012019**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 257633 — **Prep Batch: 257674**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.000685	U	0.0475	0.04406		mg/Kg	☼	93	70 - 131
Ethylbenzene	0.00111	U	0.0475	0.04386		mg/Kg	☼	92	66 - 130
Toluene	0.00150	U	0.0475	0.04255		mg/Kg	☼	90	67 - 130
Xylenes, Total	0.00123	U	0.0949	0.08723		mg/Kg	☼	92	63 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*78*		*61 - 130*
Dibromofluoromethane	*90*		*68 - 140*
Toluene-d8 (Surr)	*83*		*50 - 130*
4-Bromofluorobenzene	*101*		*57 - 140*

Lab Sample ID: 600-180048-4 MSD — **Client Sample ID: SJRP-MW20-29-30-02012019**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 257633 — **Prep Batch: 257674**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.000685	U	0.0565	0.05909		mg/Kg	☼	105	70 - 131	29	30
Ethylbenzene	0.00111	U	0.0565	0.05828		mg/Kg	☼	103	66 - 130	28	30
Toluene	0.00150	U	0.0565	0.05728		mg/Kg	☼	101	67 - 130	30	30
Xylenes, Total	0.00123	U	0.113	0.1166		mg/Kg	☼	103	63 - 130	29	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*79*		*61 - 130*
Dibromofluoromethane	*92*		*68 - 140*
Toluene-d8 (Surr)	*84*		*50 - 130*
4-Bromofluorobenzene	*102*		*57 - 140*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 490-573807/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 574162 — **Prep Batch: 573807**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		02/06/19 09:15	02/07/19 15:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*86*		*50 - 150*	*02/06/19 09:15*	*02/07/19 15:43*	*1*

Lab Sample ID: LCS 490-573807/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 574162 — **Prep Batch: 573807**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	500	507.0		mg/Kg		101	70 - 130

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180048-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: LCS 490-573807/2-A
Matrix: Solid
Analysis Batch: 574162

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 573807

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	*99*		*50 - 150*

Lab Sample ID: LCSD 490-573807/3-A
Matrix: Solid
Analysis Batch: 574162

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 573807

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10			500	494.0		mg/Kg		99	70 - 130	3	21

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	*98*		*50 - 150*

Lab Sample ID: 600-180048-4 MS
Matrix: Solid
Analysis Batch: 574162

Client Sample ID: SJRP-MW20-29-30-02012019
Prep Type: Total/NA
Prep Batch: 573807

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	3.19	J	582	591.7		mg/Kg	☼	101	56 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene	*102*		*50 - 150*

Lab Sample ID: 600-180048-4 MSD
Matrix: Solid
Analysis Batch: 574162

Client Sample ID: SJRP-MW20-29-30-02012019
Prep Type: Total/NA
Prep Batch: 573807

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	3.19	J	574	655.0		mg/Kg	☼	113	56 - 130	10	21

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene	*122*		*50 - 150*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Lab Sample ID: MB 490-574793/1-A
Matrix: Solid
Analysis Batch: 575166

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 574793

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.50	U	5.00	2.50	mg/Kg		02/11/19 14:47	02/13/19 17:16	1
ORO C24-C40	2.50	U	5.00	2.50	mg/Kg		02/11/19 14:47	02/13/19 17:16	1

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180048-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Lab Sample ID: MB 490-574793/1-A
Matrix: Solid
Analysis Batch: 575166

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 574793

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	97		50 - 150	02/11/19 14:47	02/13/19 17:16	1

Lab Sample ID: LCS 490-574793/2-A
Matrix: Solid
Analysis Batch: 575166

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 574793

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			40.0	36.76		mg/Kg		92	54 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	90		50 - 150

Lab Sample ID: 600-180048-4 MS
Matrix: Solid
Analysis Batch: 575166

Client Sample ID: SJRP-MW20-29-30-02012019
Prep Type: Total/NA
Prep Batch: 574793

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]	3.18	J	43.7	46.08		mg/Kg	☼	98	10 - 142		

Surrogate	MS %Recovery	MS Qualifier	Limits
o-Terphenyl (Surr)	90		50 - 150

Lab Sample ID: 600-180048-4 MSD
Matrix: Solid
Analysis Batch: 575166

Client Sample ID: SJRP-MW20-29-30-02012019
Prep Type: Total/NA
Prep Batch: 574793

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	3.18	J	43.3	43.28		mg/Kg	☼	93	10 - 142	6	47

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl (Surr)	85		50 - 150

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-258222/1-A
Matrix: Solid
Analysis Batch: 258351

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 258222

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.300	U	25.0	0.300	mg/Kg		02/12/19 10:42	02/13/19 12:08	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		02/12/19 10:42	02/13/19 12:08	1
Barium	0.0300	U	1.00	0.0300	mg/Kg		02/12/19 10:42	02/13/19 12:08	1
Boron	0.4050	J	20.0	0.386	mg/Kg		02/12/19 10:42	02/13/19 12:08	1

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180048-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: MB 600-258222/1-A
Matrix: Solid
Analysis Batch: 258351

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 258222

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		02/12/19 10:42	02/13/19 12:08	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		02/12/19 10:42	02/13/19 12:08	1
Cobalt	0.0676	U	0.500	0.0676	mg/Kg		02/12/19 10:42	02/13/19 12:08	1
Iron	2.53	U	20.0	2.53	mg/Kg		02/12/19 10:42	02/13/19 12:08	1
Lead	0.105	U	0.500	0.105	mg/Kg		02/12/19 10:42	02/13/19 12:08	1
Manganese	0.0381	U	1.50	0.0381	mg/Kg		02/12/19 10:42	02/13/19 12:08	1
Molybdenum	0.136	U	0.500	0.136	mg/Kg		02/12/19 10:42	02/13/19 12:08	1
Nickel	0.117	U	1.00	0.117	mg/Kg		02/12/19 10:42	02/13/19 12:08	1
Selenium	0.259	U	2.00	0.259	mg/Kg		02/12/19 10:42	02/13/19 12:08	1

Lab Sample ID: LCS 600-258222/2-A
Matrix: Solid
Analysis Batch: 258351

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 258222

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	500	539.5		mg/Kg		108	42 - 158
Arsenic	50.0	51.40		mg/Kg		103	78 - 122
Barium	50.0	53.15		mg/Kg		106	80 - 120
Boron	50.0	52.30		mg/Kg		105	68 - 133
Cadmium	25.0	25.59		mg/Kg		102	81 - 119
Chromium	50.0	51.15		mg/Kg		102	81 - 119
Cobalt	50.0	53.45		mg/Kg		107	82 - 118
Iron	500	536.0		mg/Kg		107	51 - 149
Lead	50.0	52.75		mg/Kg		106	79 - 121
Manganese	50.0	51.95		mg/Kg		104	81 - 119
Molybdenum	50.0	56.40		mg/Kg		113	75 - 125
Nickel	50.0	52.25		mg/Kg		105	81 - 119
Selenium	50.0	50.25		mg/Kg		101	80 - 120

Lab Sample ID: 600-180048-4 MS
Matrix: Solid
Analysis Batch: 258351

Client Sample ID: SJRP-MW20-29-30-02012019
Prep Type: Total/NA
Prep Batch: 258222

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	7640		542	8720	4	mg/Kg	☼	199	75 - 125
Arsenic	7.93	F1 F2	54.2	61.37		mg/Kg	☼	99	75 - 125
Barium	30.8		54.2	95.81		mg/Kg	☼	120	75 - 125
Boron	1.48	J B F1 F2	54.2	42.34		mg/Kg	☼	75	75 - 125
Cadmium	0.301	F1 F2	27.1	28.04		mg/Kg	☼	102	75 - 125
Chromium	5.15	F1 F2	54.2	61.09		mg/Kg	☼	103	75 - 125
Cobalt	6.06		54.2	63.69		mg/Kg	☼	106	75 - 125
Iron	20500		542	19540	4	mg/Kg	☼	-169	75 - 125
Lead	8.53		54.2	63.97		mg/Kg	☼	102	75 - 125
Manganese	82.2	F1 F2	54.2	132.4		mg/Kg	☼	93	75 - 125
Molybdenum	1.43	F1 F2	54.2	55.79		mg/Kg	☼	100	75 - 125
Nickel	4.40		54.2	61.58		mg/Kg	☼	106	75 - 125
Selenium	0.274	U F1 F2	54.2	51.84		mg/Kg	☼	96	75 - 125

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180048-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-180048-4 MSD — **Client Sample ID: SJRP-MW20-29-30-02012019**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 258351 — **Prep Batch: 258222**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	7640		533	9196	4	mg/Kg	☼	292	75 - 125	5	20
Arsenic	7.93	F1 F2	53.3	41.15	F1 F2	mg/Kg	☼	62	75 - 125	39	20
Barium	30.8		53.3	85.84		mg/Kg	☼	103	75 - 125	11	20
Boron	1.48	J B F1 F2	53.3	26.10	F1 F2	mg/Kg	☼	46	75 - 125	47	20
Cadmium	0.301	F1 F2	26.6	17.58	F1 F2	mg/Kg	☼	65	75 - 125	46	20
Chromium	5.15	F1 F2	53.3	37.95	F1 F2	mg/Kg	☼	62	75 - 125	47	20
Cobalt	6.06		53.3	62.77		mg/Kg	☼	106	75 - 125	1	20
Iron	20500		533	17460	4	mg/Kg	☼	-562	75 - 125	11	20
Lead	8.53		53.3	67.93		mg/Kg	☼	111	75 - 125	6	20
Manganese	82.2	F1 F2	53.3	176.0	F1 F2	mg/Kg	☼	176	75 - 125	28	20
Molybdenum	1.43	F1 F2	53.3	34.87	F1 F2	mg/Kg	☼	63	75 - 125	46	20
Nickel	4.40		53.3	60.37		mg/Kg	☼	105	75 - 125	2	20
Selenium	0.274	U F1 F2	53.3	32.62	F1 F2	mg/Kg	☼	61	75 - 125	46	20

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-258101/7-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 258160 — **Prep Batch: 258101**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00330	U	0.0157	0.00330	mg/Kg		02/11/19 08:19	02/11/19 12:37	1

Lab Sample ID: LCSSRM 600-258101/8-A ^100 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 258160 — **Prep Batch: 258101**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	29.0	28.14		mg/Kg		97.0	59.7 - 115.2

Lab Sample ID: 600-180048-4 MS — **Client Sample ID: SJRP-MW20-29-30-02012019**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 258160 — **Prep Batch: 258101**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00882	J	0.267	0.2930		mg/Kg	☼	106	75 - 125

Lab Sample ID: 600-180048-4 MSD — **Client Sample ID: SJRP-MW20-29-30-02012019**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 258160 — **Prep Batch: 258101**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00882	J	0.270	0.2958		mg/Kg	☼	106	75 - 125	1	20

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180048-1

Method: 2540B - Percent Moisture

Lab Sample ID: 600-180048-2 DU
Matrix: Solid
Analysis Batch: 257666

Client Sample ID: SJRP-MW20-10-11-02012019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	10.3			10.4		%				1	20
Percent Solids	89.7			89.6		%				0.1	20

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180048-1

GC/MS VOA

Analysis Batch: 257633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180048-2	SJRP-MW20-10-11-02012019	Total/NA	Solid	8260B	257674
600-180048-3	SJRP-MW20-19-20-02012019	Total/NA	Solid	8260B	257674
600-180048-4	SJRP-MW20-29-30-02012019	Total/NA	Solid	8260B	257674
MB 600-257633/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-257633/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-257633/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
600-180048-4 MS	SJRP-MW20-29-30-02012019	Total/NA	Solid	8260B	257674
600-180048-4 MSD	SJRP-MW20-29-30-02012019	Total/NA	Solid	8260B	257674

Analysis Batch: 257670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180048-1	SJRP-TB05-02012019	Total/NA	Water	8260B	
MB 600-257670/7	Method Blank	Total/NA	Water	8260B	
LCS 600-257670/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-257670/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Prep Batch: 257674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180048-2	SJRP-MW20-10-11-02012019	Total/NA	Solid	5035	
600-180048-3	SJRP-MW20-19-20-02012019	Total/NA	Solid	5035	
600-180048-4	SJRP-MW20-29-30-02012019	Total/NA	Solid	5035	
600-180048-4 MS	SJRP-MW20-29-30-02012019	Total/NA	Solid	5035	
600-180048-4 MSD	SJRP-MW20-29-30-02012019	Total/NA	Solid	5035	

GC VOA

Prep Batch: 573807

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180048-2	SJRP-MW20-10-11-02012019	Total/NA	Solid	5030B	
600-180048-3	SJRP-MW20-19-20-02012019	Total/NA	Solid	5030B	
600-180048-4	SJRP-MW20-29-30-02012019	Total/NA	Solid	5030B	
MB 490-573807/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 490-573807/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 490-573807/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
600-180048-4 MS	SJRP-MW20-29-30-02012019	Total/NA	Solid	5030B	
600-180048-4 MSD	SJRP-MW20-29-30-02012019	Total/NA	Solid	5030B	

Analysis Batch: 574162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180048-2	SJRP-MW20-10-11-02012019	Total/NA	Solid	8015C	573807
600-180048-3	SJRP-MW20-19-20-02012019	Total/NA	Solid	8015C	573807
600-180048-4	SJRP-MW20-29-30-02012019	Total/NA	Solid	8015C	573807
MB 490-573807/1-A	Method Blank	Total/NA	Solid	8015C	573807
LCS 490-573807/2-A	Lab Control Sample	Total/NA	Solid	8015C	573807
LCSD 490-573807/3-A	Lab Control Sample Dup	Total/NA	Solid	8015C	573807
600-180048-4 MS	SJRP-MW20-29-30-02012019	Total/NA	Solid	8015C	573807
600-180048-4 MSD	SJRP-MW20-29-30-02012019	Total/NA	Solid	8015C	573807

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180048-1

GC Semi VOA

Prep Batch: 574793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180048-2	SJRP-MW20-10-11-02012019	Total/NA	Solid	3550C	
600-180048-3	SJRP-MW20-19-20-02012019	Total/NA	Solid	3550C	
600-180048-4	SJRP-MW20-29-30-02012019	Total/NA	Solid	3550C	
MB 490-574793/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-574793/2-A	Lab Control Sample	Total/NA	Solid	3550C	
600-180048-4 MS	SJRP-MW20-29-30-02012019	Total/NA	Solid	3550C	
600-180048-4 MSD	SJRP-MW20-29-30-02012019	Total/NA	Solid	3550C	

Analysis Batch: 575166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180048-4	SJRP-MW20-29-30-02012019	Total/NA	Solid	8015C	574793
MB 490-574793/1-A	Method Blank	Total/NA	Solid	8015C	574793
LCS 490-574793/2-A	Lab Control Sample	Total/NA	Solid	8015C	574793
600-180048-4 MS	SJRP-MW20-29-30-02012019	Total/NA	Solid	8015C	574793
600-180048-4 MSD	SJRP-MW20-29-30-02012019	Total/NA	Solid	8015C	574793

Analysis Batch: 575421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180048-2	SJRP-MW20-10-11-02012019	Total/NA	Solid	8015C	574793
600-180048-3	SJRP-MW20-19-20-02012019	Total/NA	Solid	8015C	574793

Metals

Prep Batch: 258101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180048-2	SJRP-MW20-10-11-02012019	Total/NA	Solid	7471A	
600-180048-3	SJRP-MW20-19-20-02012019	Total/NA	Solid	7471A	
600-180048-4	SJRP-MW20-29-30-02012019	Total/NA	Solid	7471A	
MB 600-258101/7-A	Method Blank	Total/NA	Solid	7471A	
LCSSRM 600-258101/8-A ^1	Lab Control Sample	Total/NA	Solid	7471A	
600-180048-4 MS	SJRP-MW20-29-30-02012019	Total/NA	Solid	7471A	
600-180048-4 MSD	SJRP-MW20-29-30-02012019	Total/NA	Solid	7471A	

Analysis Batch: 258160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180048-2	SJRP-MW20-10-11-02012019	Total/NA	Solid	7471A	258101
600-180048-3	SJRP-MW20-19-20-02012019	Total/NA	Solid	7471A	258101
600-180048-4	SJRP-MW20-29-30-02012019	Total/NA	Solid	7471A	258101
MB 600-258101/7-A	Method Blank	Total/NA	Solid	7471A	258101
LCSSRM 600-258101/8-A ^1	Lab Control Sample	Total/NA	Solid	7471A	258101
600-180048-4 MS	SJRP-MW20-29-30-02012019	Total/NA	Solid	7471A	258101
600-180048-4 MSD	SJRP-MW20-29-30-02012019	Total/NA	Solid	7471A	258101

Prep Batch: 258222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180048-2	SJRP-MW20-10-11-02012019	Total/NA	Solid	3050B	
600-180048-3	SJRP-MW20-19-20-02012019	Total/NA	Solid	3050B	
600-180048-4	SJRP-MW20-29-30-02012019	Total/NA	Solid	3050B	
MB 600-258222/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 600-258222/2-A	Lab Control Sample	Total/NA	Solid	3050B	

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180048-1

Metals (Continued)

Prep Batch: 258222 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180048-4 MS	SJRP-MW20-29-30-02012019	Total/NA	Solid	3050B	
600-180048-4 MSD	SJRP-MW20-29-30-02012019	Total/NA	Solid	3050B	

Analysis Batch: 258351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180048-2	SJRP-MW20-10-11-02012019	Total/NA	Solid	6010B	258222
600-180048-3	SJRP-MW20-19-20-02012019	Total/NA	Solid	6010B	258222
600-180048-4	SJRP-MW20-29-30-02012019	Total/NA	Solid	6010B	258222
MB 600-258222/1-A	Method Blank	Total/NA	Solid	6010B	258222
LCS 600-258222/2-A	Lab Control Sample	Total/NA	Solid	6010B	258222
600-180048-4 MS	SJRP-MW20-29-30-02012019	Total/NA	Solid	6010B	258222
600-180048-4 MSD	SJRP-MW20-29-30-02012019	Total/NA	Solid	6010B	258222

General Chemistry

Analysis Batch: 257666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180048-2	SJRP-MW20-10-11-02012019	Total/NA	Solid	2540B	
600-180048-3	SJRP-MW20-19-20-02012019	Total/NA	Solid	2540B	
600-180048-4	SJRP-MW20-29-30-02012019	Total/NA	Solid	2540B	
600-180048-4 MS	SJRP-MW20-29-30-02012019	Total/NA	Solid	2540B	
600-180048-4 MSD	SJRP-MW20-29-30-02012019	Total/NA	Solid	2540B	
600-180048-2 DU	SJRP-MW20-10-11-02012019	Total/NA	Solid	2540B	

Lab Chronicle

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180048-1

Client Sample ID: SJRP-TB05-02012019
Lab Sample ID: 600-180048-1
Date Collected: 02/01/19 09:30
Matrix: Water
Date Received: 02/02/19 10:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	257670	02/04/19 14:48	KLV	TAL HOU

Client Sample ID: SJRP-MW20-10-11-02012019
Lab Sample ID: 600-180048-2
Date Collected: 02/01/19 13:00
Matrix: Solid
Date Received: 02/02/19 10:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			257666	02/04/19 11:10	DTN	TAL HOU

Client Sample ID: SJRP-MW20-10-11-02012019
Lab Sample ID: 600-180048-2
Date Collected: 02/01/19 13:00
Matrix: Solid
Date Received: 02/02/19 10:54
Percent Solids: 89.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.38 g	5 mL	257674	02/02/19 14:10	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	257633	02/04/19 11:59	WS1	TAL HOU
Total/NA	Prep	5030B			5.32 g	5.0 mL	573807	02/06/19 09:22	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	574162	02/07/19 23:39	FKG	TAL NSH
Total/NA	Prep	3550C			25.04 g	1 mL	574793	02/11/19 14:47	EDS	TAL NSH
Total/NA	Analysis	8015C		1			575421	02/14/19 21:29	LOJ	TAL NSH
Total/NA	Prep	3050B			1.03 g	50.0 mL	258222	02/12/19 10:42	AML	TAL HOU
Total/NA	Analysis	6010B		1			258351	02/13/19 15:41	KP1	TAL HOU
Total/NA	Prep	7471A			0.61 g	50 mL	258101	02/11/19 08:19	KP1	TAL HOU
Total/NA	Analysis	7471A		1			258160	02/11/19 13:05	KP1	TAL HOU

Client Sample ID: SJRP-MW20-19-20-02012019
Lab Sample ID: 600-180048-3
Date Collected: 02/01/19 13:15
Matrix: Solid
Date Received: 02/02/19 10:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			257666	02/04/19 11:10	DTN	TAL HOU

Client Sample ID: SJRP-MW20-19-20-02012019
Lab Sample ID: 600-180048-3
Date Collected: 02/01/19 13:15
Matrix: Solid
Date Received: 02/02/19 10:54
Percent Solids: 88.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.36 g	5 mL	257674	02/02/19 14:10	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	257633	02/04/19 12:22	WS1	TAL HOU
Total/NA	Prep	5030B			5.24 g	5.0 mL	573807	02/06/19 09:26	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	574162	02/08/19 00:13	FKG	TAL NSH
Total/NA	Prep	3550C			25.24 g	1 mL	574793	02/11/19 14:47	EDS	TAL NSH

Lab Chronicle

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180048-1

Client Sample ID: SJRP-MW20-19-20-02012019

Lab Sample ID: 600-180048-3
Date Collected: 02/01/19 13:15
Matrix: Solid
Date Received: 02/02/19 10:54
Percent Solids: 88.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015C		1			575421	02/14/19 21:46	LOJ	TAL NSH
Total/NA	Prep	3050B			1.06 g	50.0 mL	258222	02/12/19 10:42	AML	TAL HOU
Total/NA	Analysis	6010B		1			258351	02/13/19 15:43	KP1	TAL HOU
Total/NA	Prep	7471A			0.62 g	50 mL	258101	02/11/19 08:19	KP1	TAL HOU
Total/NA	Analysis	7471A		1			258160	02/11/19 13:07	KP1	TAL HOU

Client Sample ID: SJRP-MW20-29-30-02012019

Lab Sample ID: 600-180048-4
Date Collected: 02/01/19 15:00
Matrix: Solid
Date Received: 02/02/19 10:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			257666	02/04/19 11:10	DTN	TAL HOU

Client Sample ID: SJRP-MW20-29-30-02012019

Lab Sample ID: 600-180048-4
Date Collected: 02/01/19 15:00
Matrix: Solid
Date Received: 02/02/19 10:54
Percent Solids: 90.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.06 g	5 mL	257674	02/02/19 14:10	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	257633	02/04/19 12:46	WS1	TAL HOU
Total/NA	Prep	5030B			5.14 g	5.0 mL	573807	02/06/19 09:26	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	574162	02/08/19 00:46	FKG	TAL NSH
Total/NA	Prep	3550C			25.16 g	1 mL	574793	02/11/19 14:47	EDS	TAL NSH
Total/NA	Analysis	8015C		1			575166	02/13/19 22:52	AK1	TAL NSH
Total/NA	Prep	3050B			1.04 g	50.0 mL	258222	02/12/19 10:42	AML	TAL HOU
Total/NA	Analysis	6010B		1			258351	02/13/19 15:45	KP1	TAL HOU
Total/NA	Prep	7471A			0.62 g	50 mL	258101	02/11/19 08:19	KP1	TAL HOU
Total/NA	Analysis	7471A		1			258160	02/11/19 13:09	KP1	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444
TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-180048-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Laboratory: TestAmerica Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	18-061-0	08-04-19
Louisiana	NELAP	6	01967	06-30-19
Oklahoma	State Program	6	2018-052	08-31-19
Texas	NELAP	6	T104704223-18-23	10-31-19
USDA	Federal		P330-18-00130	04-30-21

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-19
Alaska (UST)	State Program	10	UST-087	06-30-19
Arizona	State Program	9	AZ0473	05-05-19
Arkansas DEQ	State Program	6	88-0737	04-25-19
California	State Program	9	2938	06-30-19 *
Connecticut	State Program	1	PH-0220	12-31-19
Florida	NELAP	4	E87358	06-30-19
Georgia	State Program	4	NA: NELAP & A2LA	12-31-19
Illinois	NELAP	5	200010	12-09-18 *
Iowa	State Program	7	131	04-01-20
Kansas	NELAP	7	E-10229	10-31-19
Kentucky (UST)	State Program	4	19	06-30-19
Kentucky (WW)	State Program	4	90038	12-31-19
Louisiana	NELAP	6	30613	06-30-19
Maine	State Program	1	TN00032	11-03-19
Maryland	State Program	3	316	03-31-19
Massachusetts	State Program	1	M-TN032	06-30-19
Minnesota	NELAP	5	047-999-345	12-31-19
Mississippi	State Program	4	N/A	06-30-19
Montana (UST)	State Program	8	NA	02-17-19
Nevada	State Program	9	TN00032	07-31-19
New Hampshire	NELAP	1	2963	10-09-19
New Jersey	NELAP	2	TN965	06-30-19
New York	NELAP	2	11342	03-31-19
North Carolina (WW/SW)	State Program	4	387	12-31-19
North Dakota	State Program	8	R-146	06-30-19
Ohio VAP	State Program	5	CL0033	07-06-19
Oklahoma	State Program	6	9412	08-31-19
Oregon	NELAP	10	TN200001	04-26-19
Pennsylvania	NELAP	3	68-00585	07-31-19
Rhode Island	State Program	1	LAO00268	12-30-19
South Carolina	State Program	4	84009 (001)	02-28-19
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-19
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-19
Virginia	NELAP	3	460152	06-14-19
Washington	State Program	10	C789	07-19-19
West Virginia DEP	State Program	3	219	02-28-19
Wisconsin	State Program	5	998020430	08-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-180048-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Laboratory: TestAmerica Nashville (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wyoming (UST)	A2LA	8	453.07	12-31-19

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: A. Tuckasz	Lab PM: McDaniel, Bethany	Carrier Tracking No(s): 7455 1172 8718	COC No: 06
Client Contact: Aleeca Forsberg	Phone:	E-Mail: bethany.mcdaniel@testamericainc.com		Page: 1 of 1
Company: CH2M Hill, Inc.				Job #:
Address: 3721 Rutledge Road NE Suite B-1	Due Date Requested:			
City: Albuquerque	TAT Requested (days): See ARF			
State, Zip: NM, 87109				
Phone: 505-855-5239	PO #: WD794541			
Email: Aleeca.Forsberg@CH2M.com	WO #: WD794541			
Project Name: Kinder Morgan San Juan River Plant RWIP	Project #: 60005961			
Site: San Juan River Gas Plant	ARF#: ERG ARF_CH2M_01-15-2019			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260 - BTEX	8015 - GRO Range (C6-C10)	8015 - DRO/ORO Range	6010/7470 - NMWQCC Metals with Hg	TCLP VOA (TCL)/TCLP SVOA (TCL List)	TCLP RCRA 8 Metals w /Hg	Total VOA 8260	Total SVOA 8270	Flashpoint and pH	Moisture				Total Number of containers	Special
			Preservation Code:																		
SJRP-TB05-02012019	2/1/19	0930	G	Water	U	N	X														
SJRP-MW20-10-11-02012019		1300	G	~~Water~~ S	N	N	X	X	X	X						X					
SJRP-MW20-19-20-02012019		1315	G	~~Water~~ S	N	N	X	X	X	X						X					
SJRP-MW20-29-30-02012019		1500	G	~~Water~~ S	N	Y	X	X	X	X						X					
SJRP-MW20-29-30-02012019-MS		1500	G	~~Water~~ S	N	Y	X	X	X	X						X					
SJRP-MW20-29-30-02012019-MSD	2/1/19	1500	G	~~Water~~ S	N	Y	X	X	X	X						X					
			G	Water																	
			G	Water																	
			G	Water																	
			G	Water																	
			G	Water																	AP

600-180048 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		2/1/19 1630	Jacobs	U	2/2/19 1054	TA
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Loc: 600
180048

TestAmerica Houston

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Receipt Checklist

Date/Time Received: _____

JOB NUMBER: _____ CLIENT: CH2M

UNPACKED BY: PD CARRIER/DRIVER: Fedex

Custody Seal Present: ☒ YES ☐ NO Number of Coolers Received: 1 '19FEB 2 10:54

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Them CF	Corrected Temp (°C)
GW	(Y) / N	(Y) / N	1.4	676	+0.1	1.5
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N	PD 2/2/19			
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☒ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☐ YES ☐ NO

pH paper Lot #_____

VOA headspace acceptable (5-6mm): ☒ YES ☐ NO ☐ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	☒	☐

COMMENTS:

PD 2/2/19

HS-SA-WI-013 Rev. 3; 07/01/2014



600-180048 Way bill

Ship Date: 21Jan19
Track Num: 745511728718
Project ID: 60005961



Recipient Address:
TEST AMERICA
SHIPPING MANAGER
6310 [illegible]

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

600-180048 Chain of Custody

Cooler Received/Opened On 2/5/2019 @ 08:55

Time Samples Removed From Cooler 15:41 Time Samples Placed In Storage 14 08 (2 Hour Window)

1. Tracking # 8865 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 17960358 pH Strip Lot _____ Chlorine Strip Lot _____

2. Temperature of rep. sample or temp blank when opened: 1.2 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO NA

If yes, how many and where: 1 front

5. Were the seals intact, signed, and dated correctly? YES NO NA

6. Were custody papers inside cooler? YES NO NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES NO and Intact YES NO NA

Were these signed and dated correctly? YES NO NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES NO NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES NO NA

12. Did all container labels and tags agree with custody papers? YES NO NA

13a. Were VOA vials received? YES NO NA

b. Was there any observable headspace present in any VOA vial? YES NO NA

Larger than this.

14. Was there a Trip Blank in this cooler? YES NO NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) J.J

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES NO NA

b. Did the bottle labels indicate that the correct preservatives were used YES NO NA

16. Was residual chlorine present? YES NO NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) J.J

17. Were custody papers properly filled out (ink, signed, etc)? YES NO NA

18. Did you sign the custody papers in the appropriate place? YES NO NA

19. Were correct containers used for the analysis requested? YES NO NA

20. Was sufficient amount of sample sent in each container? YES NO NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) J.J

I certify that I attached a label with the unique LIMS number to each container (intial) J.J

21. Were there Non-Conformance issues at login? YES NO Was a NCM generated? YES NO #_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 8/23/17

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

600-180048

estAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: McDaniel, Bethany A	C No: 0-37504.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: bethany.mcdaniel@testamericainc.com	State: New Mexico
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):	Page: Page 1 of 1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 2/14/2019		Job #: 600-180048-1
City: Nashville	TAT Requested (days):		
State, Zip: TN, 37204			
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:		
Email:	WO #:		
Project Name: San Juan Kinder Morgan Bloomfield, NM	Project #: 60005961		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_DRO/3550C DRO/ORO	8015C_GRO/5030B_H Standard GRO Range (C6-C10)	Total Number of containers	Special Instructions/Note:
Preservation Code:										
SJRP-MW20-10-11-02012019 (600-180048-2)	2/1/19	13:00 Mountain		Solid			X	X	2	
SJRP-MW20-19-20-02012019 (600-180048-3)	2/1/19	13:15 Mountain		Solid			X	X	2	
SJRP-MW20-29-30-02012019 (600-180048-4)	2/1/19	15:00 Mountain		Solid			X	X	2	
SJRP-MW20-29-30-02012019 (600-180048-4MS)	2/1/19	15:00 Mountain	MS	Solid			X	X	2	
SJRP-MW20-29-30-02012019 (600-180048-4MSD)	2/1/19	15:00 Mountain	MSD	Solid			X	X	2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time: 2/4/19 1800	Company	Received by: [signature] Date/Time: 02/05/19 08:55 Company TA-NM
Relinquished by:	Date/Time:	Company	Received by: Date/Time: Company
Relinquished by:	Date/Time:	Company	Received by: Date/Time: Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 1.2	

Ver: 09/20/2016

Login Sample Receipt Checklist

Client: CH2M Hill, Inc. Job Number: 600-180048-1

Login Number: 180048 **List Source: TestAmerica Houston**
List Number: 1
Creator: Daley, Phoenix 1

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

eurofins | Environment Testing America



ANALYTICAL REPORT

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-180113-1
Client Project/Site: San Juan Kinder Morgan Bloomfield, NM
Revision: 1

For:
CH2M Hill, Inc.
3721 Rutledge Rd. NE
Suite B-1
Albuquerque, New Mexico 87109

Attn: Aleeca Forsberg

Steve A Stepanski

Authorized for release by:
12/7/2020 5:03:48 PM
Steve Stepanski, Project Mgmt. Assistant
(713)690-4444
steve.stepanski@Eurofinset.com

Designee for

Bethany McDaniel, Senior Project Manager
(713)358-2005
bethany.mcdaniel@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Laboratory Job ID: 600-180113-1

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Case Narrative

Client: CH2M Hill, Inc. Job ID: 600-180113-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Job ID: 600-180113-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-180113-1

Comments
This report was revised to a Level 2 deliverable per client's request.

Receipt
The samples were received on 2/5/2019 9:11 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were -2.6º C and 4.9º C.

Receipt Exceptions
Per client, samples were placed on dry ice at the time of sample collection.

Soil samples for Volatile Organics analyses were received frozen at the laboratory and on dry ice.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8015C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 490-574585 and analytical batch 490-574633.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 6010B: The method blank for preparation batch 600-258222 and analytical batch 600-258351 contained Boron above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 6010B: The method blank for preparation batch 600-258222 and analytical batch 600-258242 contained Cadmium above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 6010B: The method blank for preparation batch 600-258174 and analytical batch 600-258351 contained Barium, Cobalt, and Manganese above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Method Summary

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-180113-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL NSH
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL NSH
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
7471A	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU
3010A	Acid Digestion of Aqueous Samples and Extracts for Total Metals	SW846	TAL HOU
3050B	Acid Digestion of Sediments, Sludges, and Soils	SW846	TAL HOU
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL NSH
3550C	Ultrasonic Extraction	SW846	TAL NSH
5030B	Purge and Trap	SW846	TAL HOU
5030B	Purge and Trap	SW846	TAL NSH
5035	Closed System Purge & Trap/Laboratory Preservation	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)/Preparation	SW846	TAL HOU
7471A	Mercury in Solid or Semi-Solid Waste (Manual Cold Vapor Technique)/Preparation	SW846	TAL HOU

Protocol References:

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444
TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180113-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-180113-1	SJRP-TB06-02022019	Water	02/02/19 10:00	02/05/19 09:11
600-180113-2	SJRP-EB04-02022019	Water	02/02/19 10:30	02/05/19 09:11
600-180113-3	SJRP-MW23-10-11-02022019	Solid	02/02/19 11:30	02/05/19 09:11
600-180113-4	SJRP-MW23-19-20-02022019	Solid	02/02/19 12:20	02/05/19 09:11
600-180113-5	SJRP-MW23-29-30-02022019	Solid	02/02/19 13:15	02/05/19 09:11
600-180113-6	SJRP-MW23-39-40-02022019	Solid	02/02/19 15:30	02/05/19 09:11
600-180113-7	SJRP-TB07-02032019	Water	02/03/19 12:30	02/05/19 09:11

Client Sample Results

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-180113-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Client Sample ID: SJRP-TB06-02022019 Lab Sample ID: 600-180113-1

Date Collected: 02/02/19 10:00 **Matrix: Water**
Date Received: 02/05/19 09:11

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			02/05/19 14:53	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			02/05/19 14:53	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			02/05/19 14:53	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			02/05/19 14:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*79*		*50 - 134*		*02/05/19 14:53*	*1*
Dibromofluoromethane	*81*		*62 - 130*		*02/05/19 14:53*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*02/05/19 14:53*	*1*
4-Bromofluorobenzene	*97*		*67 - 139*		*02/05/19 14:53*	*1*

Client Sample ID: SJRP-EB04-02022019 Lab Sample ID: 600-180113-2

Date Collected: 02/02/19 10:30 **Matrix: Water**
Date Received: 02/05/19 09:11

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			02/05/19 15:49	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			02/05/19 15:49	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			02/05/19 15:49	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			02/05/19 15:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*50 - 134*		*02/05/19 15:49*	*1*
Dibromofluoromethane	*85*		*62 - 130*		*02/05/19 15:49*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*02/05/19 15:49*	*1*
4-Bromofluorobenzene	*101*		*67 - 139*		*02/05/19 15:49*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			02/08/19 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*94*		*50 - 150*		*02/08/19 16:51*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0966	U	0.106	0.0966	mg/L		02/09/19 11:59	02/10/19 13:22	1
ORO C24-C40	0.0966	U	0.106	0.0966	mg/L		02/09/19 11:59	02/10/19 13:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*96*		*50 - 150*	*02/09/19 11:59*	*02/10/19 13:22*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		02/11/19 16:08	02/13/19 15:12	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		02/11/19 16:08	02/13/19 15:12	1
Barium	0.000530	U	0.0200	0.000530	mg/L		02/11/19 16:08	02/13/19 15:12	1
Boron	0.0116	U	0.200	0.0116	mg/L		02/11/19 16:08	02/13/19 15:12	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		02/11/19 16:08	02/13/19 15:12	1

Client Sample Results

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-180113-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Client Sample ID: SJRP-EB04-02022019 Lab Sample ID: 600-180113-2

Date Collected: 02/02/19 10:30 **Matrix: Water**
Date Received: 02/05/19 09:11

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.00159	U	0.0100	0.00159	mg/L		02/11/19 16:08	02/13/19 15:12	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		02/11/19 16:08	02/13/19 15:12	1
Iron	0.0270	U	0.400	0.0270	mg/L		02/11/19 16:08	02/13/19 15:12	1
Lead	0.00219	U	0.0100	0.00219	mg/L		02/11/19 16:08	02/13/19 15:12	1
Manganese	**0.00140**	**J B**	0.0100	0.000360	mg/L		02/11/19 16:08	02/13/19 15:12	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		02/11/19 16:08	02/13/19 15:12	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		02/11/19 16:08	02/13/19 15:12	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		02/11/19 16:08	02/13/19 15:12	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		02/06/19 10:28	02/06/19 15:33	1

Client Sample ID: SJRP-MW23-10-11-02022019 Lab Sample ID: 600-180113-3

Date Collected: 02/02/19 11:30 **Matrix: Solid**
Date Received: 02/05/19 09:11 **Percent Solids: 80.9**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000804	U	0.00638	0.000804	mg/Kg	☼	02/05/19 10:40	02/05/19 13:27	1
Ethylbenzene	0.00130	U	0.00638	0.00130	mg/Kg	☼	02/05/19 10:40	02/05/19 13:27	1
Toluene	0.00176	U	0.00638	0.00176	mg/Kg	☼	02/05/19 10:40	02/05/19 13:27	1
Xylenes, Total	0.00144	U	0.00638	0.00144	mg/Kg	☼	02/05/19 10:40	02/05/19 13:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*61 - 130*	*02/05/19 10:40*	*02/05/19 13:27*	*1*
Dibromofluoromethane	*86*		*68 - 140*	*02/05/19 10:40*	*02/05/19 13:27*	*1*
Toluene-d8 (Surr)	*76*		*50 - 130*	*02/05/19 10:40*	*02/05/19 13:27*	*1*
4-Bromofluorobenzene	*98*		*57 - 140*	*02/05/19 10:40*	*02/05/19 13:27*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.20	U	6.39	3.20	mg/Kg	☼	02/08/19 09:33	02/12/19 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*85*		*50 - 150*	*02/08/19 09:33*	*02/12/19 20:01*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	3.06	U	6.13	3.06	mg/Kg	☼	02/16/19 18:22	02/19/19 00:48	1
ORO C24-C40	**3.31**	**J**	6.13	3.06	mg/Kg	☼	02/16/19 18:22	02/19/19 00:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*92*		*50 - 150*	*02/16/19 18:22*	*02/19/19 00:48*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**10200**		29.4	0.353	mg/Kg	☼	02/12/19 10:42	02/12/19 16:08	1
Arsenic	**4.15**		1.18	0.257	mg/Kg	☼	02/12/19 10:42	02/12/19 16:08	1
Barium	**120**	**F1**	1.18	0.0353	mg/Kg	☼	02/12/19 10:42	02/12/19 16:08	1

Client Sample Results

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-180113-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Client Sample ID: SJRP-MW23-10-11-02022019 Lab Sample ID: 600-180113-3

Date Collected: 02/02/19 11:30 Matrix: Solid
Date Received: 02/05/19 09:11 Percent Solids: 80.9

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	5.92	J F1	23.5	0.454	mg/Kg	☼	02/12/19 10:42	02/12/19 16:08	1
Cadmium	0.0801	J B	0.294	0.0301	mg/Kg	☼	02/12/19 10:42	02/12/19 16:08	1
Chromium	5.49		0.589	0.0596	mg/Kg	☼	02/12/19 10:42	02/13/19 12:11	1
Cobalt	6.25		0.589	0.0796	mg/Kg	☼	02/12/19 10:42	02/12/19 16:08	1
Iron	18800		23.5	2.98	mg/Kg	☼	02/12/19 10:42	02/12/19 16:08	1
Lead	11.1		0.589	0.124	mg/Kg	☼	02/12/19 10:42	02/12/19 16:08	1
Manganese	54.1		1.77	0.0449	mg/Kg	☼	02/12/19 10:42	02/12/19 16:08	1
Molybdenum	0.924		0.589	0.160	mg/Kg	☼	02/12/19 10:42	02/12/19 16:08	1
Nickel	5.69		1.18	0.138	mg/Kg	☼	02/12/19 10:42	02/12/19 16:08	1
Selenium	0.305	U	2.35	0.305	mg/Kg	☼	02/12/19 10:42	02/12/19 16:08	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0260		0.0207	0.00435	mg/Kg	☼	02/11/19 08:19	02/11/19 12:41	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19.1		1.0	1.0	%			02/06/19 15:02	1
Percent Solids	80.9		1.0	1.0	%			02/06/19 15:02	1

Client Sample ID: SJRP-MW23-19-20-02022019 Lab Sample ID: 600-180113-4

Date Collected: 02/02/19 12:20 Matrix: Solid
Date Received: 02/05/19 09:11 Percent Solids: 60.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00100	U	0.00797	0.00100	mg/Kg	☼	02/05/19 10:40	02/05/19 14:39	1
Ethylbenzene	0.00163	U	0.00797	0.00163	mg/Kg	☼	02/05/19 10:40	02/05/19 14:39	1
Toluene	0.00220	U	0.00797	0.00220	mg/Kg	☼	02/05/19 10:40	02/05/19 14:39	1
Xylenes, Total	0.00180	U	0.00797	0.00180	mg/Kg	☼	02/05/19 10:40	02/05/19 14:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*61 - 130*	*02/05/19 10:40*	*02/05/19 14:39*	*1*
Dibromofluoromethane	*87*		*68 - 140*	*02/05/19 10:40*	*02/05/19 14:39*	*1*
Toluene-d8 (Surr)	*74*		*50 - 130*	*02/05/19 10:40*	*02/05/19 14:39*	*1*
4-Bromofluorobenzene	*117*		*57 - 140*	*02/05/19 10:40*	*02/05/19 14:39*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	5.22	U	10.4	5.22	mg/Kg	☼	02/08/19 09:33	02/12/19 20:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*88*		*50 - 150*	*02/08/19 09:33*	*02/12/19 20:35*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	4.11	U	8.22	4.11	mg/Kg	☼	02/11/19 16:09	02/12/19 18:29	1
ORO C24-C40	6.11	J	8.22	4.11	mg/Kg	☼	02/11/19 16:09	02/12/19 18:29	1

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180113-1

Client Sample ID: SJRP-MW23-19-20-02022019

Lab Sample ID: 600-180113-4
Date Collected: 02/02/19 12:20
Matrix: Solid
Date Received: 02/05/19 09:11
Percent Solids: 60.4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	99		50 - 150	02/11/19 16:09	02/12/19 18:29	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	20500		38.7	0.464	mg/Kg	☼	02/12/19 10:42	02/13/19 15:14	1
Arsenic	5.19		1.55	0.337	mg/Kg	☼	02/12/19 10:42	02/13/19 15:14	1
Barium	58.8		1.55	0.0464	mg/Kg	☼	02/12/19 10:42	02/13/19 15:14	1
Boron	2.88	J B	30.9	0.597	mg/Kg	☼	02/12/19 10:42	02/13/19 15:14	1
Cadmium	0.425		0.387	0.0396	mg/Kg	☼	02/12/19 10:42	02/13/19 15:14	1
Chromium	6.35		0.773	0.0782	mg/Kg	☼	02/12/19 10:42	02/13/19 15:14	1
Cobalt	35.3		0.773	0.105	mg/Kg	☼	02/12/19 10:42	02/13/19 15:14	1
Iron	24500		30.9	3.91	mg/Kg	☼	02/12/19 10:42	02/13/19 15:14	1
Lead	27.6		0.773	0.162	mg/Kg	☼	02/12/19 10:42	02/13/19 15:14	1
Manganese	247		2.32	0.0589	mg/Kg	☼	02/12/19 10:42	02/13/19 15:14	1
Molybdenum	0.974		0.773	0.210	mg/Kg	☼	02/12/19 10:42	02/13/19 15:14	1
Nickel	12.8		1.55	0.181	mg/Kg	☼	02/12/19 10:42	02/13/19 15:14	1
Selenium	0.400	U	3.09	0.400	mg/Kg	☼	02/12/19 10:42	02/13/19 15:14	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0251	J	0.0277	0.00583	mg/Kg	☼	02/11/19 08:19	02/11/19 12:47	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	39.6		1.0	1.0	%			02/06/19 15:02	1
Percent Solids	60.4		1.0	1.0	%			02/06/19 15:02	1

Client Sample ID: SJRP-MW23-29-30-02022019

Lab Sample ID: 600-180113-5
Date Collected: 02/02/19 13:15
Matrix: Solid
Date Received: 02/05/19 09:11
Percent Solids: 98.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000591	U	0.00469	0.000591	mg/Kg	☼	02/05/19 10:40	02/05/19 15:03	1
Ethylbenzene	0.000957	U	0.00469	0.000957	mg/Kg	☼	02/05/19 10:40	02/05/19 15:03	1
Toluene	0.00129	U	0.00469	0.00129	mg/Kg	☼	02/05/19 10:40	02/05/19 15:03	1
Xylenes, Total	0.00106	U	0.00469	0.00106	mg/Kg	☼	02/05/19 10:40	02/05/19 15:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		61 - 130	02/05/19 10:40	02/05/19 15:03	1
Dibromofluoromethane	89		68 - 140	02/05/19 10:40	02/05/19 15:03	1
Toluene-d8 (Surr)	75		50 - 130	02/05/19 10:40	02/05/19 15:03	1
4-Bromofluorobenzene	109		57 - 140	02/05/19 10:40	02/05/19 15:03	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.82	J	4.45	2.22	mg/Kg	☼	02/08/19 09:33	02/12/19 21:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	89		50 - 150	02/08/19 09:33	02/12/19 21:08	1

Client Sample Results

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-180113-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Client Sample ID: SJRP-MW23-29-30-02022019 Lab Sample ID: 600-180113-5

Date Collected: 02/02/19 13:15 **Matrix: Solid**
Date Received: 02/05/19 09:11 **Percent Solids: 98.1**

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.54	U	5.07	2.54	mg/Kg	☼	02/11/19 16:09	02/12/19 18:46	1
ORO C24-C40	**3.78**	**J**	5.07	2.54	mg/Kg	☼	02/11/19 16:09	02/12/19 18:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*91*		*50 - 150*	*02/11/19 16:09*	*02/12/19 18:46*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**6090**		24.5	0.294	mg/Kg	☼	02/12/19 10:42	02/13/19 15:16	1
Arsenic	**2.91**		0.980	0.214	mg/Kg	☼	02/12/19 10:42	02/13/19 15:16	1
Barium	**165**		0.980	0.0294	mg/Kg	☼	02/12/19 10:42	02/13/19 15:16	1
Boron	**1.48**	**J B**	19.6	0.378	mg/Kg	☼	02/12/19 10:42	02/13/19 15:16	1
Cadmium	**0.181**	**J**	0.245	0.0251	mg/Kg	☼	02/12/19 10:42	02/13/19 15:16	1
Chromium	**3.01**		0.490	0.0496	mg/Kg	☼	02/12/19 10:42	02/13/19 15:16	1
Cobalt	**7.49**		0.490	0.0662	mg/Kg	☼	02/12/19 10:42	02/13/19 15:16	1
Iron	**12200**		19.6	2.48	mg/Kg	☼	02/12/19 10:42	02/13/19 15:16	1
Lead	**7.95**		0.490	0.103	mg/Kg	☼	02/12/19 10:42	02/13/19 15:16	1
Manganese	**150**		1.47	0.0373	mg/Kg	☼	02/12/19 10:42	02/13/19 15:16	1
Molybdenum	**1.55**		0.490	0.133	mg/Kg	☼	02/12/19 10:42	02/13/19 15:16	1
Nickel	**6.05**		0.980	0.115	mg/Kg	☼	02/12/19 10:42	02/13/19 15:16	1
Selenium	0.254	U	1.96	0.254	mg/Kg	☼	02/12/19 10:42	02/13/19 15:16	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00359	U	0.0170	0.00359	mg/Kg	☼	02/11/19 08:19	02/11/19 12:49	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**1.9**		1.0	1.0	%			02/06/19 15:02	1
Percent Solids	**98.1**		1.0	1.0	%			02/06/19 15:02	1

Client Sample ID: SJRP-MW23-39-40-02022019 Lab Sample ID: 600-180113-6

Date Collected: 02/02/19 15:30 **Matrix: Solid**
Date Received: 02/05/19 09:11 **Percent Solids: 82.6**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000704	U	0.00558	0.000704	mg/Kg	☼	02/05/19 10:40	02/05/19 15:27	1
Ethylbenzene	0.00114	U	0.00558	0.00114	mg/Kg	☼	02/05/19 10:40	02/05/19 15:27	1
Toluene	0.00154	U	0.00558	0.00154	mg/Kg	☼	02/05/19 10:40	02/05/19 15:27	1
Xylenes, Total	0.00126	U	0.00558	0.00126	mg/Kg	☼	02/05/19 10:40	02/05/19 15:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*61 - 130*	*02/05/19 10:40*	*02/05/19 15:27*	*1*
Dibromofluoromethane	*86*		*68 - 140*	*02/05/19 10:40*	*02/05/19 15:27*	*1*
Toluene-d8 (Surr)	*75*		*50 - 130*	*02/05/19 10:40*	*02/05/19 15:27*	*1*
4-Bromofluorobenzene	*116*		*57 - 140*	*02/05/19 10:40*	*02/05/19 15:27*	*1*

Client Sample Results

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-180113-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Client Sample ID: SJRP-MW23-39-40-02022019 Lab Sample ID: 600-180113-6

Date Collected: 02/02/19 15:30 Matrix: Solid
Date Received: 02/05/19 09:11 Percent Solids: 82.6

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	3.75	J	6.75	3.38	mg/Kg	☼	02/08/19 09:33	02/12/19 21:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*85*		*50 - 150*	*02/08/19 09:33*	*02/12/19 21:42*	*1*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.97	U	5.94	2.97	mg/Kg	☼	02/11/19 16:09	02/12/19 19:03	1
ORO C24-C40	4.79	J	5.94	2.97	mg/Kg	☼	02/11/19 16:09	02/12/19 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*100*		*50 - 150*	*02/11/19 16:09*	*02/12/19 19:03*	*1*

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	14500		29.1	0.349	mg/Kg	☼	02/12/19 10:42	02/13/19 15:18	1
Arsenic	4.20		1.16	0.254	mg/Kg	☼	02/12/19 10:42	02/13/19 15:18	1
Barium	103		1.16	0.0349	mg/Kg	☼	02/12/19 10:42	02/13/19 15:18	1
Boron	2.18	J B	23.3	0.449	mg/Kg	☼	02/12/19 10:42	02/13/19 15:18	1
Cadmium	0.303		0.291	0.0298	mg/Kg	☼	02/12/19 10:42	02/13/19 15:18	1
Chromium	3.60		0.582	0.0589	mg/Kg	☼	02/12/19 10:42	02/13/19 15:18	1
Cobalt	9.54		0.582	0.0787	mg/Kg	☼	02/12/19 10:42	02/13/19 15:18	1
Iron	16300		23.3	2.94	mg/Kg	☼	02/12/19 10:42	02/13/19 15:18	1
Lead	17.3		0.582	0.122	mg/Kg	☼	02/12/19 10:42	02/13/19 15:18	1
Manganese	140		1.75	0.0443	mg/Kg	☼	02/12/19 10:42	02/13/19 15:18	1
Molybdenum	0.629		0.582	0.158	mg/Kg	☼	02/12/19 10:42	02/13/19 15:18	1
Nickel	13.4		1.16	0.136	mg/Kg	☼	02/12/19 10:42	02/13/19 15:18	1
Selenium	0.301	U	2.33	0.301	mg/Kg	☼	02/12/19 10:42	02/13/19 15:18	1

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0452		0.0202	0.00426	mg/Kg	☼	02/11/19 08:19	02/11/19 12:51	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17.4		1.0	1.0	%			02/06/19 15:02	1
Percent Solids	82.6		1.0	1.0	%			02/06/19 15:02	1

Client Sample ID: SJRP-TB07-02032019 Lab Sample ID: 600-180113-7

Date Collected: 02/03/19 12:30 Matrix: Water
Date Received: 02/05/19 09:11

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			02/05/19 15:21	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			02/05/19 15:21	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			02/05/19 15:21	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			02/05/19 15:21	1

Client Sample Results

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-180113-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Client Sample ID: SJRP-TB07-02032019 **Lab Sample ID: 600-180113-7**
Date Collected: 02/03/19 12:30 **Matrix: Water**
Date Received: 02/05/19 09:11

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	77		50 - 134		02/05/19 15:21	1
Dibromofluoromethane	80		62 - 130		02/05/19 15:21	1
Toluene-d8 (Surr)	91		70 - 130		02/05/19 15:21	1
4-Bromofluorobenzene	98		67 - 139		02/05/19 15:21	1

Definitions/Glossary

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-180113-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F4	MS/MSD RPD exceeds control limits due to sample size difference.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Surrogate Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180113-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(61-130)	(68-140)	(50-130)	(57-140)
600-180113-3	SJRP-MW23-10-11-02022019	84	86	76	98
600-180113-3 MS	SJRP-MW23-10-11-02022019	89	93	81	103
600-180113-3 MSD	SJRP-MW23-10-11-02022019	93	93	81	101
600-180113-4	SJRP-MW23-19-20-02022019	88	87	74	117
600-180113-5	SJRP-MW23-29-30-02022019	85	89	75	109
600-180113-6	SJRP-MW23-39-40-02022019	85	86	75	116
LCS 600-257729/3	Lab Control Sample	90	96	86	108
LCSD 600-257729/4	Lab Control Sample Dup	80	90	85	107
MB 600-257729/6	Method Blank	93	87	74	94

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(50-134)	(62-130)	(70-130)	(67-139)
600-180113-1	SJRP-TB06-02022019	79	81	92	97
600-180113-2	SJRP-EB04-02022019	80	85	95	101
600-180113-7	SJRP-TB07-02032019	77	80	91	98
LCS 600-257773/4	Lab Control Sample	77	84	98	103
LCSD 600-257773/5	Lab Control Sample Dup	75	79	90	97
MB 600-257773/7	Method Blank	84	87	99	105

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT2
Lab Sample ID	Client Sample ID	(50-150)
600-180113-3	SJRP-MW23-10-11-02022019	85
600-180113-3 MS	SJRP-MW23-10-11-02022019	99
600-180113-3 MSD	SJRP-MW23-10-11-02022019	97
600-180113-4	SJRP-MW23-19-20-02022019	88
600-180113-5	SJRP-MW23-29-30-02022019	89
600-180113-6	SJRP-MW23-39-40-02022019	85
LCS 490-574318/2-A	Lab Control Sample	90
LCSD 490-574318/3-A	Lab Control Sample Dup	91
MB 490-574318/1-A	Method Blank	86

Surrogate Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180113-1

Surrogate Legend
TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	TFT2 (50-150)
600-180113-2	SJRP-EB04-02022019	94
LCS 490-574308/5	Lab Control Sample	146
LCSD 490-574308/6	Lab Control Sample Dup	145
MB 490-574308/7	Method Blank	97

Surrogate Legend
TFT = a,a,a-Trifluorotoluene

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	OTPH1 (50-150)
600-180113-3	SJRP-MW23-10-11-02022019	92
600-180113-3 MS	SJRP-MW23-10-11-02022019	77
600-180113-3 MSD	SJRP-MW23-10-11-02022019	79
600-180113-4	SJRP-MW23-19-20-02022019	99
600-180113-5	SJRP-MW23-29-30-02022019	91
600-180113-6	SJRP-MW23-39-40-02022019	100
LCS 490-574822/2-A	Lab Control Sample	107
LCS 490-575897/2-A	Lab Control Sample	87
MB 490-574822/1-A	Method Blank	103
MB 490-575897/1-A	Method Blank	97

Surrogate Legend
OTPH = o-Terphenyl (Surr)

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	OTPH1 (50-150)
600-180113-2	SJRP-EB04-02022019	96
LCS 490-574585/2-A	Lab Control Sample	93
LCSD 490-574585/3-A	Lab Control Sample Dup	88
MB 490-574585/1-A	Method Blank	91

Surrogate Legend
OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180113-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-257729/6
Matrix: Solid
Analysis Batch: 257729

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			02/05/19 10:39	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			02/05/19 10:39	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			02/05/19 10:39	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			02/05/19 10:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*61 - 130*		*02/05/19 10:39*	*1*
Dibromofluoromethane	*87*		*68 - 140*		*02/05/19 10:39*	*1*
Toluene-d8 (Surr)	*74*		*50 - 130*		*02/05/19 10:39*	*1*
4-Bromofluorobenzene	*94*		*57 - 140*		*02/05/19 10:39*	*1*

Lab Sample ID: LCS 600-257729/3
Matrix: Solid
Analysis Batch: 257729

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0500	0.05730		mg/Kg		115	70 - 131		
Ethylbenzene			0.0500	0.05708		mg/Kg		114	66 - 130		
Toluene			0.0500	0.05583		mg/Kg		112	67 - 130		
Xylenes, Total			0.100	0.1141		mg/Kg		114	63 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*61 - 130*
Dibromofluoromethane	*96*		*68 - 140*
Toluene-d8 (Surr)	*86*		*50 - 130*
4-Bromofluorobenzene	*108*		*57 - 140*

Lab Sample ID: LCSD 600-257729/4
Matrix: Solid
Analysis Batch: 257729

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0500	0.05317		mg/Kg		106	70 - 131	7	30
Ethylbenzene			0.0500	0.05316		mg/Kg		106	66 - 130	7	30
Toluene			0.0500	0.05174		mg/Kg		103	67 - 130	8	30
Xylenes, Total			0.100	0.1061		mg/Kg		106	63 - 130	7	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*80*		*61 - 130*
Dibromofluoromethane	*90*		*68 - 140*
Toluene-d8 (Surr)	*85*		*50 - 130*
4-Bromofluorobenzene	*107*		*57 - 140*

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180113-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-257773/7
Matrix: Water
Analysis Batch: 257773

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			02/05/19 14:25	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			02/05/19 14:25	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			02/05/19 14:25	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			02/05/19 14:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*50 - 134*		*02/05/19 14:25*	*1*
Dibromofluoromethane	*87*		*62 - 130*		*02/05/19 14:25*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*02/05/19 14:25*	*1*
4-Bromofluorobenzene	*105*		*67 - 139*		*02/05/19 14:25*	*1*

Lab Sample ID: LCS 600-257773/4
Matrix: Water
Analysis Batch: 257773

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0100	0.01079		mg/L		108	70 - 130		
Ethylbenzene			0.0100	0.01079		mg/L		108	70 - 130		
Toluene			0.0100	0.01155		mg/L		116	70 - 130		
Xylenes, Total			0.0200	0.02165		mg/L		108	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*77*		*50 - 134*
Dibromofluoromethane	*84*		*62 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*
4-Bromofluorobenzene	*103*		*67 - 139*

Lab Sample ID: LCSD 600-257773/5
Matrix: Water
Analysis Batch: 257773

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0100	0.009515		mg/L		95	70 - 130	13	20
Ethylbenzene			0.0100	0.009267		mg/L		93	70 - 130	15	20
Toluene			0.0100	0.009881		mg/L		99	70 - 130	16	20
Xylenes, Total			0.0200	0.01871		mg/L		94	70 - 130	15	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*75*		*50 - 134*
Dibromofluoromethane	*79*		*62 - 130*
Toluene-d8 (Surr)	*90*		*70 - 130*
4-Bromofluorobenzene	*97*		*67 - 139*

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180113-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 600-180113-3 MS
Matrix: Solid
Analysis Batch: 257729

Client Sample ID: SJRP-MW23-10-11-02022019
Prep Type: Total/NA
Prep Batch: 257791

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.000804	U	0.0660	0.06729		mg/Kg	☼	102	70 - 131
Ethylbenzene	0.00130	U	0.0660	0.06636		mg/Kg	☼	101	66 - 130
Toluene	0.00176	U	0.0660	0.06477		mg/Kg	☼	98	67 - 130
Xylenes, Total	0.00144	U	0.132	0.1331		mg/Kg	☼	101	63 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*61 - 130*
Dibromofluoromethane	*93*		*68 - 140*
Toluene-d8 (Surr)	*81*		*50 - 130*
4-Bromofluorobenzene	*103*		*57 - 140*

Lab Sample ID: 600-180113-3 MSD
Matrix: Solid
Analysis Batch: 257729

Client Sample ID: SJRP-MW23-10-11-02022019
Prep Type: Total/NA
Prep Batch: 257791

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.000804	U	0.0594	0.05917		mg/Kg	☼	100	70 - 131	13	30
Ethylbenzene	0.00130	U	0.0594	0.05852		mg/Kg	☼	99	66 - 130	13	30
Toluene	0.00176	U	0.0594	0.05589		mg/Kg	☼	94	67 - 130	15	30
Xylenes, Total	0.00144	U	0.119	0.1158		mg/Kg	☼	98	63 - 130	14	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*61 - 130*
Dibromofluoromethane	*93*		*68 - 140*
Toluene-d8 (Surr)	*81*		*50 - 130*
4-Bromofluorobenzene	*101*		*57 - 140*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 490-574308/7
Matrix: Water
Analysis Batch: 574308

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.0500	U	0.100	0.0500	mg/L			02/08/19 10:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*50 - 150*		*02/08/19 10:15*	*1*

Lab Sample ID: LCS 490-574308/5
Matrix: Water
Analysis Batch: 574308

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	1.00	1.083		mg/L		108	66 - 140

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180113-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: LCS 490-574308/5
Matrix: Water
Analysis Batch: 574308

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	146		50 - 150

Lab Sample ID: LCSD 490-574308/6
Matrix: Water
Analysis Batch: 574308

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10			1.00	1.089		mg/L		109	66 - 140	1	42

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	145		50 - 150

Lab Sample ID: MB 490-574318/1-A
Matrix: Solid
Analysis Batch: 574675

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 574318

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	2.50	U	5.00	2.50	mg/Kg		02/08/19 09:11	02/12/19 13:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	86		50 - 150	02/08/19 09:11	02/12/19 13:52	1

Lab Sample ID: LCS 490-574318/2-A
Matrix: Solid
Analysis Batch: 574675

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 574318

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10			500	416.8		mg/Kg		83	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	90		50 - 150

Lab Sample ID: LCSD 490-574318/3-A
Matrix: Solid
Analysis Batch: 574675

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 574318

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10			500	421.8		mg/Kg		84	70 - 130	1	21

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	91		50 - 150

QC Sample Results

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-180113-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: 600-180113-3 MS Client Sample ID: SJRP-MW23-10-11-02022019
Matrix: Solid Prep Type: Total/NA
Analysis Batch: 574675 Prep Batch: 574318

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	3.20	U	750	655.7		mg/Kg	☼	87	56 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*99*		*50 - 150*

Lab Sample ID: 600-180113-3 MSD Client Sample ID: SJRP-MW23-10-11-02022019
Matrix: Solid Prep Type: Total/NA
Analysis Batch: 574675 Prep Batch: 574318

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	3.20	U	632	506.3	F4	mg/Kg	☼	80	56 - 130	26	21

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*97*		*50 - 150*

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Lab Sample ID: MB 490-574585/1-A Client Sample ID: Method Blank
Matrix: Water Prep Type: Total/NA
Analysis Batch: 574633 Prep Batch: 574585

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.0909	U	0.0999	0.0909	mg/L		02/09/19 11:59	02/10/19 11:57	1
ORO C24-C40	0.0909	U	0.0999	0.0909	mg/L		02/09/19 11:59	02/10/19 11:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*91*		*50 - 150*	*02/09/19 11:59*	*02/10/19 11:57*	*1*

Lab Sample ID: LCS 490-574585/2-A Client Sample ID: Lab Control Sample
Matrix: Water Prep Type: Total/NA
Analysis Batch: 574633 Prep Batch: 574585

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	0.785	0.9405		mg/L		120	46 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*93*		*50 - 150*

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180113-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Lab Sample ID: LCSD 490-574585/3-A
Matrix: Water
Analysis Batch: 574633

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 574585

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			0.780	0.8680		mg/L		111	46 - 132	8	31

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl (Surr)	*88*		*50 - 150*

Lab Sample ID: MB 490-574822/1-A
Matrix: Solid
Analysis Batch: 574928

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 574822

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.50	U	5.00	2.50	mg/Kg		02/11/19 16:09	02/12/19 17:22	1
ORO C24-C40	2.50	U	5.00	2.50	mg/Kg		02/11/19 16:09	02/12/19 17:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*103*		*50 - 150*	*02/11/19 16:09*	*02/12/19 17:22*	*1*

Lab Sample ID: LCS 490-574822/2-A
Matrix: Solid
Analysis Batch: 574928

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 574822

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]			40.0	42.53		mg/Kg		106	54 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl (Surr)	*107*		*50 - 150*

Lab Sample ID: MB 490-575897/1-A
Matrix: Solid
Analysis Batch: 576068

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 575897

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.50	U	5.00	2.50	mg/Kg		02/16/19 18:22	02/19/19 00:15	1
ORO C24-C40	2.50	U	5.00	2.50	mg/Kg		02/16/19 18:22	02/19/19 00:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*97*		*50 - 150*	*02/16/19 18:22*	*02/19/19 00:15*	*1*

Lab Sample ID: LCS 490-575897/2-A
Matrix: Solid
Analysis Batch: 576068

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 575897

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]			40.0	40.75		mg/Kg		102	54 - 130

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180113-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Lab Sample ID: LCS 490-575897/2-A
Matrix: Solid
Analysis Batch: 576068

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 575897

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	87		50 - 150

Lab Sample ID: 600-180113-3 MS
Matrix: Solid
Analysis Batch: 576068

Client Sample ID: SJRP-MW23-10-11-02022019
Prep Type: Total/NA
Prep Batch: 575897

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	3.06	U	50.0	45.81		mg/Kg	☼	92	10 - 142

Surrogate	MS %Recovery	MS Qualifier	Limits
o-Terphenyl (Surr)	77		50 - 150

Lab Sample ID: 600-180113-3 MSD
Matrix: Solid
Analysis Batch: 576068

Client Sample ID: SJRP-MW23-10-11-02022019
Prep Type: Total/NA
Prep Batch: 575897

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	3.06	U	45.3	43.44		mg/Kg	☼	96	10 - 142	5	47

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl (Surr)	79		50 - 150

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-258174/1-A
Matrix: Water
Analysis Batch: 258351

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 258174

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		02/11/19 16:08	02/13/19 14:51	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		02/11/19 16:08	02/13/19 14:51	1
Barium	0.001300	J	0.0200	0.000530	mg/L		02/11/19 16:08	02/13/19 14:51	1
Boron	0.0116	U	0.200	0.0116	mg/L		02/11/19 16:08	02/13/19 14:51	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		02/11/19 16:08	02/13/19 14:51	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		02/11/19 16:08	02/13/19 14:51	1
Cobalt	0.0006000	J	0.0100	0.000310	mg/L		02/11/19 16:08	02/13/19 14:51	1
Iron	0.0270	U	0.400	0.0270	mg/L		02/11/19 16:08	02/13/19 14:51	1
Lead	0.00219	U	0.0100	0.00219	mg/L		02/11/19 16:08	02/13/19 14:51	1
Manganese	0.002000	J	0.0100	0.000360	mg/L		02/11/19 16:08	02/13/19 14:51	1
Molybdenum	0.001300	J	0.0100	0.000540	mg/L		02/11/19 16:08	02/13/19 14:51	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		02/11/19 16:08	02/13/19 14:51	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		02/11/19 16:08	02/13/19 14:51	1

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180113-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCS 600-258174/2-A
Matrix: Water
Analysis Batch: 258351

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 258174

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	10.37		mg/L		104	80 - 120
Arsenic	1.00	1.009		mg/L		101	80 - 120
Barium	1.00	1.032		mg/L		103	80 - 120
Boron	1.00	1.025		mg/L		103	80 - 120
Cadmium	0.500	0.5100		mg/L		102	80 - 120
Chromium	1.00	0.9975		mg/L		100	80 - 120
Cobalt	1.00	1.020		mg/L		102	80 - 120
Iron	10.0	10.31		mg/L		103	80 - 120
Lead	1.00	1.011		mg/L		101	80 - 120
Manganese	1.00	1.003		mg/L		100	80 - 120
Molybdenum	1.00	1.096		mg/L		110	80 - 120
Nickel	1.00	1.007		mg/L		101	80 - 120
Selenium	1.00	1.008		mg/L		101	80 - 120

Lab Sample ID: MB 600-258222/1-A
Matrix: Solid
Analysis Batch: 258242

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 258222

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.300	U	25.0	0.300	mg/Kg		02/12/19 10:42	02/12/19 16:01	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		02/12/19 10:42	02/12/19 16:01	1
Barium	0.0300	U	1.00	0.0300	mg/Kg		02/12/19 10:42	02/12/19 16:01	1
Boron	0.386	U	20.0	0.386	mg/Kg		02/12/19 10:42	02/12/19 16:01	1
Cadmium	0.02925	J	0.250	0.0256	mg/Kg		02/12/19 10:42	02/12/19 16:01	1
Cobalt	0.0676	U	0.500	0.0676	mg/Kg		02/12/19 10:42	02/12/19 16:01	1
Iron	2.53	U	20.0	2.53	mg/Kg		02/12/19 10:42	02/12/19 16:01	1
Lead	0.105	U	0.500	0.105	mg/Kg		02/12/19 10:42	02/12/19 16:01	1
Manganese	0.0381	U	1.50	0.0381	mg/Kg		02/12/19 10:42	02/12/19 16:01	1
Molybdenum	0.136	U	0.500	0.136	mg/Kg		02/12/19 10:42	02/12/19 16:01	1
Nickel	0.117	U	1.00	0.117	mg/Kg		02/12/19 10:42	02/12/19 16:01	1
Selenium	0.259	U	2.00	0.259	mg/Kg		02/12/19 10:42	02/12/19 16:01	1

Lab Sample ID: MB 600-258222/1-A
Matrix: Solid
Analysis Batch: 258351

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 258222

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.300	U	25.0	0.300	mg/Kg		02/12/19 10:42	02/13/19 12:08	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		02/12/19 10:42	02/13/19 12:08	1
Barium	0.0300	U	1.00	0.0300	mg/Kg		02/12/19 10:42	02/13/19 12:08	1
Boron	0.4050	J	20.0	0.386	mg/Kg		02/12/19 10:42	02/13/19 12:08	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		02/12/19 10:42	02/13/19 12:08	1
Chromium	0.0506	U	0.500	0.0506	mg/Kg		02/12/19 10:42	02/13/19 12:08	1
Cobalt	0.0676	U	0.500	0.0676	mg/Kg		02/12/19 10:42	02/13/19 12:08	1
Iron	2.53	U	20.0	2.53	mg/Kg		02/12/19 10:42	02/13/19 12:08	1
Lead	0.105	U	0.500	0.105	mg/Kg		02/12/19 10:42	02/13/19 12:08	1
Manganese	0.0381	U	1.50	0.0381	mg/Kg		02/12/19 10:42	02/13/19 12:08	1
Molybdenum	0.136	U	0.500	0.136	mg/Kg		02/12/19 10:42	02/13/19 12:08	1

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180113-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: MB 600-258222/1-A
Matrix: Solid
Analysis Batch: 258351

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 258222

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.117	U	1.00	0.117	mg/Kg		02/12/19 10:42	02/13/19 12:08	1
Selenium	0.259	U	2.00	0.259	mg/Kg		02/12/19 10:42	02/13/19 12:08	1

Lab Sample ID: LCS 600-258222/2-A
Matrix: Solid
Analysis Batch: 258242

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 258222

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	500	524.3		mg/Kg		105	42 - 158
Arsenic	50.0	48.52		mg/Kg		97	78 - 122
Barium	50.0	55.35		mg/Kg		111	80 - 120
Boron	50.0	47.94		mg/Kg		96	68 - 133
Cadmium	25.0	26.43		mg/Kg		106	81 - 119
Cobalt	50.0	55.65		mg/Kg		111	82 - 118
Iron	500	568.8		mg/Kg		114	51 - 149
Iron	500	508.0		mg/Kg		102	51 - 149
Lead	50.0	52.90		mg/Kg		106	79 - 121
Manganese	50.0	56.20		mg/Kg		112	81 - 119
Molybdenum	50.0	57.70		mg/Kg		115	75 - 125
Nickel	50.0	53.00		mg/Kg		106	81 - 119
Selenium	50.0	45.19		mg/Kg		90	80 - 120

Lab Sample ID: LCS 600-258222/2-A
Matrix: Solid
Analysis Batch: 258351

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 258222

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	500	539.5		mg/Kg		108	42 - 158
Arsenic	50.0	51.40		mg/Kg		103	78 - 122
Barium	50.0	53.15		mg/Kg		106	80 - 120
Boron	50.0	52.30		mg/Kg		105	68 - 133
Cadmium	25.0	25.59		mg/Kg		102	81 - 119
Chromium	50.0	51.15		mg/Kg		102	81 - 119
Cobalt	50.0	53.45		mg/Kg		107	82 - 118
Iron	500	536.0		mg/Kg		107	51 - 149
Lead	50.0	52.75		mg/Kg		106	79 - 121
Manganese	50.0	51.95		mg/Kg		104	81 - 119
Molybdenum	50.0	56.40		mg/Kg		113	75 - 125
Nickel	50.0	52.25		mg/Kg		105	81 - 119
Selenium	50.0	50.25		mg/Kg		101	80 - 120

Lab Sample ID: 600-180113-3 MS
Matrix: Solid
Analysis Batch: 258242

Client Sample ID: SJRP-MW23-10-11-02022019
Prep Type: Total/NA
Prep Batch: 258222

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10200		609	13200	4	mg/Kg	☼	489	75 - 125
Arsenic	4.15		60.9	58.22		mg/Kg	☼	89	75 - 125
Barium	120	F1	60.9	208.1	F1	mg/Kg	☼	145	75 - 125

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180113-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-180113-3 MS — **Client Sample ID: SJRP-MW23-10-11-02022019**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 258242 — **Prep Batch: 258222**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	5.92	J F1	60.9	36.98	F1	mg/Kg	☼	51	75 - 125
Cadmium	0.0801	J B	30.4	29.55		mg/Kg	☼	97	75 - 125
Cobalt	6.25		60.9	69.50		mg/Kg	☼	104	75 - 125
Iron	18800		609	23780	4	mg/Kg	☼	817	75 - 125
Lead	11.1		60.9	70.96		mg/Kg	☼	98	75 - 125
Manganese	54.1		60.9	125.3		mg/Kg	☼	117	75 - 125
Molybdenum	0.924		60.9	55.38		mg/Kg	☼	89	75 - 125
Nickel	5.69		60.9	66.28		mg/Kg	☼	100	75 - 125
Selenium	0.305	U	60.9	47.74		mg/Kg	☼	78	75 - 125

Lab Sample ID: 600-180113-3 MS — **Client Sample ID: SJRP-MW23-10-11-02022019**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 258351 — **Prep Batch: 258222**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	5.49		60.9	67.07		mg/Kg	☼	101	75 - 125

Lab Sample ID: 600-180113-3 MSD — **Client Sample ID: SJRP-MW23-10-11-02022019**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 258242 — **Prep Batch: 258222**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	10200		546	11100	4	mg/Kg	☼	160	75 - 125	17	20
Arsenic	4.15		54.6	53.86		mg/Kg	☼	91	75 - 125	8	20
Barium	120	F1	54.6	200.5	F1	mg/Kg	☼	148	75 - 125	4	20
Boron	5.92	J F1	54.6	33.41	F1	mg/Kg	☼	50	75 - 125	10	20
Cadmium	0.0801	J B	27.3	26.68		mg/Kg	☼	97	75 - 125	10	20
Cobalt	6.25		54.6	62.40		mg/Kg	☼	103	75 - 125	11	20
Iron	18800		546	20060	4	mg/Kg	☼	229	75 - 125	17	20
Lead	11.1		54.6	63.27		mg/Kg	☼	96	75 - 125	11	20
Manganese	54.1		54.6	110.3		mg/Kg	☼	103	75 - 125	13	20
Molybdenum	0.924		54.6	49.25		mg/Kg	☼	89	75 - 125	12	20
Nickel	5.69		54.6	59.23		mg/Kg	☼	98	75 - 125	11	20
Selenium	0.305	U	54.6	43.24		mg/Kg	☼	79	75 - 125	10	20

Lab Sample ID: 600-180113-3 MSD — **Client Sample ID: SJRP-MW23-10-11-02022019**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 258351 — **Prep Batch: 258222**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	5.49		54.6	60.16		mg/Kg	☼	100	75 - 125	11	20

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180113-1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-257855/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 257882 — **Prep Batch: 257855**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		02/06/19 10:28	02/06/19 14:41	1

Lab Sample ID: LCS 600-257855/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 257882 — **Prep Batch: 257855**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00375	0.003951		mg/L		105	70 - 130

Method: 7471A - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-258101/7-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 258160 — **Prep Batch: 258101**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00330	U	0.0157	0.00330	mg/Kg		02/11/19 08:19	02/11/19 12:37	1

Lab Sample ID: LCSSRM 600-258101/8-A ^100 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 258160 — **Prep Batch: 258101**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	29.0	28.14		mg/Kg		97.0	59.7 - 115.2

Lab Sample ID: 600-180113-3 MS — **Client Sample ID: SJRP-MW23-10-11-02022019**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 258160 — **Prep Batch: 258101**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0260		0.308	0.3485		mg/Kg	☼	105	75 - 125

Lab Sample ID: 600-180113-3 MSD — **Client Sample ID: SJRP-MW23-10-11-02022019**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 258160 — **Prep Batch: 258101**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.0260		0.279	0.3549		mg/Kg	☼	118	75 - 125	2	20

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180113-1

GC/MS VOA

Analysis Batch: 257729

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180113-3	SJRP-MW23-10-11-02022019	Total/NA	Solid	8260B	257791
600-180113-4	SJRP-MW23-19-20-02022019	Total/NA	Solid	8260B	257791
600-180113-5	SJRP-MW23-29-30-02022019	Total/NA	Solid	8260B	257791
600-180113-6	SJRP-MW23-39-40-02022019	Total/NA	Solid	8260B	257791
MB 600-257729/6	Method Blank	Total/NA	Solid	8260B	
LCS 600-257729/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-257729/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
600-180113-3 MS	SJRP-MW23-10-11-02022019	Total/NA	Solid	8260B	257791
600-180113-3 MSD	SJRP-MW23-10-11-02022019	Total/NA	Solid	8260B	257791

Analysis Batch: 257773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180113-1	SJRP-TB06-02022019	Total/NA	Water	8260B	
600-180113-2	SJRP-EB04-02022019	Total/NA	Water	8260B	
600-180113-7	SJRP-TB07-02032019	Total/NA	Water	8260B	
MB 600-257773/7	Method Blank	Total/NA	Water	8260B	
LCS 600-257773/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-257773/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Prep Batch: 257791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180113-3	SJRP-MW23-10-11-02022019	Total/NA	Solid	5035	
600-180113-4	SJRP-MW23-19-20-02022019	Total/NA	Solid	5035	
600-180113-5	SJRP-MW23-29-30-02022019	Total/NA	Solid	5035	
600-180113-6	SJRP-MW23-39-40-02022019	Total/NA	Solid	5035	
600-180113-3 MS	SJRP-MW23-10-11-02022019	Total/NA	Solid	5035	
600-180113-3 MSD	SJRP-MW23-10-11-02022019	Total/NA	Solid	5035	

GC VOA

Analysis Batch: 574308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180113-2	SJRP-EB04-02022019	Total/NA	Water	8015C	
MB 490-574308/7	Method Blank	Total/NA	Water	8015C	
LCS 490-574308/5	Lab Control Sample	Total/NA	Water	8015C	
LCSD 490-574308/6	Lab Control Sample Dup	Total/NA	Water	8015C	

Prep Batch: 574318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180113-3	SJRP-MW23-10-11-02022019	Total/NA	Solid	5030B	
600-180113-4	SJRP-MW23-19-20-02022019	Total/NA	Solid	5030B	
600-180113-5	SJRP-MW23-29-30-02022019	Total/NA	Solid	5030B	
600-180113-6	SJRP-MW23-39-40-02022019	Total/NA	Solid	5030B	
MB 490-574318/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 490-574318/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 490-574318/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
600-180113-3 MS	SJRP-MW23-10-11-02022019	Total/NA	Solid	5030B	
600-180113-3 MSD	SJRP-MW23-10-11-02022019	Total/NA	Solid	5030B	

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180113-1

GC VOA (Continued)

Analysis Batch: 574675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180113-3	SJRP-MW23-10-11-02022019	Total/NA	Solid	8015C	574318
600-180113-4	SJRP-MW23-19-20-02022019	Total/NA	Solid	8015C	574318
600-180113-5	SJRP-MW23-29-30-02022019	Total/NA	Solid	8015C	574318
600-180113-6	SJRP-MW23-39-40-02022019	Total/NA	Solid	8015C	574318
MB 490-574318/1-A	Method Blank	Total/NA	Solid	8015C	574318
LCS 490-574318/2-A	Lab Control Sample	Total/NA	Solid	8015C	574318
LCSD 490-574318/3-A	Lab Control Sample Dup	Total/NA	Solid	8015C	574318
600-180113-3 MS	SJRP-MW23-10-11-02022019	Total/NA	Solid	8015C	574318
600-180113-3 MSD	SJRP-MW23-10-11-02022019	Total/NA	Solid	8015C	574318

GC Semi VOA

Prep Batch: 574585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180113-2	SJRP-EB04-02022019	Total/NA	Water	3510C	
MB 490-574585/1-A	Method Blank	Total/NA	Water	3510C	
LCS 490-574585/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 490-574585/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 574633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180113-2	SJRP-EB04-02022019	Total/NA	Water	8015C	574585
MB 490-574585/1-A	Method Blank	Total/NA	Water	8015C	574585
LCS 490-574585/2-A	Lab Control Sample	Total/NA	Water	8015C	574585
LCSD 490-574585/3-A	Lab Control Sample Dup	Total/NA	Water	8015C	574585

Prep Batch: 574822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180113-4	SJRP-MW23-19-20-02022019	Total/NA	Solid	3550C	
600-180113-5	SJRP-MW23-29-30-02022019	Total/NA	Solid	3550C	
600-180113-6	SJRP-MW23-39-40-02022019	Total/NA	Solid	3550C	
MB 490-574822/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-574822/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 574928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180113-4	SJRP-MW23-19-20-02022019	Total/NA	Solid	8015C	574822
600-180113-5	SJRP-MW23-29-30-02022019	Total/NA	Solid	8015C	574822
600-180113-6	SJRP-MW23-39-40-02022019	Total/NA	Solid	8015C	574822
MB 490-574822/1-A	Method Blank	Total/NA	Solid	8015C	574822
LCS 490-574822/2-A	Lab Control Sample	Total/NA	Solid	8015C	574822

Prep Batch: 575897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180113-3	SJRP-MW23-10-11-02022019	Total/NA	Solid	3550C	
MB 490-575897/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-575897/2-A	Lab Control Sample	Total/NA	Solid	3550C	
600-180113-3 MS	SJRP-MW23-10-11-02022019	Total/NA	Solid	3550C	
600-180113-3 MSD	SJRP-MW23-10-11-02022019	Total/NA	Solid	3550C	

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180113-1

GC Semi VOA (Continued)

Analysis Batch: 576068

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180113-3	SJRP-MW23-10-11-02022019	Total/NA	Solid	8015C	575897
MB 490-575897/1-A	Method Blank	Total/NA	Solid	8015C	575897
LCS 490-575897/2-A	Lab Control Sample	Total/NA	Solid	8015C	575897
600-180113-3 MS	SJRP-MW23-10-11-02022019	Total/NA	Solid	8015C	575897
600-180113-3 MSD	SJRP-MW23-10-11-02022019	Total/NA	Solid	8015C	575897

Metals

Prep Batch: 257855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180113-2	SJRP-EB04-02022019	Total/NA	Water	7470A	
MB 600-257855/1-A	Method Blank	Total/NA	Water	7470A	
LCS 600-257855/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 257882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180113-2	SJRP-EB04-02022019	Total/NA	Water	7470A	257855
MB 600-257855/1-A	Method Blank	Total/NA	Water	7470A	257855
LCS 600-257855/2-A	Lab Control Sample	Total/NA	Water	7470A	257855

Prep Batch: 258101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180113-3	SJRP-MW23-10-11-02022019	Total/NA	Solid	7471A	
600-180113-4	SJRP-MW23-19-20-02022019	Total/NA	Solid	7471A	
600-180113-5	SJRP-MW23-29-30-02022019	Total/NA	Solid	7471A	
600-180113-6	SJRP-MW23-39-40-02022019	Total/NA	Solid	7471A	
MB 600-258101/7-A	Method Blank	Total/NA	Solid	7471A	
LCSSRM 600-258101/8-A ^1	Lab Control Sample	Total/NA	Solid	7471A	
600-180113-3 MS	SJRP-MW23-10-11-02022019	Total/NA	Solid	7471A	
600-180113-3 MSD	SJRP-MW23-10-11-02022019	Total/NA	Solid	7471A	

Analysis Batch: 258160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180113-3	SJRP-MW23-10-11-02022019	Total/NA	Solid	7471A	258101
600-180113-4	SJRP-MW23-19-20-02022019	Total/NA	Solid	7471A	258101
600-180113-5	SJRP-MW23-29-30-02022019	Total/NA	Solid	7471A	258101
600-180113-6	SJRP-MW23-39-40-02022019	Total/NA	Solid	7471A	258101
MB 600-258101/7-A	Method Blank	Total/NA	Solid	7471A	258101
LCSSRM 600-258101/8-A ^1	Lab Control Sample	Total/NA	Solid	7471A	258101
600-180113-3 MS	SJRP-MW23-10-11-02022019	Total/NA	Solid	7471A	258101
600-180113-3 MSD	SJRP-MW23-10-11-02022019	Total/NA	Solid	7471A	258101

Prep Batch: 258174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180113-2	SJRP-EB04-02022019	Total/NA	Water	3010A	
MB 600-258174/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-258174/2-A	Lab Control Sample	Total/NA	Water	3010A	

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180113-1

Metals (Continued)

Prep Batch: 258222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180113-3	SJRP-MW23-10-11-02022019	Total/NA	Solid	3050B	
600-180113-4	SJRP-MW23-19-20-02022019	Total/NA	Solid	3050B	
600-180113-5	SJRP-MW23-29-30-02022019	Total/NA	Solid	3050B	
600-180113-6	SJRP-MW23-39-40-02022019	Total/NA	Solid	3050B	
MB 600-258222/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 600-258222/2-A	Lab Control Sample	Total/NA	Solid	3050B	
600-180113-3 MS	SJRP-MW23-10-11-02022019	Total/NA	Solid	3050B	
600-180113-3 MSD	SJRP-MW23-10-11-02022019	Total/NA	Solid	3050B	

Analysis Batch: 258242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180113-3	SJRP-MW23-10-11-02022019	Total/NA	Solid	6010B	258222
MB 600-258222/1-A	Method Blank	Total/NA	Solid	6010B	258222
LCS 600-258222/2-A	Lab Control Sample	Total/NA	Solid	6010B	258222
600-180113-3 MS	SJRP-MW23-10-11-02022019	Total/NA	Solid	6010B	258222
600-180113-3 MSD	SJRP-MW23-10-11-02022019	Total/NA	Solid	6010B	258222

Analysis Batch: 258351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180113-2	SJRP-EB04-02022019	Total/NA	Water	6010B	258174
600-180113-3	SJRP-MW23-10-11-02022019	Total/NA	Solid	6010B	258222
600-180113-4	SJRP-MW23-19-20-02022019	Total/NA	Solid	6010B	258222
600-180113-5	SJRP-MW23-29-30-02022019	Total/NA	Solid	6010B	258222
600-180113-6	SJRP-MW23-39-40-02022019	Total/NA	Solid	6010B	258222
MB 600-258174/1-A	Method Blank	Total/NA	Water	6010B	258174
MB 600-258222/1-A	Method Blank	Total/NA	Solid	6010B	258222
LCS 600-258174/2-A	Lab Control Sample	Total/NA	Water	6010B	258174
LCS 600-258222/2-A	Lab Control Sample	Total/NA	Solid	6010B	258222
600-180113-3 MS	SJRP-MW23-10-11-02022019	Total/NA	Solid	6010B	258222
600-180113-3 MSD	SJRP-MW23-10-11-02022019	Total/NA	Solid	6010B	258222

General Chemistry

Analysis Batch: 257907

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-180113-3	SJRP-MW23-10-11-02022019	Total/NA	Solid	2540B	
600-180113-4	SJRP-MW23-19-20-02022019	Total/NA	Solid	2540B	
600-180113-5	SJRP-MW23-29-30-02022019	Total/NA	Solid	2540B	
600-180113-6	SJRP-MW23-39-40-02022019	Total/NA	Solid	2540B	
600-180113-3 MS	SJRP-MW23-10-11-02022019	Total/NA	Solid	2540B	
600-180113-3 MSD	SJRP-MW23-10-11-02022019	Total/NA	Solid	2540B	

Lab Chronicle

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180113-1

Client Sample ID: SJRP-TB06-02022019
Date Collected: 02/02/19 10:00
Date Received: 02/05/19 09:11

Lab Sample ID: 600-180113-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	257773	02/05/19 14:53	KLV	TAL HOU

Client Sample ID: SJRP-EB04-02022019
Date Collected: 02/02/19 10:30
Date Received: 02/05/19 09:11

Lab Sample ID: 600-180113-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	257773	02/05/19 15:49	KLV	TAL HOU
Total/NA	Analysis	8015C		1	5 mL	5 mL	574308	02/08/19 16:51	S1S	TAL NSH
Total/NA	Prep	3510C			235.4 mL	1 mL	574585	02/09/19 11:59	KWS	TAL NSH
Total/NA	Analysis	8015C		1			574633	02/10/19 13:22	GMH	TAL NSH
Total/NA	Prep	3010A			50.0 mL	50.0 mL	258174	02/11/19 16:08	AML	TAL HOU
Total/NA	Analysis	6010B		1			258351	02/13/19 15:12	KP1	TAL HOU
Total/NA	Prep	7470A			40 mL	50 mL	257855	02/06/19 10:28	SOT	TAL HOU
Total/NA	Analysis	7470A		1			257882	02/06/19 15:33	SOT	TAL HOU

Client Sample ID: SJRP-MW23-10-11-02022019
Date Collected: 02/02/19 11:30
Date Received: 02/05/19 09:11

Lab Sample ID: 600-180113-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			257907	02/06/19 15:02	A1T	TAL HOU

Client Sample ID: SJRP-MW23-10-11-02022019
Date Collected: 02/02/19 11:30
Date Received: 02/05/19 09:11

Lab Sample ID: 600-180113-3
Matrix: Solid
Percent Solids: 80.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.84 g	5 mL	257791	02/05/19 10:40	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	257729	02/05/19 13:27	WS1	TAL HOU
Total/NA	Prep	5030B			5.93 g	5.0 mL	574318	02/08/19 09:33	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	574675	02/12/19 20:01	AK1	TAL NSH
Total/NA	Prep	3550C			25.22 g	1 mL	575897	02/16/19 18:22	AMD	TAL NSH
Total/NA	Analysis	8015C		1			576068	02/19/19 00:48	AK1	TAL NSH
Total/NA	Prep	3050B			1.05 g	50.0 mL	258222	02/12/19 10:42	AML	TAL HOU
Total/NA	Analysis	6010B		1			258242	02/12/19 16:08	DCL	TAL HOU
Total/NA	Prep	3050B			1.05 g	50.0 mL	258222	02/12/19 10:42	AML	TAL HOU
Total/NA	Analysis	6010B		1			258351	02/13/19 12:11	KP1	TAL HOU
Total/NA	Prep	7471A			0.61 g	50 mL	258101	02/11/19 08:19	KP1	TAL HOU
Total/NA	Analysis	7471A		1			258160	02/11/19 12:41	KP1	TAL HOU

Lab Chronicle

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180113-1

Client Sample ID: SJRP-MW23-19-20-02022019 — Lab Sample ID: 600-180113-4

Date Collected: 02/02/19 12:20 — **Matrix: Solid**
Date Received: 02/05/19 09:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			257907	02/06/19 15:02	A1T	TAL HOU

Client Sample ID: SJRP-MW23-19-20-02022019 — Lab Sample ID: 600-180113-4

Date Collected: 02/02/19 12:20 — **Matrix: Solid**
Date Received: 02/05/19 09:11 — **Percent Solids: 60.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.19 g	5 mL	257791	02/05/19 10:40	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	257729	02/05/19 14:39	WS1	TAL HOU
Total/NA	Prep	5030B			5.77 g	5.0 mL	574318	02/08/19 09:33	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	574675	02/12/19 20:35	AK1	TAL NSH
Total/NA	Prep	3550C			25.17 g	1 mL	574822	02/11/19 16:09	EDS	TAL NSH
Total/NA	Analysis	8015C		1			574928	02/12/19 18:29	AK1	TAL NSH
Total/NA	Prep	3050B			1.07 g	50.0 mL	258222	02/12/19 10:42	AML	TAL HOU
Total/NA	Analysis	6010B		1			258351	02/13/19 15:14	KP1	TAL HOU
Total/NA	Prep	7471A			0.61 g	50 mL	258101	02/11/19 08:19	KP1	TAL HOU
Total/NA	Analysis	7471A		1			258160	02/11/19 12:47	KP1	TAL HOU

Client Sample ID: SJRP-MW23-29-30-02022019 — Lab Sample ID: 600-180113-5

Date Collected: 02/02/19 13:15 — **Matrix: Solid**
Date Received: 02/05/19 09:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			257907	02/06/19 15:02	A1T	TAL HOU

Client Sample ID: SJRP-MW23-29-30-02022019 — Lab Sample ID: 600-180113-5

Date Collected: 02/02/19 13:15 — **Matrix: Solid**
Date Received: 02/05/19 09:11 — **Percent Solids: 98.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.43 g	5 mL	257791	02/05/19 10:40	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	257729	02/05/19 15:03	WS1	TAL HOU
Total/NA	Prep	5030B			5.85 g	5.0 mL	574318	02/08/19 09:33	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	574675	02/12/19 21:08	AK1	TAL NSH
Total/NA	Prep	3550C			25.12 g	1 mL	574822	02/11/19 16:09	EDS	TAL NSH
Total/NA	Analysis	8015C		1			574928	02/12/19 18:46	AK1	TAL NSH
Total/NA	Prep	3050B			1.04 g	50.0 mL	258222	02/12/19 10:42	AML	TAL HOU
Total/NA	Analysis	6010B		1			258351	02/13/19 15:16	KP1	TAL HOU
Total/NA	Prep	7471A			0.61 g	50 mL	258101	02/11/19 08:19	KP1	TAL HOU
Total/NA	Analysis	7471A		1			258160	02/11/19 12:49	KP1	TAL HOU

Lab Chronicle

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan Bloomfield, NM

TestAmerica Job ID: 600-180113-1

Client Sample ID: SJRP-MW23-39-40-02022019
Date Collected: 02/02/19 15:30
Date Received: 02/05/19 09:11

Lab Sample ID: 600-180113-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1			257907	02/06/19 15:02	A1T	TAL HOU

Client Sample ID: SJRP-MW23-39-40-02022019
Date Collected: 02/02/19 15:30
Date Received: 02/05/19 09:11

Lab Sample ID: 600-180113-6
Matrix: Solid
Percent Solids: 82.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.42 g	5 mL	257791	02/05/19 10:40	WS1	TAL HOU
Total/NA	Analysis	8260B		1	5 g	5 g	257729	02/05/19 15:27	WS1	TAL HOU
Total/NA	Prep	5030B			5.31 g	5.0 mL	574318	02/08/19 09:33	JLP	TAL NSH
Total/NA	Analysis	8015C		1	0.1 mL	5 mL	574675	02/12/19 21:42	AK1	TAL NSH
Total/NA	Prep	3550C			25.48 g	1 mL	574822	02/11/19 16:09	EDS	TAL NSH
Total/NA	Analysis	8015C		1			574928	02/12/19 19:03	AK1	TAL NSH
Total/NA	Prep	3050B			1.04 g	50.0 mL	258222	02/12/19 10:42	AML	TAL HOU
Total/NA	Analysis	6010B		1			258351	02/13/19 15:18	KP1	TAL HOU
Total/NA	Prep	7471A			0.61 g	50 mL	258101	02/11/19 08:19	KP1	TAL HOU
Total/NA	Analysis	7471A		1			258160	02/11/19 12:51	KP1	TAL HOU

Client Sample ID: SJRP-TB07-02032019
Date Collected: 02/03/19 12:30
Date Received: 02/05/19 09:11

Lab Sample ID: 600-180113-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	257773	02/05/19 15:21	KLV	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-180113-1
Project/Site: San Juan Kinder Morgan Bloomfield, NM

Laboratory: TestAmerica Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	18-061-0	08-04-19
Louisiana	NELAP	6	01967	06-30-19
Oklahoma	State Program	6	2018-052	08-31-19
Texas	NELAP	6	T104704223-18-23	10-31-19
USDA	Federal		P330-18-00130	04-30-21

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-19
Alaska (UST)	State Program	10	UST-087	06-30-19
Arizona	State Program	9	AZ0473	05-05-19
Arkansas DEQ	State Program	6	88-0737	04-25-19
California	State Program	9	2938	06-30-19 *
Connecticut	State Program	1	PH-0220	12-31-19
Florida	NELAP	4	E87358	06-30-19
Georgia	State Program	4	NA: NELAP & A2LA	12-31-19
Illinois	NELAP	5	200010	12-09-18 *
Iowa	State Program	7	131	04-01-20
Kansas	NELAP	7	E-10229	10-31-19
Kentucky (UST)	State Program	4	19	06-30-19
Kentucky (WW)	State Program	4	90038	12-31-19
Louisiana	NELAP	6	30613	06-30-19
Maine	State Program	1	TN00032	11-03-19
Maryland	State Program	3	316	03-31-19
Massachusetts	State Program	1	M-TN032	06-30-19
Minnesota	NELAP	5	047-999-345	12-31-19
Mississippi	State Program	4	N/A	06-30-19
Nevada	State Program	9	TN00032	07-31-19
New Hampshire	NELAP	1	2963	10-09-19
New Jersey	NELAP	2	TN965	06-30-19
New York	NELAP	2	11342	03-31-19
North Carolina (WW/SW)	State Program	4	387	12-31-19
North Dakota	State Program	8	R-146	06-30-19
Ohio VAP	State Program	5	CL0033	07-06-19
Oklahoma	State Program	6	9412	08-31-19
Oregon	NELAP	10	TN200001	04-26-19
Pennsylvania	NELAP	3	68-00585	07-31-19
Rhode Island	State Program	1	LAO00268	12-30-19
South Carolina	State Program	4	84009 (001)	02-28-19
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-19
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-19
Virginia	NELAP	3	460152	06-14-19
Washington	State Program	10	C789	07-19-19
West Virginia DEP	State Program	3	219	02-28-19
Wisconsin	State Program	5	998020430	08-31-19
Wyoming (UST)	A2LA	8	453.07	12-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: A. Tuckness	Lab PM: McDaniel, Bethany	Carrier Tracking No(s): 7405 1172 8707	COC No: 08
Client Contact: Aleeca Forsberg	Phone:	E-Mail: bethany.mcdaniel@testamericainc.com		Page: 1 of 1
Company: CH2M Hill, Inc.				Job #:
Address: 3721 Rutledge Road NE Suite B-1	Due Date Requested:			
City: Albuquerque	TAT Requested (days): See ARF			
State, Zip: NM, 87109				
Phone: 505-855-5239	PO #: WD794541			
Email: Aleeca.Forsberg@CH2M.com	WO #: WD794541			
Project Name: Kinder Morgan San Juan River Plant RWIP	Project #: 60005961			
Site: San Juan River Gas Plant	ARF#: ERG ARF_CH2M_01-15-2019			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260 - BTEX	8015 - GRO Range (C6-C10)	8015 - DRO/ORO Range	6010/7470 - NMWQCC Metals with Hg	TCLP VOA (TCL)/TCLP SVOA (TCL List)	TCLP RCRA 8 Metals w /Hg	Total VOA 8260	Total SVOA 8270	Flashpoint and pH	Moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code:															
SJRP-TB06-02022019	2/2/19	1000	G	Water	N	N	X	X										8260 - BTEX
SJRP-EB04-02022019	2/2/19	1030	G	Water	N	N	X	X	X	X						X		
SJRP-MW23-10-11-02022019	2/2/19	1130	G	~~Water~~ S	F	Y	X	X	X	Y						X		
SJRP-MW23-10-11-02022019-MS	2/2/19	1130	G	~~Water~~ S	N	Y	X	X	X	Y						X		
SJRP-MW23-10-11-02022019-MSD	2/2/19	1130	G	~~Water~~ S	N	Y	X	X	X	X						X		
SJRP-MW23-19-20-02022019	2/2/19	1220	G	~~Water~~ S	N	N	X	X	X	X						X		
SJRP-MW23-29-30-02022019	2/2/19	1315	G	~~Water~~ S	N	N	X	X	X	X						X		
SJRP-MW23-39-40-02022019	2/2/19	1530	G	~~Water~~ S	N	N	X	X	X	X						X		
SJRP-TB07-02032019	2/3/19	1230	G	Water	N	N	X											
			G	Water														
			G	Water														AT

600-180113 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	2/4/19 1630	Jacobs		2-5-19 0911	TA Houston
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Receipt Checklist

Loc: 600
180113

Date/Time Received: '19FEB 5 9:1

JOB NUMBER: _____ CLIENT: CH2M Hill

UNPACKED BY: J.L. CARRIER/DRIVER: Fedex

Custody Seal Present: ☐ YES ☐ NO Number of Coolers Received: 2

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Them CF	Corrected Temp (°C)
BW	(Y) / N	(Y) / N	-2.7	IR 67b	+0.1	-2.6
BW	(Y) / N	(Y) / N	4.8	"	"	4.9
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N	J.L. 2-5-19			
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☐ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☐ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☐ YES ☐ NO

pH paper Lot #_____

VOA headspace acceptable (5-6mm): ☐ YES ☐ NO ☐ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?		

COMMENTS: BTEX samples received frozen/on dry ice
trip blanks in frozen cooler 1/3 frozen/not broken
→ heavily insulated

HS-SA-WI-013 Rev. 3; 07/01/2014

600-180113 Wayt

TRK# 0201 7743 7345 5815

TUE - 05 FEB 10:30A
PRIORITY OVERNIGHT

XH LKSA

ICE
77040
TX-US IAH

FedEx
TRK# 0221 7455 1172 8692

TUE – 05 FEB 10:30A
PRIORITY OVERNIGHT

XH LKSA

77040
TX–US IAH

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

600-180113 Chain of Custody

Cooler Received/Opened On 2/7/2019 @ 0900

Time Samples Removed From Cooler 15:07 Time Samples Placed In Storage 15:15 (2 Hour Window)

1. Tracking # 9070 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 17610176 pH Strip Lot NA Chlorine Strip Lot NA

2. Temperature of rep. sample or temp blank when opened: 1.4 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 (Front)

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) J.J.

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

Larger than this.

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) ACE

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) ACE

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) ACE

I certify that I attached a label with the unique LIMS number to each container (intial) ACE

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 8/23/17

12/7/2020 (Rev. 1)

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

600-180113

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: McDaniel, Bethany		COC No: 600-37561.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: bethany.mcdaniel@testamericainc.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):		Job #: 600-180113-1
Address: 2960 Foster Creighton Drive,	Due Date Requested: 2/15/2019			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: San Juan Kinder Morgan Bloomfield, NM	Project #: 60005961			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015C_GRO/5030B GRO Range (C6-C10)	8015C_DRO/3510C_LVI DRO/ORO	8015C_DRO/3550C DRO/ORO	8015C_GRO/5030B_H Standard GRO Range (C6-C10)	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
SJRP-EB04-02022019 (600-180113-2)	2/2/19	10:30 Central		Water			X	X			5	
SJRP-MW23-10-11-02022019 (600-180113-3)	2/2/19	11:30 Central		Solid					X	X	2	
SJRP-MW23-10-11-02022019 (600-180113-3MS)	2/2/19	11:30 Central	MS	Solid					X	X	2	
SJRP-MW23-10-11-02022019 (600-180113-3MSD)	2/2/19	11:30 Central	MSD	Solid					X	X	2	
SJRP-MW23-19-20-02022019 (600-180113-4)	2/2/19	12:20 Central		Solid					X	X	2	
SJRP-MW23-29-30-02022019 (600-180113-5)	2/2/19	13:15 Central		Solid					X	X	2	
SJRP-MW23-39-40-02022019 (600-180113-6)	2/2/19	15:30 Central		Solid					X	X	2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 2/6/19 1600	Company TA	Received by:	Date/Time: 2/7/19 9:00	Company TA-MAS
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.9

Ver: 09/20/2016

Login Sample Receipt Checklist

Client: CH2M Hill, Inc. Job Number: 600-180113-1

Login Number: 180113 **List Source: TestAmerica Houston**
List Number: 1
Creator: Snow, Tiffany B

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	-2.6, 4.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

eurofins | Environment Testing America



ANALYTICAL REPORT

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-181809-1
Client Project/Site: San Juan Kinder Morgan
Revision: 1

For:
CH2M Hill, Inc.
3721 Rutledge Rd. NE
Suite B-1
Albuquerque, New Mexico 87109

Attn: Aleeca Forsberg

Authorized for release by:
12/7/2020 5:05:22 PM
Steve Stepanski, Project Mgmt. Assistant
(713)690-4444
steve.stepanski@Eurofinset.com

Designee for

Bethany McDaniel, Senior Project Manager
(713)358-2005
bethany.mcdaniel@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Laboratory Job ID: 600-181809-1

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Case Narrative

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181809-1

Job ID: 600-181809-1

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative
600-181809-1

Comments
This report was revised to a Level 2 deliverable per client's request.

This report was revised on May 20, 2019 for the case narrative and QC results for Method 300.0. This replaces the previous reports dated March 28, 2019 and May 17, 2019.

This report was revised on May 17, 2019 for the case narrative and replaces the original report dated March 28, 2019.

Receipt
The samples were received on 3/12/2019 10:19 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.8º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method(s) 6010B: The serial dilution performed for the following sample associated with batch 600-260804 was outside control limits Molybdenum (62%): (600-181780-A-1-A SD ^5)

Method(s) 6010B: The method blank for preparation batch 600-260646 and analytical batch 600-260804 contained Barium, Molybdenum and Lead above the method detection limit. These target analytes concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s): The method blank for analytical batch 600-260881 contained chloride above the method detection limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
Method(s) 300.0: The method blank for analytical batch 600-260324 contained chloride above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 300.0: The method blank for analytical batch 600-260324 contained Sulfate above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method(s) 300.0: Due to the high concentration of chloride and sulfate, the matrix spike / matrix spike duplicate (MS/MSD) of sample SJRP-MW6-03112019 (600-181809-2) for analytical batch 600-260217 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method(s) 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries of sample SJRP-MW11-03112019MS (600-181809-5) for analytical batch 600-260324 were low outside control limits for sulfate. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 300.0: Due to the high concentration of nitrate, the matrix spike / matrix spike duplicate (MS/MSD) of sample SJRP-MW6-03112019 (600-181809-2) for analytical batch 600-260218 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

TestAmerica Job ID: 600-181809-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2320B-1997	Alkalinity, Total - SM Online, 2011	SM-Online	TAL HOU
2540 C-1997	Total Dissolved Solids (Dried at 180 °C)	SM	TAL HOU
3010A	Acid Digestion of Aqueous Samples and Extracts for Total Metals	SW846	TAL HOU
5030B	Purge and Trap	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)/Preparation	SW846	TAL HOU

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater"

SM-Online = Standard Methods Online

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

TestAmerica Job ID: 600-181809-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-181809-1	SJRP-TB01-03112019	Water	03/11/19 14:40	03/12/19 10:19
600-181809-2	SJRP-MW6-03112019	Water	03/11/19 14:50	03/12/19 10:19
600-181809-3	SJRP-MW4-03112019	Water	03/11/19 15:30	03/12/19 10:19
600-181809-4	SJRP-MW2-03112019	Water	03/11/19 15:45	03/12/19 10:19
600-181809-5	SJRP-MW11-03112019	Water	03/11/19 16:05	03/12/19 10:19
600-181809-6	SJRP-MW11-03112019-2	Water	03/11/19 16:15	03/12/19 10:19

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

TestAmerica Job ID: 600-181809-1

Client Sample ID: SJRP-TB01-03112019

Lab Sample ID: 600-181809-1
Date Collected: 03/11/19 14:40
Matrix: Water
Date Received: 03/12/19 10:19

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			03/14/19 20:52	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			03/14/19 20:52	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			03/14/19 20:52	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			03/14/19 20:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*70*		*50 - 134*		*03/14/19 20:52*	*1*
Dibromofluoromethane	*83*		*62 - 130*		*03/14/19 20:52*	*1*
Toluene-d8 (Surr)	*109*		*70 - 130*		*03/14/19 20:52*	*1*
4-Bromofluorobenzene	*117*		*67 - 139*		*03/14/19 20:52*	*1*

Client Sample ID: SJRP-MW6-03112019

Lab Sample ID: 600-181809-2
Date Collected: 03/11/19 14:50
Matrix: Water
Date Received: 03/12/19 10:19

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			03/13/19 21:11	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			03/13/19 21:11	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			03/13/19 21:11	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			03/13/19 21:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*50 - 134*		*03/13/19 21:11*	*1*
Dibromofluoromethane	*91*		*62 - 130*		*03/13/19 21:11*	*1*
Toluene-d8 (Surr)	*88*		*70 - 130*		*03/13/19 21:11*	*1*
4-Bromofluorobenzene	*118*		*67 - 139*		*03/13/19 21:11*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**648**		80.0	10.7	mg/L			03/12/19 20:10	200
Nitrate as N	**53.8**	**F1**	1.00	0.126	mg/L			03/12/19 14:50	5
Nitrate Nitrite as N	**53.8**		1.00	0.126	mg/L			03/12/19 14:50	5
Sulfate	**9930**	**E**	2.50	0.479	mg/L			03/12/19 14:50	5
Nitrite as N	0.149	U	1.00	0.149	mg/L			03/12/19 14:50	5

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**17.5**		0.500	0.0926	mg/L		03/19/19 08:43	03/20/19 12:38	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		03/19/19 08:43	03/20/19 12:38	1
Barium	**0.00870**	**J B**	0.0200	0.000530	mg/L		03/19/19 08:43	03/20/19 12:38	1
Boron	**0.775**		0.200	0.0116	mg/L		03/19/19 08:43	03/20/19 12:38	1
Cadmium	**0.0125**		0.00500	0.000280	mg/L		03/19/19 08:43	03/20/19 12:38	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		03/19/19 08:43	03/20/19 12:38	1
Cobalt	**0.259**		0.0100	0.000310	mg/L		03/19/19 08:43	03/20/19 12:38	1
Iron	**0.414**		0.400	0.0270	mg/L		03/19/19 08:43	03/20/19 12:38	1
Lead	0.00219	U	0.0100	0.00219	mg/L		03/19/19 08:43	03/20/19 12:38	1
Manganese	**7.51**		0.0100	0.000360	mg/L		03/19/19 08:43	03/20/19 12:38	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		03/19/19 08:43	03/20/19 12:38	1
Nickel	**0.311**		0.0100	0.000800	mg/L		03/19/19 08:43	03/20/19 12:38	1

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

TestAmerica Job ID: 600-181809-1

Client Sample ID: SJRP-MW6-03112019

Lab Sample ID: 600-181809-2
Date Collected: 03/11/19 14:50
Matrix: Water
Date Received: 03/12/19 10:19

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	**0.274**	**F1**	0.0400	0.00287	mg/L		03/19/19 08:43	03/20/19 12:38	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		03/21/19 10:36	03/22/19 10:10	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	20.0	U	20.0	20.0	mg/L			03/24/19 15:03	1
Bicarbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			03/24/19 15:03	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			03/24/19 15:03	1
Total Dissolved Solids	**15100**		100	100	mg/L			03/14/19 14:34	1

Client Sample ID: SJRP-MW4-03112019

Lab Sample ID: 600-181809-3
Date Collected: 03/11/19 15:30
Matrix: Water
Date Received: 03/12/19 10:19

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			03/14/19 21:18	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			03/14/19 21:18	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			03/14/19 21:18	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			03/14/19 21:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*74*		*50 - 134*		*03/14/19 21:18*	*1*
Dibromofluoromethane	*86*		*62 - 130*		*03/14/19 21:18*	*1*
Toluene-d8 (Surr)	*110*		*70 - 130*		*03/14/19 21:18*	*1*
4-Bromofluorobenzene	*113*		*67 - 139*		*03/14/19 21:18*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**331**		40.0	5.34	mg/L			03/12/19 20:30	100
Nitrate as N	0.0251	U	0.200	0.0251	mg/L			03/12/19 15:50	1
Nitrate Nitrite as N	0.0251	U	0.200	0.0251	mg/L			03/12/19 15:50	1
Sulfate	**2830**		50.0	9.57	mg/L			03/12/19 20:30	100
Nitrite as N	0.0297	U	0.200	0.0297	mg/L			03/12/19 15:50	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		03/19/19 08:43	03/20/19 12:44	1
Arsenic	**0.0188**		0.0100	0.00285	mg/L		03/19/19 08:43	03/20/19 12:44	1
Barium	**0.00960**	**J B**	0.0200	0.000530	mg/L		03/19/19 08:43	03/20/19 12:44	1
Boron	**0.744**		0.200	0.0116	mg/L		03/19/19 08:43	03/20/19 12:44	1
Cadmium	**0.00960**		0.00500	0.000280	mg/L		03/19/19 08:43	03/20/19 12:44	1
Chromium	**0.00320**	**J**	0.0100	0.00159	mg/L		03/19/19 08:43	03/20/19 12:44	1
Cobalt	**0.0896**		0.0100	0.000310	mg/L		03/19/19 08:43	03/20/19 12:44	1
Iron	**1.72**		0.400	0.0270	mg/L		03/19/19 08:43	03/20/19 12:44	1
Lead	**0.0149**	**B**	0.0100	0.00219	mg/L		03/19/19 08:43	03/20/19 12:44	1
Manganese	**4.98**		0.0100	0.000360	mg/L		03/19/19 08:43	03/20/19 12:44	1
Molybdenum	**0.0218**	**B**	0.0100	0.000540	mg/L		03/19/19 08:43	03/20/19 12:44	1

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

TestAmerica Job ID: 600-181809-1

Client Sample ID: SJRP-MW4-03112019

Lab Sample ID: 600-181809-3
Date Collected: 03/11/19 15:30
Matrix: Water
Date Received: 03/12/19 10:19

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**0.198**		0.0100	0.000800	mg/L		03/19/19 08:43	03/20/19 12:44	1
Selenium	**0.0191**	**J**	0.0400	0.00287	mg/L		03/19/19 08:43	03/20/19 12:44	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		03/21/19 10:36	03/22/19 10:19	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**817**		20.0	20.0	mg/L			03/24/19 15:21	1
Bicarbonate Alkalinity as CaCO3	**817**		20.0	20.0	mg/L			03/24/19 15:21	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			03/24/19 15:21	1
Total Dissolved Solids	**5220**		40.0	40.0	mg/L			03/14/19 14:34	1

Client Sample ID: SJRP-MW2-03112019

Lab Sample ID: 600-181809-4
Date Collected: 03/11/19 15:45
Matrix: Water
Date Received: 03/12/19 10:19

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			03/15/19 22:29	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			03/15/19 22:29	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			03/15/19 22:29	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			03/15/19 22:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*50 - 134*		*03/15/19 22:29*	*1*
Dibromofluoromethane	*101*		*62 - 130*		*03/15/19 22:29*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*03/15/19 22:29*	*1*
4-Bromofluorobenzene	*107*		*67 - 139*		*03/15/19 22:29*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**200**		40.0	5.34	mg/L			03/12/19 21:30	100
Nitrate as N	**18.5**		0.200	0.0251	mg/L			03/12/19 16:10	1
Nitrate Nitrite as N	**19.2**		0.200	0.0251	mg/L			03/12/19 16:10	1
Sulfate	**3150**		50.0	9.57	mg/L			03/12/19 21:30	100
Nitrite as N	**0.673**		0.200	0.0297	mg/L			03/12/19 16:10	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		03/19/19 08:43	03/20/19 12:47	1
Arsenic	**0.00300**	**J**	0.0100	0.00285	mg/L		03/19/19 08:43	03/20/19 12:47	1
Barium	**0.0110**	**J B**	0.0200	0.000530	mg/L		03/19/19 08:43	03/20/19 12:47	1
Boron	**0.554**		0.200	0.0116	mg/L		03/19/19 08:43	03/20/19 12:47	1
Cadmium	**0.000800**	**J**	0.00500	0.000280	mg/L		03/19/19 08:43	03/20/19 12:47	1
Chromium	**0.00200**	**J**	0.0100	0.00159	mg/L		03/19/19 08:43	03/20/19 12:47	1
Cobalt	**0.00170**	**J**	0.0100	0.000310	mg/L		03/19/19 08:43	03/20/19 12:47	1
Iron	**0.0478**	**J**	0.400	0.0270	mg/L		03/19/19 08:43	03/20/19 12:47	1
Lead	0.00219	U	0.0100	0.00219	mg/L		03/19/19 08:43	03/20/19 12:47	1
Manganese	**0.0195**		0.0100	0.000360	mg/L		03/19/19 08:43	03/20/19 12:47	1

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

TestAmerica Job ID: 600-181809-1

Client Sample ID: SJRP-MW2-03112019

Lab Sample ID: 600-181809-4
Date Collected: 03/11/19 15:45
Matrix: Water
Date Received: 03/12/19 10:19

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	**0.00440**	**J B**	0.0100	0.000540	mg/L		03/19/19 08:43	03/20/19 12:47	1
Nickel	**0.00520**	**J**	0.0100	0.000800	mg/L		03/19/19 08:43	03/20/19 12:47	1
Selenium	**0.0824**		0.0400	0.00287	mg/L		03/19/19 08:43	03/20/19 12:47	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		03/21/19 10:36	03/22/19 10:21	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**203**		20.0	20.0	mg/L			03/24/19 15:27	1
Bicarbonate Alkalinity as CaCO3	**203**		20.0	20.0	mg/L			03/24/19 15:27	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			03/24/19 15:27	1
Total Dissolved Solids	**4160**		40.0	40.0	mg/L			03/14/19 14:34	1

Client Sample ID: SJRP-MW11-03112019

Lab Sample ID: 600-181809-5
Date Collected: 03/11/19 16:05
Matrix: Water
Date Received: 03/12/19 10:19

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			03/15/19 22:54	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			03/15/19 22:54	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			03/15/19 22:54	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			03/15/19 22:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*50 - 134*		*03/15/19 22:54*	*1*
Dibromofluoromethane	*98*		*62 - 130*		*03/15/19 22:54*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*03/15/19 22:54*	*1*
4-Bromofluorobenzene	*107*		*67 - 139*		*03/15/19 22:54*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**179**		40.0	5.34	mg/L			03/12/19 21:50	100
Nitrate as N	0.0251	U	0.200	0.0251	mg/L			03/12/19 16:30	1
Nitrate Nitrite as N	0.0251	U	0.200	0.0251	mg/L			03/12/19 16:30	1
Sulfate	**3880**	**F1 B**	100	19.1	mg/L			03/14/19 00:53	200
Nitrite as N	0.0297	U	0.200	0.0297	mg/L			03/12/19 16:30	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.140**	**J**	0.500	0.0926	mg/L		03/19/19 08:43	03/20/19 12:49	1
Arsenic	**0.00350**	**J**	0.0100	0.00285	mg/L		03/19/19 08:43	03/20/19 12:49	1
Barium	**0.0201**	**B**	0.0200	0.000530	mg/L		03/19/19 08:43	03/20/19 12:49	1
Boron	**0.357**		0.200	0.0116	mg/L		03/19/19 08:43	03/20/19 12:49	1
Cadmium	**0.00110**	**J**	0.00500	0.000280	mg/L		03/19/19 08:43	03/20/19 12:49	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		03/19/19 08:43	03/20/19 12:49	1
Cobalt	**0.000800**	**J**	0.0100	0.000310	mg/L		03/19/19 08:43	03/20/19 12:49	1
Iron	**0.152**	**J**	0.400	0.0270	mg/L		03/19/19 08:43	03/20/19 12:49	1
Lead	**0.00360**	**J B**	0.0100	0.00219	mg/L		03/19/19 08:43	03/20/19 12:49	1

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

TestAmerica Job ID: 600-181809-1

Client Sample ID: SJRP-MW11-03112019

Lab Sample ID: 600-181809-5
Date Collected: 03/11/19 16:05
Matrix: Water
Date Received: 03/12/19 10:19

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**1.49**		0.0100	0.000360	mg/L		03/19/19 08:43	03/20/19 12:49	1
Molybdenum	**0.00170**	**J B**	0.0100	0.000540	mg/L		03/19/19 08:43	03/20/19 12:49	1
Nickel	**0.0170**		0.0100	0.000800	mg/L		03/19/19 08:43	03/20/19 12:49	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		03/19/19 08:43	03/20/19 12:49	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		03/21/19 10:36	03/22/19 10:23	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**600**		20.0	20.0	mg/L			03/24/19 15:33	1
Bicarbonate Alkalinity as CaCO3	**600**		20.0	20.0	mg/L			03/24/19 15:33	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			03/24/19 15:33	1
Total Dissolved Solids	**5590**		40.0	40.0	mg/L			03/14/19 14:34	1

Client Sample ID: SJRP-MW11-03112019-2

Lab Sample ID: 600-181809-6
Date Collected: 03/11/19 16:15
Matrix: Water
Date Received: 03/12/19 10:19

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			03/15/19 23:20	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			03/15/19 23:20	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			03/15/19 23:20	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			03/15/19 23:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*50 - 134*		*03/15/19 23:20*	*1*
Dibromofluoromethane	*104*		*62 - 130*		*03/15/19 23:20*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*03/15/19 23:20*	*1*
4-Bromofluorobenzene	*106*		*67 - 139*		*03/15/19 23:20*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**171**		40.0	5.34	mg/L			03/12/19 22:10	100
Nitrate as N	0.0251	U	0.200	0.0251	mg/L			03/12/19 17:30	1
Nitrate Nitrite as N	0.0251	U	0.200	0.0251	mg/L			03/12/19 17:30	1
Sulfate	**3930**	**B**	100	19.1	mg/L			03/14/19 01:53	200
Nitrite as N	0.0297	U	0.200	0.0297	mg/L			03/12/19 17:30	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.0927**	**J**	0.500	0.0926	mg/L		03/19/19 08:43	03/20/19 12:51	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		03/19/19 08:43	03/20/19 12:51	1
Barium	**0.0191**	**J B**	0.0200	0.000530	mg/L		03/19/19 08:43	03/20/19 12:51	1
Boron	**0.347**		0.200	0.0116	mg/L		03/19/19 08:43	03/20/19 12:51	1
Cadmium	**0.000900**	**J**	0.00500	0.000280	mg/L		03/19/19 08:43	03/20/19 12:51	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		03/19/19 08:43	03/20/19 12:51	1
Cobalt	**0.000800**	**J**	0.0100	0.000310	mg/L		03/19/19 08:43	03/20/19 12:51	1
Iron	**0.109**	**J**	0.400	0.0270	mg/L		03/19/19 08:43	03/20/19 12:51	1

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

TestAmerica Job ID: 600-181809-1

Client Sample ID: SJRP-MW11-03112019-2
Date Collected: 03/11/19 16:15
Date Received: 03/12/19 10:19

Lab Sample ID: 600-181809-6
Matrix: Water

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00219	U	0.0100	0.00219	mg/L		03/19/19 08:43	03/20/19 12:51	1
Manganese	**1.43**		0.0100	0.000360	mg/L		03/19/19 08:43	03/20/19 12:51	1
Molybdenum	**0.00120**	**J B**	0.0100	0.000540	mg/L		03/19/19 08:43	03/20/19 12:51	1
Nickel	**0.0174**		0.0100	0.000800	mg/L		03/19/19 08:43	03/20/19 12:51	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		03/19/19 08:43	03/20/19 12:51	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		03/21/19 10:36	03/22/19 10:25	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**599**		20.0	20.0	mg/L			03/24/19 15:39	1
Bicarbonate Alkalinity as CaCO3	**599**		20.0	20.0	mg/L			03/24/19 15:39	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			03/24/19 15:39	1
Total Dissolved Solids	**6220**		40.0	40.0	mg/L			03/14/19 14:34	1

Definitions/Glossary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

TestAmerica Job ID: 600-181809-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
E	Result exceeded calibration range.
F1	MS and/or MSD Recovery is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Surrogate Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

TestAmerica Job ID: 600-181809-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(50-134)	(62-130)	(70-130)	(67-139)
600-181809-1	SJRP-TB01-03112019	70	83	109	117
600-181809-2	SJRP-MW6-03112019	89	91	88	118
600-181809-2 MS	SJRP-MW6-03112019	84	88	83	120
600-181809-2 MSD	SJRP-MW6-03112019	82	87	84	125
600-181809-3	SJRP-MW4-03112019	74	86	110	113
600-181809-4	SJRP-MW2-03112019	109	101	96	107
600-181809-5	SJRP-MW11-03112019	109	98	96	107
600-181809-6	SJRP-MW11-03112019-2	110	104	96	106
LCS 600-260311/3	Lab Control Sample	88	90	86	127
LCS 600-260412/3	Lab Control Sample	75	82	92	133
LCS 600-260516/4	Lab Control Sample	109	103	96	113
LCSD 600-260311/4	Lab Control Sample Dup	81	89	83	126
LCSD 600-260412/4	Lab Control Sample Dup	74	82	93	134
MB 600-260311/6	Method Blank	83	86	88	126
MB 600-260412/6	Method Blank	72	85	92	130
MB 600-260516/6	Method Blank	111	105	96	110

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

TestAmerica Job ID: 600-181809-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-260311/6
Matrix: Water
Analysis Batch: 260311

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			03/13/19 12:53	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			03/13/19 12:53	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			03/13/19 12:53	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			03/13/19 12:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*50 - 134*		*03/13/19 12:53*	*1*
Dibromofluoromethane	*86*		*62 - 130*		*03/13/19 12:53*	*1*
Toluene-d8 (Surr)	*88*		*70 - 130*		*03/13/19 12:53*	*1*
4-Bromofluorobenzene	*126*		*67 - 139*		*03/13/19 12:53*	*1*

Lab Sample ID: LCS 600-260311/3
Matrix: Water
Analysis Batch: 260311

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0100	0.009355		mg/L		94	70 - 130		
Ethylbenzene			0.0100	0.008478		mg/L		85	70 - 130		
Toluene			0.0100	0.008243		mg/L		82	70 - 130		
Xylenes, Total			0.0200	0.01727		mg/L		86	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*50 - 134*
Dibromofluoromethane	*90*		*62 - 130*
Toluene-d8 (Surr)	*86*		*70 - 130*
4-Bromofluorobenzene	*127*		*67 - 139*

Lab Sample ID: LCSD 600-260311/4
Matrix: Water
Analysis Batch: 260311

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0100	0.01079		mg/L		108	70 - 130	14	20
Ethylbenzene			0.0100	0.009266		mg/L		93	70 - 130	9	20
Toluene			0.0100	0.009175		mg/L		92	70 - 130	11	20
Xylenes, Total			0.0200	0.01898		mg/L		95	70 - 130	9	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*81*		*50 - 134*
Dibromofluoromethane	*89*		*62 - 130*
Toluene-d8 (Surr)	*83*		*70 - 130*
4-Bromofluorobenzene	*126*		*67 - 139*

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

TestAmerica Job ID: 600-181809-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 600-181809-2 MS
Matrix: Water
Analysis Batch: 260311

Client Sample ID: SJRP-MW6-03112019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.000176	U	0.0100	0.01002		mg/L		100	70 - 130
Ethylbenzene	0.000212	U	0.0100	0.008463		mg/L		85	70 - 130
Toluene	0.000198	U	0.0100	0.008520		mg/L		85	70 - 130
Xylenes, Total	0.000366	U	0.0200	0.01758		mg/L		88	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*84*		*50 - 134*
Dibromofluoromethane	*88*		*62 - 130*
Toluene-d8 (Surr)	*83*		*70 - 130*
4-Bromofluorobenzene	*120*		*67 - 139*

Lab Sample ID: 600-181809-2 MSD
Matrix: Water
Analysis Batch: 260311

Client Sample ID: SJRP-MW6-03112019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.000176	U	0.0100	0.009896		mg/L		99	70 - 130	1	30
Ethylbenzene	0.000212	U	0.0100	0.008608		mg/L		86	70 - 130	2	30
Toluene	0.000198	U	0.0100	0.008574		mg/L		86	70 - 130	1	30
Xylenes, Total	0.000366	U	0.0200	0.01776		mg/L		89	70 - 130	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*82*		*50 - 134*
Dibromofluoromethane	*87*		*62 - 130*
Toluene-d8 (Surr)	*84*		*70 - 130*
4-Bromofluorobenzene	*125*		*67 - 139*

Lab Sample ID: MB 600-260412/6
Matrix: Water
Analysis Batch: 260412

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			03/14/19 14:58	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			03/14/19 14:58	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			03/14/19 14:58	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			03/14/19 14:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*72*		*50 - 134*		*03/14/19 14:58*	*1*
Dibromofluoromethane	*85*		*62 - 130*		*03/14/19 14:58*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*03/14/19 14:58*	*1*
4-Bromofluorobenzene	*130*		*67 - 139*		*03/14/19 14:58*	*1*

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

TestAmerica Job ID: 600-181809-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-260412/3
Matrix: Water
Analysis Batch: 260412

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0100	0.009780		mg/L		98	70 - 130		
Ethylbenzene			0.0100	0.009335		mg/L		93	70 - 130		
Toluene			0.0100	0.009300		mg/L		93	70 - 130		
Xylenes, Total			0.0200	0.01851		mg/L		93	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*75*		*50 - 134*
Dibromofluoromethane	*82*		*62 - 130*
Toluene-d8 (Surr)	*92*		*70 - 130*
4-Bromofluorobenzene	*133*		*67 - 139*

Lab Sample ID: LCSD 600-260412/4
Matrix: Water
Analysis Batch: 260412

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0100	0.01068		mg/L		107	70 - 130	9	20
Ethylbenzene			0.0100	0.01048		mg/L		105	70 - 130	12	20
Toluene			0.0100	0.01031		mg/L		103	70 - 130	10	20
Xylenes, Total			0.0200	0.02054		mg/L		103	70 - 130	10	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*74*		*50 - 134*
Dibromofluoromethane	*82*		*62 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*
4-Bromofluorobenzene	*134*		*67 - 139*

Lab Sample ID: MB 600-260516/6
Matrix: Water
Analysis Batch: 260516

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			03/15/19 16:08	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			03/15/19 16:08	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			03/15/19 16:08	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			03/15/19 16:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*50 - 134*		*03/15/19 16:08*	*1*
Dibromofluoromethane	*105*		*62 - 130*		*03/15/19 16:08*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*03/15/19 16:08*	*1*
4-Bromofluorobenzene	*110*		*67 - 139*		*03/15/19 16:08*	*1*

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

TestAmerica Job ID: 600-181809-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-260516/4
Matrix: Water
Analysis Batch: 260516

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0100	0.01069		mg/L		107	70 - 130
Ethylbenzene	0.0100	0.009491		mg/L		95	70 - 130
Toluene	0.0100	0.009536		mg/L		95	70 - 130
Xylenes, Total	0.0200	0.01959		mg/L		98	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*109*		*50 - 134*
Dibromofluoromethane	*103*		*62 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*
4-Bromofluorobenzene	*113*		*67 - 139*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-260217/4
Matrix: Water
Analysis Batch: 260217

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.0534	U	0.400	0.0534	mg/L			03/12/19 13:30	1
Sulfate	0.0957	U	0.500	0.0957	mg/L			03/12/19 13:30	1

Lab Sample ID: LCS 600-260217/5
Matrix: Water
Analysis Batch: 260217

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	20.0	19.62		mg/L		98	90 - 110
Sulfate	20.0	21.08		mg/L		105	90 - 110

Lab Sample ID: 600-181809-2 MS
Matrix: Water
Analysis Batch: 260217

Client Sample ID: SJRP-MW6-03112019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	742	E	50.0	698.1	E 4	mg/L		-89	80 - 120
Sulfate	9930	E	50.0	9087	E 4	mg/L		-1683	80 - 120

Lab Sample ID: MB 600-260218/4
Matrix: Water
Analysis Batch: 260218

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.0251	U	0.200	0.0251	mg/L			03/12/19 13:30	1
Nitrate Nitrite as N	0.0251	U	0.200	0.0251	mg/L			03/12/19 13:30	1
Nitrite as N	0.0297	U	0.200	0.0297	mg/L			03/12/19 13:30	1

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

TestAmerica Job ID: 600-181809-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 600-260218/5
Matrix: Water
Analysis Batch: 260218

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	10.0	10.32		mg/L		103	90 - 110
Nitrite as N	10.0	10.48		mg/L		105	90 - 110

Lab Sample ID: 600-181809-2 MS
Matrix: Water
Analysis Batch: 260218

Client Sample ID: SJRP-MW6-03112019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	53.8	F1	10.0	94.10	4	mg/L		403	80 - 120
Nitrite as N	0.149	U	10.0	9.835		mg/L		98	80 - 120

Lab Sample ID: MB 600-260324/35
Matrix: Water
Analysis Batch: 260324

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.1063	J	0.400	0.0534	mg/L			03/13/19 23:13	1
Sulfate	1.150		0.500	0.0957	mg/L			03/13/19 23:13	1

Lab Sample ID: LCS 600-260324/36
Matrix: Water
Analysis Batch: 260324

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	20.0	19.94		mg/L		100	90 - 110
Sulfate	20.0	20.67		mg/L		103	90 - 110

Lab Sample ID: 600-181809-5 MS
Matrix: Water
Analysis Batch: 260324

Client Sample ID: SJRP-MW11-03112019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	173	B	2000	2111		mg/L		97	80 - 120
Sulfate	3880	F1 B	2000	5470	F1	mg/L		79	80 - 120

Lab Sample ID: 600-181809-5 MSD
Matrix: Water
Analysis Batch: 260324

Client Sample ID: SJRP-MW11-03112019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	173	B	2000	2114		mg/L		97	80 - 120	0	20
Sulfate	3880	F1 B	2000	5409	F1	mg/L		76	80 - 120	1	20

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

TestAmerica Job ID: 600-181809-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-260646/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 260804 — **Prep Batch: 260646**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		03/19/19 08:43	03/20/19 11:46	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		03/19/19 08:43	03/20/19 11:46	1
Barium	0.001600	J	0.0200	0.000530	mg/L		03/19/19 08:43	03/20/19 11:46	1
Boron	0.0116	U	0.200	0.0116	mg/L		03/19/19 08:43	03/20/19 11:46	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		03/19/19 08:43	03/20/19 11:46	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		03/19/19 08:43	03/20/19 11:46	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		03/19/19 08:43	03/20/19 11:46	1
Iron	0.0270	U	0.400	0.0270	mg/L		03/19/19 08:43	03/20/19 11:46	1
Lead	0.003000	J	0.0100	0.00219	mg/L		03/19/19 08:43	03/20/19 11:46	1
Manganese	0.000360	U	0.0100	0.000360	mg/L		03/19/19 08:43	03/20/19 11:46	1
Molybdenum	0.001100	J	0.0100	0.000540	mg/L		03/19/19 08:43	03/20/19 11:46	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		03/19/19 08:43	03/20/19 11:46	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		03/19/19 08:43	03/20/19 11:46	1

Lab Sample ID: LCS 600-260646/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 260804 — **Prep Batch: 260646**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	10.36		mg/L		104	80 - 120
Arsenic	1.00	1.013		mg/L		101	80 - 120
Barium	1.00	1.050		mg/L		105	80 - 120
Boron	1.00	1.014		mg/L		101	80 - 120
Cadmium	0.500	0.5143		mg/L		103	80 - 120
Chromium	1.00	1.019		mg/L		102	80 - 120
Cobalt	1.00	0.9926		mg/L		99	80 - 120
Iron	10.0	10.43		mg/L		104	80 - 120
Lead	1.00	1.010		mg/L		101	80 - 120
Manganese	1.00	1.016		mg/L		102	80 - 120
Molybdenum	1.00	1.047		mg/L		105	80 - 120
Nickel	1.00	0.9890		mg/L		99	80 - 120
Selenium	1.00	1.034		mg/L		103	80 - 120

Lab Sample ID: 600-181809-2 MS — **Client Sample ID: SJRP-MW6-03112019**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 260804 — **Prep Batch: 260646**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	17.5		10.0	26.57		mg/L		91	75 - 125
Arsenic	0.00285	U	1.00	1.092		mg/L		109	75 - 125
Barium	0.00870	J B	1.00	0.9764		mg/L		97	75 - 125
Boron	0.775		1.00	1.651		mg/L		88	75 - 125
Cadmium	0.0125		0.500	0.5520		mg/L		108	75 - 125
Chromium	0.00159	U	1.00	0.9198		mg/L		92	75 - 125
Cobalt	0.259		1.00	1.316		mg/L		106	75 - 125
Iron	0.414		10.0	10.42		mg/L		100	75 - 125
Lead	0.00219	U	1.00	1.016		mg/L		102	75 - 125
Manganese	7.51		1.00	7.968	4	mg/L		46	75 - 125

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

TestAmerica Job ID: 600-181809-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-181809-2 MS — **Client Sample ID: SJRP-MW6-03112019**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 260804 — **Prep Batch: 260646**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Molybdenum	0.000540	U	1.00	0.9292		mg/L		93	75 - 125
Nickel	0.311		1.00	1.346		mg/L		104	75 - 125
Selenium	0.274	F1	1.00	1.548	F1	mg/L		127	75 - 125

Lab Sample ID: 600-181809-2 MSD — **Client Sample ID: SJRP-MW6-03112019**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 260804 — **Prep Batch: 260646**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	17.5		10.0	26.30		mg/L		88	75 - 125	1	20
Arsenic	0.00285	U	1.00	1.119		mg/L		112	75 - 125	2	20
Barium	0.00870	J B	1.00	0.9752		mg/L		97	75 - 125	0	20
Boron	0.775		1.00	1.683		mg/L		91	75 - 125	2	20
Cadmium	0.0125		0.500	0.5664		mg/L		111	75 - 125	3	20
Chromium	0.00159	U	1.00	0.9121		mg/L		91	75 - 125	1	20
Cobalt	0.259		1.00	1.337		mg/L		108	75 - 125	2	20
Iron	0.414		10.0	10.44		mg/L		100	75 - 125	0	20
Lead	0.00219	U	1.00	1.032		mg/L		103	75 - 125	2	20
Manganese	7.51		1.00	7.919	4	mg/L		41	75 - 125	1	20
Molybdenum	0.000540	U	1.00	0.9740		mg/L		97	75 - 125	5	20
Nickel	0.311		1.00	1.364		mg/L		105	75 - 125	1	20
Selenium	0.274	F1	1.00	1.577	F1	mg/L		130	75 - 125	2	20

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-260881/1-B — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 260997 — **Prep Batch: 260881**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0001361	J	0.000250	0.000103	mg/L		03/21/19 10:36	03/22/19 10:06	1

Lab Sample ID: LCS 600-260881/2-B — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 260997 — **Prep Batch: 260881**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00375	0.003821		mg/L		102	70 - 130

Lab Sample ID: 600-181809-2 MS — **Client Sample ID: SJRP-MW6-03112019**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 260997 — **Prep Batch: 260881**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.000103	U	0.00375	0.003897		mg/L		104	75 - 125

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

TestAmerica Job ID: 600-181809-1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) (Continued)

Lab Sample ID: 600-181809-2 MSD — **Client Sample ID: SJRP-MW6-03112019**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 260997 — **Prep Batch: 260881**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.000103	U	0.00375	0.003799		mg/L		101	75 - 125	3	20

Method: 2320B-1997 - Alkalinity, Total - SM Online, 2011

Lab Sample ID: MB 600-261084/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 261084

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	20.0	U	20.0	20.0	mg/L			03/24/19 14:54	1
Bicarbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			03/24/19 14:54	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			03/24/19 14:54	1

Lab Sample ID: LCS 600-261084/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 261084

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	100	105.0		mg/L		105	90 - 110

Lab Sample ID: 600-181809-2 MS — **Client Sample ID: SJRP-MW6-03112019**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 261084

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	20.0	U	250	189.2		mg/L		76	75 - 125

Lab Sample ID: 600-181809-2 MSD — **Client Sample ID: SJRP-MW6-03112019**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 261084

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Alkalinity	20.0	U	250	194.5		mg/L		78	75 - 125	3	20

Method: 2540 C-1997 - Total Dissolved Solids (Dried at 180 °C)

Lab Sample ID: MB 600-260454/25 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 260454

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10.0	U	10.0	10.0	mg/L			03/14/19 14:34	1

Lab Sample ID: MB 600-260454/49 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 260454

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10.0	U	10.0	10.0	mg/L			03/14/19 14:34	1

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

TestAmerica Job ID: 600-181809-1

Lab Sample ID: LCS 600-260454/26
Matrix: Water
Analysis Batch: 260454

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1800	1679		mg/L		93	90 - 110

Lab Sample ID: LCS 600-260454/50
Matrix: Water
Analysis Batch: 260454

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1800	1732		mg/L		96	90 - 110

Lab Sample ID: 600-181809-2 DU
Matrix: Water
Analysis Batch: 260454

Client Sample ID: SJRP-MW6-03112019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	15100		15050		mg/L		0	10

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

TestAmerica Job ID: 600-181809-1

GC/MS VOA

Analysis Batch: 260311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181809-2	SJRP-MW6-03112019	Total/NA	Water	8260B	
MB 600-260311/6	Method Blank	Total/NA	Water	8260B	
LCS 600-260311/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-260311/4	Lab Control Sample Dup	Total/NA	Water	8260B	
600-181809-2 MS	SJRP-MW6-03112019	Total/NA	Water	8260B	
600-181809-2 MSD	SJRP-MW6-03112019	Total/NA	Water	8260B	

Analysis Batch: 260412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181809-1	SJRP-TB01-03112019	Total/NA	Water	8260B	
600-181809-3	SJRP-MW4-03112019	Total/NA	Water	8260B	
MB 600-260412/6	Method Blank	Total/NA	Water	8260B	
LCS 600-260412/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-260412/4	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 260516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181809-4	SJRP-MW2-03112019	Total/NA	Water	8260B	
600-181809-5	SJRP-MW11-03112019	Total/NA	Water	8260B	
600-181809-6	SJRP-MW11-03112019-2	Total/NA	Water	8260B	
MB 600-260516/6	Method Blank	Total/NA	Water	8260B	
LCS 600-260516/4	Lab Control Sample	Total/NA	Water	8260B	

HPLC/IC

Analysis Batch: 260217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181809-2	SJRP-MW6-03112019	Total/NA	Water	300.0	
600-181809-2	SJRP-MW6-03112019	Total/NA	Water	300.0	
600-181809-3	SJRP-MW4-03112019	Total/NA	Water	300.0	
600-181809-4	SJRP-MW2-03112019	Total/NA	Water	300.0	
600-181809-5	SJRP-MW11-03112019	Total/NA	Water	300.0	
600-181809-6	SJRP-MW11-03112019-2	Total/NA	Water	300.0	
MB 600-260217/4	Method Blank	Total/NA	Water	300.0	
LCS 600-260217/5	Lab Control Sample	Total/NA	Water	300.0	
600-181809-2 MS	SJRP-MW6-03112019	Total/NA	Water	300.0	
600-181809-2 MSD	SJRP-MW6-03112019	Total/NA	Water	300.0	

Analysis Batch: 260218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181809-2	SJRP-MW6-03112019	Total/NA	Water	300.0	
600-181809-3	SJRP-MW4-03112019	Total/NA	Water	300.0	
600-181809-4	SJRP-MW2-03112019	Total/NA	Water	300.0	
600-181809-5	SJRP-MW11-03112019	Total/NA	Water	300.0	
600-181809-6	SJRP-MW11-03112019-2	Total/NA	Water	300.0	
MB 600-260218/4	Method Blank	Total/NA	Water	300.0	
LCS 600-260218/5	Lab Control Sample	Total/NA	Water	300.0	
600-181809-2 MS	SJRP-MW6-03112019	Total/NA	Water	300.0	
600-181809-2 MSD	SJRP-MW6-03112019	Total/NA	Water	300.0	

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

TestAmerica Job ID: 600-181809-1

HPLC/IC (Continued)

Analysis Batch: 260324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181809-5	SJRP-MW11-03112019	Total/NA	Water	300.0	
600-181809-6	SJRP-MW11-03112019-2	Total/NA	Water	300.0	
MB 600-260324/35	Method Blank	Total/NA	Water	300.0	
LCS 600-260324/36	Lab Control Sample	Total/NA	Water	300.0	
600-181809-5 MS	SJRP-MW11-03112019	Total/NA	Water	300.0	
600-181809-5 MSD	SJRP-MW11-03112019	Total/NA	Water	300.0	

Metals

Prep Batch: 260646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181809-2	SJRP-MW6-03112019	Total/NA	Water	3010A	
600-181809-3	SJRP-MW4-03112019	Total/NA	Water	3010A	
600-181809-4	SJRP-MW2-03112019	Total/NA	Water	3010A	
600-181809-5	SJRP-MW11-03112019	Total/NA	Water	3010A	
600-181809-6	SJRP-MW11-03112019-2	Total/NA	Water	3010A	
MB 600-260646/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-260646/2-A	Lab Control Sample	Total/NA	Water	3010A	
600-181809-2 MS	SJRP-MW6-03112019	Total/NA	Water	3010A	
600-181809-2 MSD	SJRP-MW6-03112019	Total/NA	Water	3010A	

Analysis Batch: 260804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181809-2	SJRP-MW6-03112019	Total/NA	Water	6010B	260646
600-181809-3	SJRP-MW4-03112019	Total/NA	Water	6010B	260646
600-181809-4	SJRP-MW2-03112019	Total/NA	Water	6010B	260646
600-181809-5	SJRP-MW11-03112019	Total/NA	Water	6010B	260646
600-181809-6	SJRP-MW11-03112019-2	Total/NA	Water	6010B	260646
MB 600-260646/1-A	Method Blank	Total/NA	Water	6010B	260646
LCS 600-260646/2-A	Lab Control Sample	Total/NA	Water	6010B	260646
600-181809-2 MS	SJRP-MW6-03112019	Total/NA	Water	6010B	260646
600-181809-2 MSD	SJRP-MW6-03112019	Total/NA	Water	6010B	260646

Prep Batch: 260881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181809-2	SJRP-MW6-03112019	Total/NA	Water	7470A	
600-181809-3	SJRP-MW4-03112019	Total/NA	Water	7470A	
600-181809-4	SJRP-MW2-03112019	Total/NA	Water	7470A	
600-181809-5	SJRP-MW11-03112019	Total/NA	Water	7470A	
600-181809-6	SJRP-MW11-03112019-2	Total/NA	Water	7470A	
MB 600-260881/1-B	Method Blank	Total/NA	Water	7470A	
LCS 600-260881/2-B	Lab Control Sample	Total/NA	Water	7470A	
600-181809-2 MS	SJRP-MW6-03112019	Total/NA	Water	7470A	
600-181809-2 MSD	SJRP-MW6-03112019	Total/NA	Water	7470A	

Analysis Batch: 260997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181809-2	SJRP-MW6-03112019	Total/NA	Water	7470A	260881
600-181809-3	SJRP-MW4-03112019	Total/NA	Water	7470A	260881
600-181809-4	SJRP-MW2-03112019	Total/NA	Water	7470A	260881

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

TestAmerica Job ID: 600-181809-1

Metals (Continued)

Analysis Batch: 260997 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181809-5	SJRP-MW11-03112019	Total/NA	Water	7470A	260881
600-181809-6	SJRP-MW11-03112019-2	Total/NA	Water	7470A	260881
MB 600-260881/1-B	Method Blank	Total/NA	Water	7470A	260881
LCS 600-260881/2-B	Lab Control Sample	Total/NA	Water	7470A	260881
600-181809-2 MS	SJRP-MW6-03112019	Total/NA	Water	7470A	260881
600-181809-2 MSD	SJRP-MW6-03112019	Total/NA	Water	7470A	260881

General Chemistry

Analysis Batch: 260454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181809-2	SJRP-MW6-03112019	Total/NA	Water	2540 C-1997	
600-181809-3	SJRP-MW4-03112019	Total/NA	Water	2540 C-1997	
600-181809-4	SJRP-MW2-03112019	Total/NA	Water	2540 C-1997	
600-181809-5	SJRP-MW11-03112019	Total/NA	Water	2540 C-1997	
600-181809-6	SJRP-MW11-03112019-2	Total/NA	Water	2540 C-1997	
MB 600-260454/25	Method Blank	Total/NA	Water	2540 C-1997	
MB 600-260454/49	Method Blank	Total/NA	Water	2540 C-1997	
LCS 600-260454/26	Lab Control Sample	Total/NA	Water	2540 C-1997	
LCS 600-260454/50	Lab Control Sample	Total/NA	Water	2540 C-1997	
600-181809-2 DU	SJRP-MW6-03112019	Total/NA	Water	2540 C-1997	

Analysis Batch: 261084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181809-2	SJRP-MW6-03112019	Total/NA	Water	2320B-1997	
600-181809-3	SJRP-MW4-03112019	Total/NA	Water	2320B-1997	
600-181809-4	SJRP-MW2-03112019	Total/NA	Water	2320B-1997	
600-181809-5	SJRP-MW11-03112019	Total/NA	Water	2320B-1997	
600-181809-6	SJRP-MW11-03112019-2	Total/NA	Water	2320B-1997	
MB 600-261084/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 600-261084/5	Lab Control Sample	Total/NA	Water	2320B-1997	
600-181809-2 MS	SJRP-MW6-03112019	Total/NA	Water	2320B-1997	
600-181809-2 MSD	SJRP-MW6-03112019	Total/NA	Water	2320B-1997	

Lab Chronicle

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

TestAmerica Job ID: 600-181809-1

Client Sample ID: SJRP-TB01-03112019 — Lab Sample ID: 600-181809-1

Date Collected: 03/11/19 14:40 — **Matrix: Water**
Date Received: 03/12/19 10:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	260412	03/14/19 20:52	YX1	TAL HOU

Client Sample ID: SJRP-MW6-03112019 — Lab Sample ID: 600-181809-2

Date Collected: 03/11/19 14:50 — **Matrix: Water**
Date Received: 03/12/19 10:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	260311	03/13/19 21:11	YX1	TAL HOU
Total/NA	Analysis	300.0		5	5 mL	1.0 mL	260217	03/12/19 14:50	SKR	TAL HOU
Total/NA	Analysis	300.0		5	5 mL	1.0 mL	260218	03/12/19 14:50	SKR	TAL HOU
Total/NA	Analysis	300.0		200			260217	03/12/19 20:10	SKR	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	260646	03/19/19 08:43	DCL	TAL HOU
Total/NA	Analysis	6010B		1			260804	03/20/19 12:38	KP1	TAL HOU
Total/NA	Prep	7470A			40 mL	50 mL	260881	03/21/19 10:36	SOT	TAL HOU
Total/NA	Analysis	7470A		1			260997	03/22/19 10:10	TWR	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	261084	03/24/19 15:03	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	10 mL	100 mL	260454	03/14/19 14:34	DTN	TAL HOU

Client Sample ID: SJRP-MW4-03112019 — Lab Sample ID: 600-181809-3

Date Collected: 03/11/19 15:30 — **Matrix: Water**
Date Received: 03/12/19 10:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	260412	03/14/19 21:18	YX1	TAL HOU
Total/NA	Analysis	300.0		1			260218	03/12/19 15:50	SKR	TAL HOU
Total/NA	Analysis	300.0		100			260217	03/12/19 20:30	SKR	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	260646	03/19/19 08:43	DCL	TAL HOU
Total/NA	Analysis	6010B		1			260804	03/20/19 12:44	KP1	TAL HOU
Total/NA	Prep	7470A			40 mL	50 mL	260881	03/21/19 10:36	SOT	TAL HOU
Total/NA	Analysis	7470A		1			260997	03/22/19 10:19	TWR	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	261084	03/24/19 15:21	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	25 mL	100 mL	260454	03/14/19 14:34	DTN	TAL HOU

Client Sample ID: SJRP-MW2-03112019 — Lab Sample ID: 600-181809-4

Date Collected: 03/11/19 15:45 — **Matrix: Water**
Date Received: 03/12/19 10:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	260516	03/15/19 22:29	PXS	TAL HOU
Total/NA	Analysis	300.0		1			260218	03/12/19 16:10	SKR	TAL HOU
Total/NA	Analysis	300.0		100			260217	03/12/19 21:30	SKR	TAL HOU

Lab Chronicle

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

TestAmerica Job ID: 600-181809-1

Client Sample ID: SJRP-MW2-03112019

Lab Sample ID: 600-181809-4

Date Collected: 03/11/19 15:45
Matrix: Water
Date Received: 03/12/19 10:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	260646	03/19/19 08:43	DCL	TAL HOU
Total/NA	Analysis	6010B		1			260804	03/20/19 12:47	KP1	TAL HOU
Total/NA	Prep	7470A			40 mL	50 mL	260881	03/21/19 10:36	SOT	TAL HOU
Total/NA	Analysis	7470A		1			260997	03/22/19 10:21	TWR	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	261084	03/24/19 15:27	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	25 mL	100 mL	260454	03/14/19 14:34	DTN	TAL HOU

Client Sample ID: SJRP-MW11-03112019

Lab Sample ID: 600-181809-5

Date Collected: 03/11/19 16:05
Matrix: Water
Date Received: 03/12/19 10:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	260516	03/15/19 22:54	PXS	TAL HOU
Total/NA	Analysis	300.0		1			260218	03/12/19 16:30	SKR	TAL HOU
Total/NA	Analysis	300.0		100			260217	03/12/19 21:50	SKR	TAL HOU
Total/NA	Analysis	300.0		200			260324	03/14/19 00:53	SKR	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	260646	03/19/19 08:43	DCL	TAL HOU
Total/NA	Analysis	6010B		1			260804	03/20/19 12:49	KP1	TAL HOU
Total/NA	Prep	7470A			40 mL	50 mL	260881	03/21/19 10:36	SOT	TAL HOU
Total/NA	Analysis	7470A		1			260997	03/22/19 10:23	TWR	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	261084	03/24/19 15:33	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	25 mL	100 mL	260454	03/14/19 14:34	DTN	TAL HOU

Client Sample ID: SJRP-MW11-03112019-2

Lab Sample ID: 600-181809-6

Date Collected: 03/11/19 16:15
Matrix: Water
Date Received: 03/12/19 10:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	260516	03/15/19 23:20	PXS	TAL HOU
Total/NA	Analysis	300.0		1			260218	03/12/19 17:30	SKR	TAL HOU
Total/NA	Analysis	300.0		100			260217	03/12/19 22:10	SKR	TAL HOU
Total/NA	Analysis	300.0		200			260324	03/14/19 01:53	SKR	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	260646	03/19/19 08:43	DCL	TAL HOU
Total/NA	Analysis	6010B		1			260804	03/20/19 12:51	KP1	TAL HOU
Total/NA	Prep	7470A			40 mL	50 mL	260881	03/21/19 10:36	SOT	TAL HOU
Total/NA	Analysis	7470A		1			260997	03/22/19 10:25	TWR	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	261084	03/24/19 15:39	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	25 mL	100 mL	260454	03/14/19 14:34	DTN	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Accreditation/Certification Summary

Client: CH2M Hill, Inc. TestAmerica Job ID: 600-181809-1
Project/Site: San Juan Kinder Morgan

Laboratory: TestAmerica Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	18-061-0	08-04-19
Louisiana	NELAP	6	01967	06-30-19
Oklahoma	State Program	6	2018-052	08-31-19
Texas	NELAP	6	T104704223-18-23	10-31-19
USDA	Federal		P330-18-00130	04-30-21

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: AForsberg	Lab PM: McDaniel, Bethany A	Carrier Tracking No(s): fedEX 4840 2905 1254	COC No: 600-67174-18376.3
Client Contact: Aleeca Forsberg	Phone: 5059181800	E-Mail: bethany.mcdaniel@testamericainc.com		Page:
Company: CH2M Hill, Inc.				Job #:
Address: 3721 Rutledge Rd. NE Suite B-1	Due Date Requested:			
City: Albuquerque	TAT Requested (days):			
State, Zip: NM, 87109				
Phone: 505-855-5239(Tel)	PO #: WD285077			
Email: aleeca.forsberg@jacobs.com	WO #: WD285077			
Project Name: Kinder Morgan Bloomfield, NM San Juan	Project #: 60005961			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - BTEX	2320B - Alkalinity	6010B, 7470A - NMWQCC Dissolved Metals	300_ORGFM_28D - chloride, sulfate	300_ORGFM - Nitrite, nitrite **	2540C_Calcd - TDS											Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	D	N	N	N												
SJRP-TB01-03112019	3/11/19	1440	G	Water	N	N	X																	**Short Hold Samples**
SJRP-MW6-03112019		1450	G	Water	Y	Y	X	X	X	X	X	X												1L bottles 1/2 full ran out of H2O
SJRP-MW4-03112019		1530	G	Water	Y	N	X	X	X	X	X	X												
SJRP-MW2-03112019		1545	G	Water	Y	N	X	X	X	X	X	X												
SJRP-MW11-03112019		1605	G	Water	Y	N	X	X	X	X	X	X												
SJRP-MW11-03112019-2		1615	G	Water	Y	N	X	X	X	X	X	Y												
				Water																				
				Water																				
				Water																				
				Water																				
				Water																				

600-181809 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: JACOBS	Date/Time: 3/11/19 1700	Company	Received by:	Date/Time: 3/12/19 1019	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

TestAmerica Houston

Loc: 600
181809

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Receipt Checklist

Date/Time Received: '19 MAR 12 10:19

JOB NUMBER: _____ CLIENT: CH2M

UNPACKED BY: [signature] CARRIER/DRIVER: Fedex

Custody Seal Present: ☒ YES ☐ NO Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Them CF	Corrected Temp (°C)
BW	Y / N	Y / N	1.7	676	+0.1	1.8
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N		PD	3/12/19	
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☒ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☐ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☐ YES ☐ NO

pH paper Lot #_____

VOA headspace acceptable (5-6mm): ☐ YES ☐ NO ☐ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X	

COMMENTS:

Sample 1 has #5 all vials
Sample 2 - reg (1) vial

3/12/19

HS-SA-WI-013 Rev. 3; 07/01/2014

600-181809 Waybill



12/7/2020 (Rev. 1)

Login Sample Receipt Checklist

Client: CH2M Hill, Inc. Job Number: 600-181809-1

Login Number: 181809 **List Source: TestAmerica Houston**
List Number: 1
Creator: Taylor, Jaquelyn R

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-181877-1
Client Project/Site: San Juan Kinder Morgan
Revision: 1

For:
CH2M Hill, Inc.
3721 Rutledge Rd. NE
Suite B-1
Albuquerque, New Mexico 87109

Attn: Aleeca Forsberg

Authorized for release by:
12/7/2020 5:06:53 PM
Steve Stepanski, Project Mgmt. Assistant
(713)690-4444
steve.stepanski@Eurofinset.com

Designee for

Bethany McDaniel, Senior Project Manager
(713)358-2005
bethany.mcdaniel@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1

Job ID: 600-181877-1

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative
600-181877-1

Comments
This report was revised to a Level 2 deliverable per client's request.

This report was revised on May 14, 2019. The narrative was updated and the Nitrate as N and Nitrite as N results for sample SJRP-MW13-03122019 (600-181877-3).
changed. This revision replaces the original report dated April 2, 2019.

Receipt
The samples were received on 3/13/2019 10:12 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.2º C and 3.1º C.

GC/MS VOA
Method(s) 8260B: The following samples were diluted due to the nature of the sample matrix: SJRP-MW13-03122019 (600-181877-3), SJRP-MW16-03122019 (600-181877-7), SJRP-MW15-03122019 (600-181877-8) and SJRP-PMW2-03122019 (600-181877-12). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following sample was diluted to bring the concentration of target analytes within the calibration range: SJRP-PMW2-03122019 (600-181877-12). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following volatile sample was analyzed with significant headspace in the sample container(s): SJRP-TB02-03122019 (600-181877-2). Significant headspace is defined as a bubble greater than 6 mm in diameter.

Method(s) 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: SJRP-MW13-03122019 (600-181877-3), SJRP-MW16-03122019 (600-181877-7), SJRP-MW15-03122019 (600-181877-8), SJRP-MW15-03122019-2 (600-181877-9), (600-181991-B-13), (600-181991-B-13 MS) and (600-181991-B-13 MSD). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following samples were diluted due to the nature of the sample matrix: SJRP-MW15-03122019-2 (600-181877-9), SJRP-MW21-03122019 (600-181877-11) and (600-181991-B-13). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 3010A: The following samples for metals were received unpreserved and were preserved upon receipt to the laboratory: SJRP-MW16-03122019 (600-181877-7) and SJRP-PMW2-03122019 (600-181877-12). Regulatory documents require a 16-hour waiting period from the time of the addition of the acid preservative to the time of digestion.

Method(s) 3010A: The following samples for metals were received unpreserved and were preserved upon receipt to the laboratory: SJRP-MW13-03122019 (600-181877-3). Regulatory documents require a 16-hour waiting period from the time of the addition of the acid preservative to the time of digestion.

Method(s) 6010B: The method blank for Prep Batch 260946 contained Nickel above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 6010B: The following samples were diluted to bring the concentration of target analytes within the calibration range: SJRP-MW19-03122019 (600-181877-4), SJRP-MW19-03122019 (600-181877-4[MS]) and SJRP-MW19-03122019 (600-181877-4[MSD]). Elevated reporting limits (RLs) are provided.

Method(s) 6010B: The method blank for Prep Batch 261147 contained Selenium above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 6010B: The method blank for Prep Batch 261179 contained Boron, Barium and Selenium above the method detection limit.

Case Narrative

Client: CH2M Hill, Inc. Job ID: 600-181877-1
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1 (Continued)

Laboratory: Eurofins TestAmerica, Houston (Continued)

These target analyte concentrations were less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 6010B: The serial dilution performed for the following sample associated with batch 261326 was outside control limits for Barium at 22% recovery: (600-182328-D-1-A SD ^5)

Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 600-261001 were outside control limits for selenium. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 6010B: Due to the high concentration of manganese, the matrix spike / matrix spike duplicate (MS/MSD) for batch 600-261126 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
Method(s) 300.0: The method blank for analytical batch 600-260324 contained chloride above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 300.0: The method blank for analytical batch 600-260545 contained chloride above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 300.0: The method blank for analytical batch 600-261426 contained Chloride above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 300.0: Due to the high concentration of Chloride and Sulfate, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 600-260324 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method(s) 300.0: Due to the high concentration of Chloride and Sulfate, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 600-260514 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method(s) 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 600-260325 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. The Nitrate is being masked by the high sulfate that is present in the sample.

Method(s) 300.0: Reanalysis of the following sample was performed outside of the analytical holding time due to high Sulfate analyte in the sample: SJRP-MW13-03122019 (600-181877-3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2320B-1997	Alkalinity, Total - SM Online, 2011	SM-Online	TAL HOU
2540 C-1997	Total Dissolved Solids (Dried at 180 °C)	SM	TAL HOU
3010A	Acid Digestion of Aqueous Samples and Extracts for Total Metals	SW846	TAL HOU
5030B	Purge and Trap	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)/Preparation	SW846	TAL HOU

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM = "Standard Methods For The Examination Of Water And Wastewater"
SM-Online = Standard Methods Online
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-181877-1	SJRP-MW12-03122019	Water	03/12/19 09:00	03/13/19 10:12
600-181877-2	SJRP-TB02-03122019	Water	03/12/19 08:55	03/13/19 10:12
600-181877-3	SJRP-MW13-03122019	Water	03/12/19 09:30	03/13/19 10:12
600-181877-4	SJRP-MW19-03122019	Water	03/12/19 10:10	03/13/19 10:12
600-181877-5	SJRP-MW14-03122019	Water	03/12/19 11:25	03/13/19 10:12
600-181877-6	SJRP-MW9-03122019	Water	03/12/19 11:50	03/13/19 10:12
600-181877-7	SJRP-MW16-03122019	Water	03/12/19 12:05	03/13/19 10:12
600-181877-8	SJRP-MW15-03122019	Water	03/12/19 12:40	03/13/19 10:12
600-181877-9	SJRP-MW15-03122019-2	Water	03/12/19 12:50	03/13/19 10:12
600-181877-10	SJRP-MW8-03122019	Water	03/12/19 13:45	03/13/19 10:12
600-181877-11	SJRP-MW21-03122019	Water	03/12/19 14:15	03/13/19 10:12
600-181877-12	SJRP-PMW2-03122019	Water	03/12/19 16:00	03/13/19 10:12

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1

Client Sample ID: SJRP-MW12-03122019

Lab Sample ID: 600-181877-1
Date Collected: 03/12/19 09:00
Matrix: Water
Date Received: 03/13/19 10:12

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.000576**	**J**	0.00100	0.000176	mg/L			03/14/19 15:59	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			03/14/19 15:59	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			03/14/19 15:59	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			03/14/19 15:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*76*		*50 - 134*		*03/14/19 15:59*	*1*
Dibromofluoromethane	*90*		*62 - 130*		*03/14/19 15:59*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*03/14/19 15:59*	*1*
4-Bromofluorobenzene	*127*		*67 - 139*		*03/14/19 15:59*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**703**		20.0	2.67	mg/L			03/14/19 17:16	50
Nitrate as N	0.0251	U	0.200	0.0251	mg/L			03/13/19 15:33	1
Nitrate Nitrite as N	0.0251	U	0.200	0.0251	mg/L			03/13/19 15:33	1
Sulfate	0.0957	U	0.500	0.0957	mg/L			03/13/19 15:33	1
Nitrite as N	0.0297	U	0.200	0.0297	mg/L			03/13/19 15:33	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		03/22/19 08:21	03/22/19 16:57	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		03/22/19 08:21	03/22/19 16:57	1
Barium	**0.0140**	**J**	0.0200	0.000530	mg/L		03/22/19 08:21	03/22/19 16:57	1
Boron	**0.339**		0.200	0.0116	mg/L		03/22/19 08:21	03/22/19 16:57	1
Cadmium	**0.000700**	**J**	0.00500	0.000280	mg/L		03/22/19 08:21	03/22/19 16:57	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		03/22/19 08:21	03/22/19 16:57	1
Cobalt	**0.0217**		0.0100	0.000310	mg/L		03/22/19 08:21	03/22/19 16:57	1
Iron	**1.06**		0.400	0.0270	mg/L		03/22/19 08:21	03/22/19 16:57	1
Lead	0.00219	U	0.0100	0.00219	mg/L		03/22/19 08:21	03/22/19 16:57	1
Manganese	**6.53**		0.0100	0.000360	mg/L		03/22/19 08:21	03/22/19 16:57	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		03/22/19 08:21	03/25/19 13:01	1
Nickel	**0.0190**	**B**	0.0100	0.000800	mg/L		03/22/19 08:21	03/22/19 16:57	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		03/22/19 08:21	03/22/19 16:57	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		03/25/19 09:21	03/25/19 13:17	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**725**		20.0	20.0	mg/L			03/15/19 18:00	1
Bicarbonate Alkalinity as CaCO3	**725**		20.0	20.0	mg/L			03/15/19 18:00	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			03/15/19 18:00	1
Total Dissolved Solids	**6680**		100	100	mg/L			03/19/19 14:57	1

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1

Client Sample ID: SJRP-TB02-03122019

Lab Sample ID: 600-181877-2
Date Collected: 03/12/19 08:55
Matrix: Water
Date Received: 03/13/19 10:12

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			03/14/19 15:35	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			03/14/19 15:35	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			03/14/19 15:35	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			03/14/19 15:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*75*		*50 - 134*		*03/14/19 15:35*	*1*
Dibromofluoromethane	*84*		*62 - 130*		*03/14/19 15:35*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*03/14/19 15:35*	*1*
4-Bromofluorobenzene	*133*		*67 - 139*		*03/14/19 15:35*	*1*

Client Sample ID: SJRP-MW13-03122019

Lab Sample ID: 600-181877-3
Date Collected: 03/12/19 09:30
Matrix: Water
Date Received: 03/13/19 10:12

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	**0.882**		0.0200	0.00424	mg/L			03/14/19 17:59	20
Toluene	0.00396	U	0.0200	0.00396	mg/L			03/14/19 17:59	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*75*		*50 - 134*		*03/14/19 17:59*	*20*
Dibromofluoromethane	*84*		*62 - 130*		*03/14/19 17:59*	*20*
Toluene-d8 (Surr)	*101*		*70 - 130*		*03/14/19 17:59*	*20*
4-Bromofluorobenzene	*128*		*67 - 139*		*03/14/19 17:59*	*20*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**3.27**		0.250	0.0440	mg/L			03/15/19 19:29	250
Xylenes, Total	**1.06**		0.500	0.0915	mg/L			03/15/19 19:29	250

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*64*		*50 - 134*		*03/15/19 19:29*	*250*
Dibromofluoromethane	*82*		*62 - 130*		*03/15/19 19:29*	*250*
Toluene-d8 (Surr)	*105*		*70 - 130*		*03/15/19 19:29*	*250*
4-Bromofluorobenzene	*133*		*67 - 139*		*03/15/19 19:29*	*250*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1440**		80.0	10.7	mg/L			03/14/19 18:10	200
Nitrate as N	0.0251	U	0.200	0.0251	mg/L			03/13/19 15:53	1
Nitrate Nitrite as N	6.28	U H	50.0	6.28	mg/L			03/15/19 15:43	250
Sulfate	**5480**		250	47.9	mg/L			03/16/19 18:49	500
Nitrite as N	7.43	U H	50.0	7.43	mg/L			03/15/19 15:43	250

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		03/26/19 09:29	03/27/19 16:07	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		03/26/19 09:29	03/27/19 16:07	1
Barium	**0.0231**	**B**	0.0200	0.000530	mg/L		03/26/19 09:29	03/27/19 16:07	1
Boron	**0.248**	**B**	0.200	0.0116	mg/L		03/26/19 09:29	03/27/19 16:07	1

Client Sample Results

Client: CH2M Hill, Inc. Job ID: 600-181877-1
Project/Site: San Juan Kinder Morgan

Client Sample ID: SJRP-MW13-03122019 Lab Sample ID: 600-181877-3

Date Collected: 03/12/19 09:30 **Matrix: Water**
Date Received: 03/13/19 10:12

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.000900**	**J**	0.00500	0.000280	mg/L		03/26/19 09:29	03/27/19 16:07	1
Chromium	**0.00190**	**J**	0.0100	0.00159	mg/L		03/26/19 09:29	03/27/19 16:07	1
Cobalt	**0.00200**	**J**	0.0100	0.000310	mg/L		03/26/19 09:29	03/27/19 16:07	1
Iron	**23.8**		0.400	0.0270	mg/L		03/26/19 09:29	03/27/19 16:07	1
Lead	0.00219	U	0.0100	0.00219	mg/L		03/26/19 09:29	03/27/19 16:07	1
Manganese	**5.15**		0.0100	0.000360	mg/L		03/26/19 09:29	03/27/19 16:07	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		03/26/19 09:29	03/27/19 16:07	1
Nickel	**0.00270**	**J**	0.0100	0.000800	mg/L		03/26/19 09:29	03/27/19 16:07	1
Selenium	**0.00370**	**J B**	0.0400	0.00287	mg/L		03/26/19 09:29	03/27/19 16:07	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		03/26/19 15:02	03/27/19 12:27	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**2330**		20.0	20.0	mg/L			03/25/19 20:15	1
Bicarbonate Alkalinity as CaCO3	**2330**		20.0	20.0	mg/L			03/25/19 20:15	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			03/25/19 20:15	1
Total Dissolved Solids	**11100**		100	100	mg/L			03/19/19 14:57	1

Client Sample ID: SJRP-MW19-03122019 Lab Sample ID: 600-181877-4

Date Collected: 03/12/19 10:10 **Matrix: Water**
Date Received: 03/13/19 10:12

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			03/14/19 17:11	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			03/14/19 17:11	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			03/14/19 17:11	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			03/14/19 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*50 - 134*		*03/14/19 17:11*	*1*
Dibromofluoromethane	*91*		*62 - 130*		*03/14/19 17:11*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*03/14/19 17:11*	*1*
4-Bromofluorobenzene	*128*		*67 - 139*		*03/14/19 17:11*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**290**		200	26.7	mg/L			03/14/19 18:46	500
Nitrate as N	0.0251	U F1	0.200	0.0251	mg/L			03/13/19 17:13	1
Nitrate Nitrite as N	0.0251	U	0.200	0.0251	mg/L			03/13/19 17:13	1
Sulfate	**10300**		250	47.9	mg/L			03/14/19 18:46	500
Nitrite as N	0.0297	U	0.200	0.0297	mg/L			03/13/19 17:13	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		03/22/19 08:21	03/22/19 16:59	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		03/22/19 08:21	03/22/19 16:59	1
Barium	**0.00880**	**J**	0.0200	0.000530	mg/L		03/22/19 08:21	03/22/19 16:59	1

Client Sample Results

Client: CH2M Hill, Inc. Job ID: 600-181877-1
Project/Site: San Juan Kinder Morgan

Client Sample ID: SJRP-MW19-03122019 Lab Sample ID: 600-181877-4
Date Collected: 03/12/19 10:10 **Matrix: Water**
Date Received: 03/13/19 10:12

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.798**		0.200	0.0116	mg/L		03/22/19 08:21	03/22/19 16:59	1
Cadmium	**0.0126**		0.00500	0.000280	mg/L		03/22/19 08:21	03/22/19 16:59	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		03/22/19 08:21	03/22/19 16:59	1
Cobalt	**0.0703**		0.0100	0.000310	mg/L		03/22/19 08:21	03/22/19 16:59	1
Iron	0.0270	U	0.400	0.0270	mg/L		03/22/19 08:21	03/22/19 16:59	1
Lead	0.00219	U	0.0100	0.00219	mg/L		03/22/19 08:21	03/22/19 16:59	1
Manganese	**11.1**		0.0200	0.000720	mg/L		03/22/19 08:21	03/25/19 13:06	2
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		03/22/19 08:21	03/25/19 13:03	1
Nickel	**0.205**	**B**	0.0100	0.000800	mg/L		03/22/19 08:21	03/22/19 16:59	1
Selenium	**0.0287**	**J F1**	0.0400	0.00287	mg/L		03/22/19 08:21	03/22/19 16:59	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		03/21/19 13:49	03/22/19 12:26	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**179**		20.0	20.0	mg/L			03/24/19 16:24	1
Bicarbonate Alkalinity as CaCO3	**179**		20.0	20.0	mg/L			03/24/19 16:24	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			03/24/19 16:24	1
Total Dissolved Solids	**14000**		100	100	mg/L			03/19/19 14:57	1

Client Sample ID: SJRP-MW14-03122019 Lab Sample ID: 600-181877-5
Date Collected: 03/12/19 11:25 **Matrix: Water**
Date Received: 03/13/19 10:12

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			03/14/19 16:23	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			03/14/19 16:23	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			03/14/19 16:23	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			03/14/19 16:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*50 - 134*		*03/14/19 16:23*	*1*
Dibromofluoromethane	*96*		*62 - 130*		*03/14/19 16:23*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*03/14/19 16:23*	*1*
4-Bromofluorobenzene	*131*		*67 - 139*		*03/14/19 16:23*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**342**		200	26.7	mg/L			03/14/19 19:04	500
Nitrate as N	0.0251	U	0.200	0.0251	mg/L			03/13/19 18:13	1
Nitrate Nitrite as N	0.0251	U	0.200	0.0251	mg/L			03/13/19 18:13	1
Sulfate	**8030**		250	47.9	mg/L			03/14/19 19:04	500
Nitrite as N	0.0297	U	0.200	0.0297	mg/L			03/13/19 18:13	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		03/22/19 08:21	03/22/19 17:05	1
Arsenic	**0.0157**		0.0100	0.00285	mg/L		03/22/19 08:21	03/22/19 17:05	1

Client Sample Results

Client: CH2M Hill, Inc. Job ID: 600-181877-1
Project/Site: San Juan Kinder Morgan

Client Sample ID: SJRP-MW14-03122019 Lab Sample ID: 600-181877-5

Date Collected: 03/12/19 11:25 **Matrix: Water**
Date Received: 03/13/19 10:12

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.00890	J	0.0200	0.000530	mg/L		03/22/19 08:21	03/22/19 17:05	1
Boron	0.611		0.200	0.0116	mg/L		03/22/19 08:21	03/22/19 17:05	1
Cadmium	0.0137		0.00500	0.000280	mg/L		03/22/19 08:21	03/22/19 17:05	1
Chromium	0.00270	J	0.0100	0.00159	mg/L		03/22/19 08:21	03/22/19 17:05	1
Cobalt	0.0243		0.0100	0.000310	mg/L		03/22/19 08:21	03/22/19 17:05	1
Iron	0.145	J	0.400	0.0270	mg/L		03/22/19 08:21	03/22/19 17:05	1
Lead	0.0155		0.0100	0.00219	mg/L		03/22/19 08:21	03/22/19 17:05	1
Manganese	8.26		0.0100	0.000360	mg/L		03/22/19 08:21	03/22/19 17:05	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		03/22/19 08:21	03/25/19 13:23	1
Nickel	0.0573	B	0.0100	0.000800	mg/L		03/22/19 08:21	03/22/19 17:05	1
Selenium	0.0349	J	0.0400	0.00287	mg/L		03/22/19 08:21	03/22/19 17:05	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		03/25/19 09:21	03/25/19 13:23	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	516		20.0	20.0	mg/L			03/15/19 18:14	1
Bicarbonate Alkalinity as CaCO3	516		20.0	20.0	mg/L			03/15/19 18:14	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			03/15/19 18:14	1
Total Dissolved Solids	12500		100	100	mg/L			03/19/19 14:57	1

Client Sample ID: SJRP-MW9-03122019 Lab Sample ID: 600-181877-6

Date Collected: 03/12/19 11:50 **Matrix: Water**
Date Received: 03/13/19 10:12

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			03/14/19 16:47	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			03/14/19 16:47	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			03/14/19 16:47	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			03/14/19 16:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*50 - 134*		*03/14/19 16:47*	*1*
Dibromofluoromethane	*92*		*62 - 130*		*03/14/19 16:47*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*03/14/19 16:47*	*1*
4-Bromofluorobenzene	*128*		*67 - 139*		*03/14/19 16:47*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	371	J	400	53.4	mg/L			03/14/19 20:16	1000
Nitrate as N	0.0251	U	0.200	0.0251	mg/L			03/13/19 18:53	1
Nitrate Nitrite as N	0.0251	U	0.200	0.0251	mg/L			03/13/19 18:53	1
Sulfate	9580		500	95.7	mg/L			03/14/19 20:16	1000
Nitrite as N	0.0297	U	0.200	0.0297	mg/L			03/13/19 18:53	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	10.4		0.500	0.0926	mg/L		03/22/19 08:21	03/22/19 17:08	1

Client Sample Results

Client: CH2M Hill, Inc. Job ID: 600-181877-1
Project/Site: San Juan Kinder Morgan

Client Sample ID: SJRP-MW9-03122019 Lab Sample ID: 600-181877-6

Date Collected: 03/12/19 11:50 **Matrix: Water**
Date Received: 03/13/19 10:12

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00285	U	0.0100	0.00285	mg/L		03/22/19 08:21	03/22/19 17:08	1
Barium	**0.00940**	**J**	0.0200	0.000530	mg/L		03/22/19 08:21	03/22/19 17:08	1
Boron	**0.726**		0.200	0.0116	mg/L		03/22/19 08:21	03/22/19 17:08	1
Cadmium	**0.00920**		0.00500	0.000280	mg/L		03/22/19 08:21	03/22/19 17:08	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		03/22/19 08:21	03/22/19 17:08	1
Cobalt	**0.271**		0.0100	0.000310	mg/L		03/22/19 08:21	03/22/19 17:08	1
Iron	**1.32**		0.400	0.0270	mg/L		03/22/19 08:21	03/22/19 17:08	1
Lead	0.00219	U	0.0100	0.00219	mg/L		03/22/19 08:21	03/22/19 17:08	1
Manganese	**7.58**		0.0100	0.000360	mg/L		03/22/19 08:21	03/22/19 17:08	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		03/22/19 08:21	03/25/19 13:25	1
Nickel	**0.337**	**B**	0.0100	0.000800	mg/L		03/22/19 08:21	03/22/19 17:08	1
Selenium	**0.00360**	**J**	0.0400	0.00287	mg/L		03/22/19 08:21	03/22/19 17:08	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		03/25/19 09:21	03/25/19 13:25	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	20.0	U	20.0	20.0	mg/L			03/15/19 18:04	1
Bicarbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			03/15/19 18:04	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			03/15/19 18:04	1
Total Dissolved Solids	**16000**		200	200	mg/L			03/19/19 14:57	1

Client Sample ID: SJRP-MW16-03122019 Lab Sample ID: 600-181877-7

Date Collected: 03/12/19 12:05 **Matrix: Water**
Date Received: 03/13/19 10:12

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	**0.576**		0.0200	0.00424	mg/L			03/14/19 18:23	20
Toluene	0.00396	U	0.0200	0.00396	mg/L			03/14/19 18:23	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*50 - 134*		*03/14/19 18:23*	*20*
Dibromofluoromethane	*88*		*62 - 130*		*03/14/19 18:23*	*20*
Toluene-d8 (Surr)	*98*		*70 - 130*		*03/14/19 18:23*	*20*
4-Bromofluorobenzene	*125*		*67 - 139*		*03/14/19 18:23*	*20*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1.15**		0.100	0.0176	mg/L			03/15/19 19:54	100
Xylenes, Total	**1.42**		0.200	0.0366	mg/L			03/15/19 19:54	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*62*		*50 - 134*		*03/15/19 19:54*	*100*
Dibromofluoromethane	*78*		*62 - 130*		*03/15/19 19:54*	*100*
Toluene-d8 (Surr)	*102*		*70 - 130*		*03/15/19 19:54*	*100*
4-Bromofluorobenzene	*125*		*67 - 139*		*03/15/19 19:54*	*100*

Client Sample Results

Client: CH2M Hill, Inc. Job ID: 600-181877-1
Project/Site: San Juan Kinder Morgan

Client Sample ID: SJRP-MW16-03122019 Lab Sample ID: 600-181877-7

Date Collected: 03/12/19 12:05 **Matrix: Water**
Date Received: 03/13/19 10:12

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2210**		200	26.7	mg/L			03/14/19 20:51	500
Nitrate as N	0.0251	U	0.200	0.0251	mg/L			03/13/19 19:33	1
Nitrate Nitrite as N	**18.0**		0.200	0.0251	mg/L			03/13/19 19:33	1
Sulfate	**9060**		250	47.9	mg/L			03/14/19 20:51	500
Nitrite as N	**18.0**		0.200	0.0297	mg/L			03/13/19 19:33	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		03/25/19 17:09	03/27/19 13:33	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		03/25/19 17:09	03/27/19 13:33	1
Barium	**0.0243**		0.0200	0.000530	mg/L		03/25/19 17:09	03/27/19 13:33	1
Boron	**1.00**		0.200	0.0116	mg/L		03/25/19 17:09	03/27/19 13:33	1
Cadmium	**0.000600**	**J**	0.00500	0.000280	mg/L		03/25/19 17:09	03/27/19 13:33	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		03/25/19 17:09	03/27/19 13:33	1
Cobalt	**0.000400**	**J**	0.0100	0.000310	mg/L		03/25/19 17:09	03/27/19 13:33	1
Iron	**0.0428**	**J**	0.400	0.0270	mg/L		03/25/19 17:09	03/27/19 13:33	1
Lead	0.00219	U	0.0100	0.00219	mg/L		03/25/19 17:09	03/27/19 13:33	1
Manganese	**0.0210**		0.0100	0.000360	mg/L		03/25/19 17:09	03/27/19 13:33	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		03/25/19 17:09	03/27/19 13:33	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		03/25/19 17:09	03/27/19 13:33	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		03/25/19 17:09	03/27/19 13:33	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		03/25/19 09:21	03/25/19 13:27	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**2720**		20.0	20.0	mg/L			03/25/19 19:55	1
Bicarbonate Alkalinity as CaCO3	**2720**		20.0	20.0	mg/L			03/25/19 19:55	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			03/25/19 19:55	1
Total Dissolved Solids	**17100**		200	200	mg/L			03/19/19 14:57	1

Client Sample ID: SJRP-MW15-03122019 Lab Sample ID: 600-181877-8

Date Collected: 03/12/19 12:40 **Matrix: Water**
Date Received: 03/13/19 10:12

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	**0.00691**	**J**	0.0200	0.00424	mg/L			03/14/19 18:47	20
Toluene	0.00396	U	0.0200	0.00396	mg/L			03/14/19 18:47	20
Xylenes, Total	0.00732	U	0.0400	0.00732	mg/L			03/14/19 18:47	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*71*		*50 - 134*		*03/14/19 18:47*	*20*
Dibromofluoromethane	*84*		*62 - 130*		*03/14/19 18:47*	*20*
Toluene-d8 (Surr)	*98*		*70 - 130*		*03/14/19 18:47*	*20*
4-Bromofluorobenzene	*129*		*67 - 139*		*03/14/19 18:47*	*20*

Client Sample Results

Client: CH2M Hill, Inc. Job ID: 600-181877-1
Project/Site: San Juan Kinder Morgan

Client Sample ID: SJRP-MW15-03122019 Lab Sample ID: 600-181877-8

Date Collected: 03/12/19 12:40 **Matrix: Water**
Date Received: 03/13/19 10:12

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2.94**		0.200	0.0352	mg/L			03/15/19 20:18	200

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*63*		*50 - 134*		*03/15/19 20:18*	*200*
Dibromofluoromethane	*80*		*62 - 130*		*03/15/19 20:18*	*200*
Toluene-d8 (Surr)	*100*		*70 - 130*		*03/15/19 20:18*	*200*
4-Bromofluorobenzene	*133*		*67 - 139*		*03/15/19 20:18*	*200*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2400**		400	53.4	mg/L			03/29/19 02:16	1000
Nitrate as N	0.0251	U	0.200	0.0251	mg/L			03/13/19 19:53	1
Nitrate Nitrite as N	**0.236**		0.200	0.0251	mg/L			03/13/19 19:53	1
Sulfate	**11400**		500	95.7	mg/L			03/29/19 02:16	1000
Nitrite as N	**0.236**		0.200	0.0297	mg/L			03/13/19 19:53	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		03/25/19 17:09	03/27/19 13:41	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		03/25/19 17:09	03/27/19 13:41	1
Barium	**0.00880**	**J**	0.0200	0.000530	mg/L		03/25/19 17:09	03/27/19 13:41	1
Boron	**0.768**		0.200	0.0116	mg/L		03/25/19 17:09	03/27/19 13:41	1
Cadmium	**0.000400**	**J**	0.00500	0.000280	mg/L		03/25/19 17:09	03/27/19 13:41	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		03/25/19 17:09	03/27/19 13:41	1
Cobalt	**0.00170**	**J**	0.0100	0.000310	mg/L		03/25/19 17:09	03/27/19 13:41	1
Iron	**6.33**		0.400	0.0270	mg/L		03/25/19 17:09	03/27/19 13:41	1
Lead	0.00219	U	0.0100	0.00219	mg/L		03/25/19 17:09	03/27/19 13:41	1
Manganese	**3.51**		0.0100	0.000360	mg/L		03/25/19 17:09	03/27/19 13:41	1
Molybdenum	**0.00290**	**J**	0.0100	0.000540	mg/L		03/25/19 17:09	03/27/19 13:41	1
Nickel	**0.00240**	**J**	0.0100	0.000800	mg/L		03/25/19 17:09	03/27/19 13:41	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		03/25/19 17:09	03/27/19 13:41	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		03/25/19 09:21	03/25/19 13:29	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**1430**		20.0	20.0	mg/L			03/24/19 17:49	1
Bicarbonate Alkalinity as CaCO3	**1430**		20.0	20.0	mg/L			03/24/19 17:49	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			03/24/19 17:49	1
Total Dissolved Solids	**21300**		200	200	mg/L			03/19/19 14:57	1

Client Sample ID: SJRP-MW15-03122019-2 Lab Sample ID: 600-181877-9

Date Collected: 03/12/19 12:50 **Matrix: Water**
Date Received: 03/13/19 10:12

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	**0.00994**	**J**	0.0200	0.00424	mg/L			03/15/19 20:42	20
Toluene	**0.0196**	**J**	0.0200	0.00396	mg/L			03/15/19 20:42	20

Client Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1

Client Sample ID: SJRP-MW15-03122019-2

Lab Sample ID: 600-181877-9
Matrix: Water
Date Collected: 03/12/19 12:50
Date Received: 03/13/19 10:12

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	**0.0257**	**J**	0.0400	0.00732	mg/L			03/15/19 20:42	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*62*		*50 - 134*		*03/15/19 20:42*	*20*
Dibromofluoromethane	*76*		*62 - 130*		*03/15/19 20:42*	*20*
Toluene-d8 (Surr)	*103*		*70 - 130*		*03/15/19 20:42*	*20*
4-Bromofluorobenzene	*129*		*67 - 139*		*03/15/19 20:42*	*20*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2.87**		0.200	0.0352	mg/L			03/15/19 21:06	200

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*63*		*50 - 134*		*03/15/19 21:06*	*200*
Dibromofluoromethane	*79*		*62 - 130*		*03/15/19 21:06*	*200*
Toluene-d8 (Surr)	*103*		*70 - 130*		*03/15/19 21:06*	*200*
4-Bromofluorobenzene	*131*		*67 - 139*		*03/15/19 21:06*	*200*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2860**		200	26.7	mg/L			03/14/19 21:45	500
Nitrate as N	0.0251	U	0.200	0.0251	mg/L			03/13/19 20:53	1
Nitrate Nitrite as N	**0.184**	**J**	0.200	0.0251	mg/L			03/13/19 20:53	1
Sulfate	**11400**		250	47.9	mg/L			03/14/19 21:45	500
Nitrite as N	**0.184**	**J**	0.200	0.0297	mg/L			03/13/19 20:53	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		03/25/19 17:09	03/27/19 13:43	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		03/25/19 17:09	03/27/19 13:43	1
Barium	**0.0108**	**J**	0.0200	0.000530	mg/L		03/25/19 17:09	03/27/19 13:43	1
Boron	**0.782**		0.200	0.0116	mg/L		03/25/19 17:09	03/27/19 13:43	1
Cadmium	**0.000600**	**J**	0.00500	0.000280	mg/L		03/25/19 17:09	03/27/19 13:43	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		03/25/19 17:09	03/27/19 13:43	1
Cobalt	**0.00200**	**J**	0.0100	0.000310	mg/L		03/25/19 17:09	03/27/19 13:43	1
Iron	**6.56**		0.400	0.0270	mg/L		03/25/19 17:09	03/27/19 13:43	1
Lead	0.00219	U	0.0100	0.00219	mg/L		03/25/19 17:09	03/27/19 13:43	1
Manganese	**3.42**		0.0100	0.000360	mg/L		03/25/19 17:09	03/27/19 13:43	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		03/25/19 17:09	03/27/19 13:43	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		03/25/19 17:09	03/27/19 13:43	1
Selenium	**0.00400**	**J B**	0.0400	0.00287	mg/L		03/25/19 17:09	03/27/19 13:43	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		03/25/19 09:21	03/25/19 13:31	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**1450**		20.0	20.0	mg/L			03/15/19 18:33	1
Bicarbonate Alkalinity as CaCO3	**1450**		20.0	20.0	mg/L			03/15/19 18:33	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			03/15/19 18:33	1

Client Sample Results

Client: CH2M Hill, Inc. Job ID: 600-181877-1
Project/Site: San Juan Kinder Morgan

Client Sample ID: SJRP-MW15-03122019-2 Lab Sample ID: 600-181877-9
Date Collected: 03/12/19 12:50 **Matrix: Water**
Date Received: 03/13/19 10:12

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**21500**		200	200	mg/L			03/19/19 14:57	1

Client Sample ID: SJRP-MW8-03122019 Lab Sample ID: 600-181877-10
Date Collected: 03/12/19 13:45 **Matrix: Water**
Date Received: 03/13/19 10:12

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.000957**	**J**	0.00100	0.000176	mg/L			03/14/19 17:35	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			03/14/19 17:35	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			03/14/19 17:35	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			03/14/19 17:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*50 - 134*		*03/14/19 17:35*	*1*
Dibromofluoromethane	*89*		*62 - 130*		*03/14/19 17:35*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*03/14/19 17:35*	*1*
4-Bromofluorobenzene	*130*		*67 - 139*		*03/14/19 17:35*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**451**		200	26.7	mg/L			03/14/19 22:21	500
Nitrate as N	0.0251	U	0.200	0.0251	mg/L			03/13/19 21:33	1
Nitrate Nitrite as N	0.0251	U	0.200	0.0251	mg/L			03/13/19 21:33	1
Sulfate	**3740**		250	47.9	mg/L			03/14/19 22:21	500
Nitrite as N	0.0297	U	0.200	0.0297	mg/L			03/13/19 21:33	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.198**	**J**	0.500	0.0926	mg/L		03/25/19 17:09	03/27/19 13:46	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		03/25/19 17:09	03/27/19 13:46	1
Barium	**0.0263**		0.0200	0.000530	mg/L		03/25/19 17:09	03/27/19 13:46	1
Boron	**0.286**		0.200	0.0116	mg/L		03/25/19 17:09	03/27/19 13:46	1
Cadmium	**0.000500**	**J**	0.00500	0.000280	mg/L		03/25/19 17:09	03/27/19 13:46	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		03/25/19 17:09	03/27/19 13:46	1
Cobalt	**0.000800**	**J**	0.0100	0.000310	mg/L		03/25/19 17:09	03/27/19 13:46	1
Iron	**2.06**		0.400	0.0270	mg/L		03/25/19 17:09	03/27/19 13:46	1
Lead	0.00219	U	0.0100	0.00219	mg/L		03/25/19 17:09	03/27/19 13:46	1
Manganese	**0.194**		0.0100	0.000360	mg/L		03/25/19 17:09	03/27/19 13:46	1
Molybdenum	**0.0208**		0.0100	0.000540	mg/L		03/25/19 17:09	03/27/19 13:46	1
Nickel	**0.00190**	**J**	0.0100	0.000800	mg/L		03/25/19 17:09	03/27/19 13:46	1
Selenium	**0.00310**	**J B**	0.0400	0.00287	mg/L		03/25/19 17:09	03/27/19 13:46	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		03/25/19 09:21	03/25/19 13:37	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**3090**		20.0	20.0	mg/L			03/25/19 20:36	1
Bicarbonate Alkalinity as CaCO3	**3090**		20.0	20.0	mg/L			03/25/19 20:36	1

Client Sample Results

Client: CH2M Hill, Inc. Job ID: 600-181877-1
Project/Site: San Juan Kinder Morgan

Client Sample ID: SJRP-MW8-03122019 Lab Sample ID: 600-181877-10

Date Collected: 03/12/19 13:45 **Matrix: Water**
Date Received: 03/13/19 10:12

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			03/25/19 20:36	1
Total Dissolved Solids	**9870**		100	100	mg/L			03/19/19 14:57	1

Client Sample ID: SJRP-MW21-03122019 Lab Sample ID: 600-181877-11

Date Collected: 03/12/19 14:15 **Matrix: Water**
Date Received: 03/13/19 10:12

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.307**		0.0500	0.00880	mg/L			03/15/19 21:30	50
Ethylbenzene	**0.0854**		0.0500	0.0106	mg/L			03/15/19 21:30	50
Toluene	**0.186**		0.0500	0.00990	mg/L			03/15/19 21:30	50
Xylenes, Total	**0.427**		0.100	0.0183	mg/L			03/15/19 21:30	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*64*		*50 - 134*		*03/15/19 21:30*	*50*
Dibromofluoromethane	*79*		*62 - 130*		*03/15/19 21:30*	*50*
Toluene-d8 (Surr)	*102*		*70 - 130*		*03/15/19 21:30*	*50*
4-Bromofluorobenzene	*129*		*67 - 139*		*03/15/19 21:30*	*50*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2090**		200	26.7	mg/L			03/14/19 22:39	500
Nitrate as N	0.0251	U	0.200	0.0251	mg/L			03/13/19 21:53	1
Nitrate Nitrite as N	0.0251	U	0.200	0.0251	mg/L			03/13/19 21:53	1
Sulfate	**7640**		250	47.9	mg/L			03/14/19 22:39	500
Nitrite as N	0.0297	U	0.200	0.0297	mg/L			03/13/19 21:53	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		03/22/19 08:21	03/22/19 17:10	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		03/22/19 08:21	03/22/19 17:10	1
Barium	**0.0302**		0.0200	0.000530	mg/L		03/22/19 08:21	03/22/19 17:10	1
Boron	**0.594**		0.200	0.0116	mg/L		03/22/19 08:21	03/22/19 17:10	1
Cadmium	**0.000500**	**J**	0.00500	0.000280	mg/L		03/22/19 08:21	03/22/19 17:10	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		03/22/19 08:21	03/22/19 17:10	1
Cobalt	**0.00520**	**J**	0.0100	0.000310	mg/L		03/22/19 08:21	03/22/19 17:10	1
Iron	**1.50**		0.400	0.0270	mg/L		03/22/19 08:21	03/22/19 17:10	1
Lead	0.00219	U	0.0100	0.00219	mg/L		03/22/19 08:21	03/22/19 17:10	1
Manganese	**0.950**		0.0100	0.000360	mg/L		03/22/19 08:21	03/22/19 17:10	1
Molybdenum	**0.00360**	**J**	0.0100	0.000540	mg/L		03/22/19 08:21	03/25/19 13:27	1
Nickel	**0.00630**	**J B**	0.0100	0.000800	mg/L		03/22/19 08:21	03/22/19 17:10	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		03/22/19 08:21	03/22/19 17:10	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		03/25/19 09:21	03/25/19 13:39	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**711**		20.0	20.0	mg/L			03/15/19 19:09	1

Client Sample Results

Client: CH2M Hill, Inc. Job ID: 600-181877-1
Project/Site: San Juan Kinder Morgan

Client Sample ID: SJRP-MW21-03122019 Lab Sample ID: 600-181877-11

Date Collected: 03/12/19 14:15 **Matrix: Water**
Date Received: 03/13/19 10:12

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	**711**		20.0	20.0	mg/L			03/15/19 19:09	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			03/15/19 19:09	1
Total Dissolved Solids	**14400**		200	200	mg/L			03/19/19 14:57	1

Client Sample ID: SJRP-PMW2-03122019 Lab Sample ID: 600-181877-12

Date Collected: 03/12/19 16:00 **Matrix: Water**
Date Received: 03/13/19 10:12

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	**0.117**		0.0500	0.0106	mg/L			03/14/19 20:22	50
Toluene	**0.0579**		0.0500	0.00990	mg/L			03/14/19 20:22	50
Xylenes, Total	**1.05**		0.100	0.0183	mg/L			03/14/19 20:22	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*69*		*50 - 134*		*03/14/19 20:22*	*50*
Dibromofluoromethane	*83*		*62 - 130*		*03/14/19 20:22*	*50*
Toluene-d8 (Surr)	*99*		*70 - 130*		*03/14/19 20:22*	*50*
4-Bromofluorobenzene	*130*		*67 - 139*		*03/14/19 20:22*	*50*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**6.92**		0.250	0.0440	mg/L			03/14/19 20:45	250

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*71*		*50 - 134*		*03/14/19 20:45*	*250*
Dibromofluoromethane	*84*		*62 - 130*		*03/14/19 20:45*	*250*
Toluene-d8 (Surr)	*97*		*70 - 130*		*03/14/19 20:45*	*250*
4-Bromofluorobenzene	*126*		*67 - 139*		*03/14/19 20:45*	*250*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1840**		20.0	2.67	mg/L			03/14/19 23:15	50
Nitrate as N	0.0251	U	0.200	0.0251	mg/L			03/13/19 22:33	1
Nitrate Nitrite as N	0.0251	U	0.200	0.0251	mg/L			03/13/19 22:33	1
Sulfate	**977**		25.0	4.79	mg/L			03/14/19 23:15	50
Nitrite as N	0.0297	U	0.200	0.0297	mg/L			03/13/19 22:33	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		03/25/19 17:09	03/27/19 13:48	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		03/25/19 17:09	03/27/19 13:48	1
Barium	**0.227**		0.0200	0.000530	mg/L		03/25/19 17:09	03/27/19 13:48	1
Boron	**0.965**		0.200	0.0116	mg/L		03/25/19 17:09	03/27/19 13:48	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		03/25/19 17:09	03/27/19 13:48	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		03/25/19 17:09	03/27/19 13:48	1
Cobalt	**0.000400**	**J**	0.0100	0.000310	mg/L		03/25/19 17:09	03/27/19 13:48	1
Iron	**0.0359**	**J**	0.400	0.0270	mg/L		03/25/19 17:09	03/27/19 13:48	1
Lead	0.00219	U	0.0100	0.00219	mg/L		03/25/19 17:09	03/27/19 13:48	1
Manganese	**0.128**		0.0100	0.000360	mg/L		03/25/19 17:09	03/27/19 13:48	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		03/25/19 17:09	03/27/19 13:48	1

Client Sample Results

Client: CH2M Hill, Inc. Job ID: 600-181877-1
Project/Site: San Juan Kinder Morgan

Client Sample ID: SJRP-PMW2-03122019 Lab Sample ID: 600-181877-12

Date Collected: 03/12/19 16:00 **Matrix: Water**
Date Received: 03/13/19 10:12

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.000800	U	0.0100	0.000800	mg/L		03/25/19 17:09	03/27/19 13:48	1
Selenium	**0.00380**	**J B**	0.0400	0.00287	mg/L		03/25/19 17:09	03/27/19 13:48	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		03/25/19 09:21	03/25/19 13:41	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**2350**		20.0	20.0	mg/L			03/25/19 20:25	1
Bicarbonate Alkalinity as CaCO3	**2350**		20.0	20.0	mg/L			03/25/19 20:25	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			03/25/19 20:25	1
Total Dissolved Solids	**5390**		40.0	40.0	mg/L			03/19/19 14:57	1

Definitions/Glossary

Client: CH2M Hill, Inc. Job ID: 600-181877-1
Project/Site: San Juan Kinder Morgan

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
F1	MS and/or MSD Recovery is outside acceptance limits.
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Surrogate Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCA (50-134)	DBFM (62-130)	TOL (70-130)	BFB (67-139)
600-181877-1	SJRP-MW12-03122019	76	90	98	127
600-181877-2	SJRP-TB02-03122019	75	84	98	133
600-181877-3	SJRP-MW13-03122019	75	84	101	128
600-181877-3 - DL	SJRP-MW13-03122019	64	82	105	133
600-181877-4	SJRP-MW19-03122019	83	91	99	128
600-181877-4 MS	SJRP-MW19-03122019	88	99	98	128
600-181877-4 MSD	SJRP-MW19-03122019	86	96	102	129
600-181877-5	SJRP-MW14-03122019	87	96	97	131
600-181877-6	SJRP-MW9-03122019	86	92	93	128
600-181877-7	SJRP-MW16-03122019	80	88	98	125
600-181877-7 - DL	SJRP-MW16-03122019	62	78	102	125
600-181877-8	SJRP-MW15-03122019	71	84	98	129
600-181877-8 - DL	SJRP-MW15-03122019	63	80	100	133
600-181877-9	SJRP-MW15-03122019-2	62	76	103	129
600-181877-9 - DL	SJRP-MW15-03122019-2	63	79	103	131
600-181877-10	SJRP-MW8-03122019	85	89	99	130
600-181877-11	SJRP-MW21-03122019	64	79	102	129
600-181877-12	SJRP-PMW2-03122019	69	83	99	130
600-181877-12 - DL	SJRP-PMW2-03122019	71	84	97	126
LCS 600-260439/3	Lab Control Sample	75	93	105	127
LCS 600-260510/3	Lab Control Sample	70	92	107	128
LCSD 600-260439/4	Lab Control Sample Dup	77	95	105	131
LCSD 600-260510/4	Lab Control Sample Dup	73	94	105	125
MB 600-260439/6	Method Blank	72	85	102	128
MB 600-260510/6	Method Blank	71	87	100	132

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-260439/6
Matrix: Water
Analysis Batch: 260439

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			03/14/19 15:12	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			03/14/19 15:12	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			03/14/19 15:12	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			03/14/19 15:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*72*		*50 - 134*		*03/14/19 15:12*	*1*
Dibromofluoromethane	*85*		*62 - 130*		*03/14/19 15:12*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*03/14/19 15:12*	*1*
4-Bromofluorobenzene	*128*		*67 - 139*		*03/14/19 15:12*	*1*

Lab Sample ID: LCS 600-260439/3
Matrix: Water
Analysis Batch: 260439

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0100	0.01058		mg/L		106	70 - 130
Ethylbenzene	0.0100	0.01086		mg/L		109	70 - 130
Toluene	0.0100	0.01084		mg/L		108	70 - 130
Xylenes, Total	0.0200	0.02198		mg/L		110	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*75*		*50 - 134*
Dibromofluoromethane	*93*		*62 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*
4-Bromofluorobenzene	*127*		*67 - 139*

Lab Sample ID: LCSD 600-260439/4
Matrix: Water
Analysis Batch: 260439

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0100	0.01066		mg/L		107	70 - 130	1	20
Ethylbenzene	0.0100	0.01101		mg/L		110	70 - 130	1	20
Toluene	0.0100	0.01083		mg/L		108	70 - 130	0	20
Xylenes, Total	0.0200	0.02280		mg/L		114	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*77*		*50 - 134*
Dibromofluoromethane	*95*		*62 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*
4-Bromofluorobenzene	*131*		*67 - 139*

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 600-181877-4 MS
Matrix: Water
Analysis Batch: 260439

Client Sample ID: SJRP-MW19-03122019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.000176	U	0.0100	0.01132		mg/L		113	70 - 130
Ethylbenzene	0.000212	U	0.0100	0.01043		mg/L		104	70 - 130
Toluene	0.000198	U	0.0100	0.01029		mg/L		103	70 - 130
Xylenes, Total	0.000366	U	0.0200	0.02191		mg/L		110	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*50 - 134*
Dibromofluoromethane	*99*		*62 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*
4-Bromofluorobenzene	*128*		*67 - 139*

Lab Sample ID: 600-181877-4 MSD
Matrix: Water
Analysis Batch: 260439

Client Sample ID: SJRP-MW19-03122019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.000176	U	0.0100	0.01083		mg/L		108	70 - 130	4	30
Ethylbenzene	0.000212	U	0.0100	0.01013		mg/L		101	70 - 130	3	30
Toluene	0.000198	U	0.0100	0.01034		mg/L		103	70 - 130	0	30
Xylenes, Total	0.000366	U	0.0200	0.02179		mg/L		109	70 - 130	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*50 - 134*
Dibromofluoromethane	*96*		*62 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*
4-Bromofluorobenzene	*129*		*67 - 139*

Lab Sample ID: MB 600-260510/6
Matrix: Water
Analysis Batch: 260510

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			03/15/19 14:40	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			03/15/19 14:40	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			03/15/19 14:40	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			03/15/19 14:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*71*		*50 - 134*		*03/15/19 14:40*	*1*
Dibromofluoromethane	*87*		*62 - 130*		*03/15/19 14:40*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*03/15/19 14:40*	*1*
4-Bromofluorobenzene	*132*		*67 - 139*		*03/15/19 14:40*	*1*

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-260510/3
Matrix: Water
Analysis Batch: 260510

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0100	0.01051		mg/L		105	70 - 130		
Ethylbenzene			0.0100	0.01107		mg/L		111	70 - 130		
Toluene			0.0100	0.01064		mg/L		106	70 - 130		
Xylenes, Total			0.0200	0.02237		mg/L		112	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*70*		*50 - 134*
Dibromofluoromethane	*92*		*62 - 130*
Toluene-d8 (Surr)	*107*		*70 - 130*
4-Bromofluorobenzene	*128*		*67 - 139*

Lab Sample ID: LCSD 600-260510/4
Matrix: Water
Analysis Batch: 260510

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0100	0.01014		mg/L		101	70 - 130	4	20
Ethylbenzene			0.0100	0.01055		mg/L		106	70 - 130	5	20
Toluene			0.0100	0.01021		mg/L		102	70 - 130	4	20
Xylenes, Total			0.0200	0.02156		mg/L		108	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*73*		*50 - 134*
Dibromofluoromethane	*94*		*62 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*
4-Bromofluorobenzene	*125*		*67 - 139*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-260324/4
Matrix: Water
Analysis Batch: 260324

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.0534	U	0.400	0.0534	mg/L			03/13/19 12:53	1
Sulfate	0.0957	U	0.500	0.0957	mg/L			03/13/19 12:53	1

Lab Sample ID: LCS 600-260324/5
Matrix: Water
Analysis Batch: 260324

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			20.0	19.84		mg/L		99	90 - 110		
Sulfate			20.0	21.48		mg/L		107	90 - 110		

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 600-181877-4 MS — **Client Sample ID: SJRP-MW19-03122019**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 260324

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	207	E	10.0	195.9	E 4	mg/L		-108	80 - 120
Sulfate	9340	E	10.0	8825	E 4	mg/L		-5186	80 - 120

Lab Sample ID: 600-181877-4 MSD — **Client Sample ID: SJRP-MW19-03122019**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 260324

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	207	E	10.0	195.9	E 4	mg/L		-108	80 - 120	0	20
Sulfate	9340	E	10.0	8475	E 4	mg/L		-8689	80 - 120	4	20

Lab Sample ID: MB 600-260325/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 260325

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.0251	U	0.200	0.0251	mg/L			03/13/19 12:53	1
Nitrate Nitrite as N	0.0251	U	0.200	0.0251	mg/L			03/13/19 12:53	1
Nitrite as N	0.0297	U	0.200	0.0297	mg/L			03/13/19 12:53	1

Lab Sample ID: LCS 600-260325/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 260325

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	10.0	10.43		mg/L		104	90 - 110
Nitrite as N	10.0	10.62		mg/L		106	90 - 110

Lab Sample ID: 600-181877-4 MS — **Client Sample ID: SJRP-MW19-03122019**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 260325

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.0251	U F1	2.00	0.0251	U F1	mg/L		0	80 - 120
Nitrite as N	0.0297	U	2.00	1.866		mg/L		93	80 - 120

Lab Sample ID: 600-181877-4 MSD — **Client Sample ID: SJRP-MW19-03122019**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 260325

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	0.0251	U F1	2.00	0.0251	U F1	mg/L		0	80 - 120	NC	20
Nitrite as N	0.0297	U	2.00	2.184		mg/L		109	80 - 120	16	20

Lab Sample ID: MB 600-260429/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 260429

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.0534	U	0.400	0.0534	mg/L			03/14/19 14:36	1

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 600-260429/4
Matrix: Water
Analysis Batch: 260429

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	0.0957	U	0.500	0.0957	mg/L			03/14/19 14:36	1

Lab Sample ID: LCS 600-260429/5
Matrix: Water
Analysis Batch: 260429

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	20.0	19.69		mg/L		98	90 - 110
Sulfate	20.0	19.61		mg/L		98	90 - 110

Lab Sample ID: MB 600-260514/4
Matrix: Water
Analysis Batch: 260514

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.0534	U	0.400	0.0534	mg/L			03/15/19 13:52	1
Sulfate	0.0957	U	0.500	0.0957	mg/L			03/15/19 13:52	1

Lab Sample ID: LCS 600-260514/5
Matrix: Water
Analysis Batch: 260514

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	20.0	19.84		mg/L		99	90 - 110
Sulfate	20.0	20.06		mg/L		100	90 - 110

Lab Sample ID: 600-181877-3 MS
Matrix: Water
Analysis Batch: 260514

Client Sample ID: SJRP-MW13-03122019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2290	F1	2500	2995	F1	mg/L		28	80 - 120
Sulfate	19500	E	2500	7173	4	mg/L		-491	80 - 120

Lab Sample ID: 600-181877-3 MSD
Matrix: Water
Analysis Batch: 260514

Client Sample ID: SJRP-MW13-03122019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	2290	F1	2500	3041	F1	mg/L		30	80 - 120	2	20
Sulfate	19500	E	2500	7424	4	mg/L		-481	80 - 120	3	20

Lab Sample ID: MB 600-260515/4
Matrix: Water
Analysis Batch: 260515

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.0251	U	0.200	0.0251	mg/L			03/15/19 13:52	1
Nitrate Nitrite as N	0.0251	U	0.200	0.0251	mg/L			03/15/19 13:52	1
Nitrite as N	0.0297	U	0.200	0.0297	mg/L			03/15/19 13:52	1

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 600-260515/5
Matrix: Water
Analysis Batch: 260515

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	10.0	10.13		mg/L		101	90 - 110
Nitrite as N	10.0	9.298		mg/L		93	90 - 110

Lab Sample ID: 600-181877-3 MS
Matrix: Water
Analysis Batch: 260515

Client Sample ID: SJRP-MW13-03122019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrite as N	7.43	U H	500	474.1		mg/L		95	80 - 120

Lab Sample ID: 600-181877-3 MSD
Matrix: Water
Analysis Batch: 260515

Client Sample ID: SJRP-MW13-03122019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrite as N	7.43	U H	500	461.8		mg/L		92	80 - 120	3	20

Lab Sample ID: MB 600-260545/4
Matrix: Water
Analysis Batch: 260545

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.0534	U	0.400	0.0534	mg/L			03/16/19 13:29	1
Sulfate	0.0957	U	0.500	0.0957	mg/L			03/16/19 13:29	1

Lab Sample ID: LCS 600-260545/5
Matrix: Water
Analysis Batch: 260545

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	20.0	20.04		mg/L		100	90 - 110
Sulfate	20.0	21.17		mg/L		106	90 - 110

Lab Sample ID: MB 600-261426/35
Matrix: Water
Analysis Batch: 261426

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.0534	U	0.400	0.0534	mg/L			03/28/19 23:36	1
Sulfate	0.0957	U	0.500	0.0957	mg/L			03/28/19 23:36	1

Lab Sample ID: LCS 600-261426/36
Matrix: Water
Analysis Batch: 261426

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	20.0	20.99		mg/L		105	90 - 110
Sulfate	20.0	21.50		mg/L		108	90 - 110

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-260946/1-A
Matrix: Water
Analysis Batch: 261001

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260946

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		03/22/19 08:21	03/22/19 16:02	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		03/22/19 08:21	03/22/19 16:02	1
Barium	0.000530	U	0.0200	0.000530	mg/L		03/22/19 08:21	03/22/19 16:02	1
Boron	0.0116	U	0.200	0.0116	mg/L		03/22/19 08:21	03/22/19 16:02	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		03/22/19 08:21	03/22/19 16:02	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		03/22/19 08:21	03/22/19 16:02	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		03/22/19 08:21	03/22/19 16:02	1
Iron	0.0270	U	0.400	0.0270	mg/L		03/22/19 08:21	03/22/19 16:02	1
Lead	0.00219	U	0.0100	0.00219	mg/L		03/22/19 08:21	03/22/19 16:02	1
Manganese	0.000360	U	0.0100	0.000360	mg/L		03/22/19 08:21	03/22/19 16:02	1
Nickel	0.001400	J	0.0100	0.000800	mg/L		03/22/19 08:21	03/22/19 16:02	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		03/22/19 08:21	03/22/19 16:02	1

Lab Sample ID: MB 600-260946/1-A
Matrix: Water
Analysis Batch: 261126

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260946

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		03/22/19 08:21	03/25/19 12:55	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		03/22/19 08:21	03/25/19 12:55	1
Barium	0.000530	U	0.0200	0.000530	mg/L		03/22/19 08:21	03/25/19 12:55	1
Boron	0.0116	U	0.200	0.0116	mg/L		03/22/19 08:21	03/25/19 12:55	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		03/22/19 08:21	03/25/19 12:55	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		03/22/19 08:21	03/25/19 12:55	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		03/22/19 08:21	03/25/19 12:55	1
Iron	0.0270	U	0.400	0.0270	mg/L		03/22/19 08:21	03/25/19 12:55	1
Lead	0.00219	U	0.0100	0.00219	mg/L		03/22/19 08:21	03/25/19 12:55	1
Manganese	0.000360	U	0.0100	0.000360	mg/L		03/22/19 08:21	03/25/19 12:55	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		03/22/19 08:21	03/25/19 12:55	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		03/22/19 08:21	03/25/19 12:55	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		03/22/19 08:21	03/25/19 12:55	1

Lab Sample ID: LCS 600-260946/2-A
Matrix: Water
Analysis Batch: 261001

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260946

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	9.526		mg/L		95	80 - 120
Arsenic	1.00	1.029		mg/L		103	80 - 120
Barium	1.00	0.9908		mg/L		99	80 - 120
Boron	1.00	0.9921		mg/L		99	80 - 120
Cadmium	0.500	0.5258		mg/L		105	80 - 120
Chromium	1.00	1.007		mg/L		101	80 - 120
Cobalt	1.00	1.001		mg/L		100	80 - 120
Iron	10.0	10.02		mg/L		100	80 - 120
Lead	1.00	0.9948		mg/L		99	80 - 120
Manganese	1.00	1.014		mg/L		101	80 - 120
Nickel	1.00	0.9817		mg/L		98	80 - 120
Selenium	1.00	1.069		mg/L		107	80 - 120

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: LCS 600-260946/2-A
Matrix: Water
Analysis Batch: 261126

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260946

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	10.03		mg/L		100	80 - 120
Arsenic	1.00	1.040		mg/L		104	80 - 120
Barium	1.00	1.030		mg/L		103	80 - 120
Boron	1.00	0.9775		mg/L		98	80 - 120
Cadmium	0.500	0.5198		mg/L		104	80 - 120
Chromium	1.00	1.001		mg/L		100	80 - 120
Cobalt	1.00	1.009		mg/L		101	80 - 120
Iron	10.0	10.07		mg/L		101	80 - 120
Lead	1.00	1.022		mg/L		102	80 - 120
Manganese	1.00	1.026		mg/L		103	80 - 120
Molybdenum	1.00	1.048		mg/L		105	80 - 120
Nickel	1.00	1.009		mg/L		101	80 - 120
Selenium	1.00	1.050		mg/L		105	80 - 120

Lab Sample ID: 600-181877-4 MS
Matrix: Water
Analysis Batch: 261001

Client Sample ID: SJRP-MW19-03122019
Prep Type: Total/NA
Prep Batch: 260946

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.0926	U	10.0	10.34		mg/L		103	75 - 125
Arsenic	0.00285	U	1.00	1.147		mg/L		115	75 - 125
Barium	0.00880	J	1.00	0.9740		mg/L		97	75 - 125
Boron	0.798		1.00	1.758		mg/L		96	75 - 125
Cadmium	0.0126		0.500	0.5873		mg/L		115	75 - 125
Chromium	0.00159	U	1.00	0.9629		mg/L		96	75 - 125
Cobalt	0.0703		1.00	1.152		mg/L		108	75 - 125
Iron	0.0270	U	10.0	10.03		mg/L		100	75 - 125
Lead	0.00219	U	1.00	0.9864		mg/L		99	75 - 125
Nickel	0.205	B	1.00	1.252		mg/L		105	75 - 125
Selenium	0.0287	J F1	1.00	1.393	F1	mg/L		136	75 - 125

Lab Sample ID: 600-181877-4 MS
Matrix: Water
Analysis Batch: 261126

Client Sample ID: SJRP-MW19-03122019
Prep Type: Total/NA
Prep Batch: 260946

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Molybdenum	0.000540	U	1.00	0.9872		mg/L		99	75 - 125

Lab Sample ID: 600-181877-4 MS
Matrix: Water
Analysis Batch: 261126

Client Sample ID: SJRP-MW19-03122019
Prep Type: Total/NA
Prep Batch: 260946

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	11.1		1.00	11.64	4	mg/L		49	75 - 125

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-181877-4 MSD — **Client Sample ID: SJRP-MW19-03122019**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 261001 — **Prep Batch: 260946**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.0926	U	10.0	10.34		mg/L		103	75 - 125	0	20
Arsenic	0.00285	U	1.00	1.156		mg/L		116	75 - 125	1	20
Barium	0.00880	J	1.00	0.9717		mg/L		96	75 - 125	0	20
Boron	0.798		1.00	1.769		mg/L		97	75 - 125	1	20
Cadmium	0.0126		0.500	0.5929		mg/L		116	75 - 125	1	20
Chromium	0.00159	U	1.00	0.9498		mg/L		95	75 - 125	1	20
Cobalt	0.0703		1.00	1.150		mg/L		108	75 - 125	0	20
Iron	0.0270	U	10.0	10.01		mg/L		100	75 - 125	0	20
Lead	0.00219	U	1.00	0.9905		mg/L		99	75 - 125	0	20
Nickel	0.205	B	1.00	1.248		mg/L		104	75 - 125	0	20
Selenium	0.0287	J F1	1.00	1.402	F1	mg/L		137	75 - 125	1	20

Lab Sample ID: 600-181877-4 MSD — **Client Sample ID: SJRP-MW19-03122019**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 261126 — **Prep Batch: 260946**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Molybdenum	0.000540	U	1.00	0.9932		mg/L		99	75 - 125	1	20

Lab Sample ID: 600-181877-4 MSD — **Client Sample ID: SJRP-MW19-03122019**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 261126 — **Prep Batch: 260946**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Manganese	11.1		1.00	12.06	4	mg/L		92	75 - 125	4	20

Lab Sample ID: MB 600-261147/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 261326 — **Prep Batch: 261147**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		03/25/19 17:09	03/27/19 12:59	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		03/25/19 17:09	03/27/19 12:59	1
Barium	0.000530	U	0.0200	0.000530	mg/L		03/25/19 17:09	03/27/19 12:59	1
Boron	0.0116	U	0.200	0.0116	mg/L		03/25/19 17:09	03/27/19 12:59	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		03/25/19 17:09	03/27/19 12:59	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		03/25/19 17:09	03/27/19 12:59	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		03/25/19 17:09	03/27/19 12:59	1
Iron	0.0270	U	0.400	0.0270	mg/L		03/25/19 17:09	03/27/19 12:59	1
Lead	0.00219	U	0.0100	0.00219	mg/L		03/25/19 17:09	03/27/19 12:59	1
Manganese	0.000360	U	0.0100	0.000360	mg/L		03/25/19 17:09	03/27/19 12:59	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		03/25/19 17:09	03/27/19 12:59	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		03/25/19 17:09	03/27/19 12:59	1
Selenium	0.003000	J	0.0400	0.00287	mg/L		03/25/19 17:09	03/27/19 12:59	1

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCS 600-261147/2-A
Matrix: Water
Analysis Batch: 261326

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261147

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	10.25		mg/L		103	80 - 120
Arsenic	1.00	1.071		mg/L		107	80 - 120
Barium	1.00	1.076		mg/L		108	80 - 120
Boron	1.00	0.9937		mg/L		99	80 - 120
Cadmium	0.500	0.5276		mg/L		106	80 - 120
Chromium	1.00	1.005		mg/L		101	80 - 120
Cobalt	1.00	0.9998		mg/L		100	80 - 120
Iron	10.0	10.28		mg/L		103	80 - 120
Lead	1.00	1.033		mg/L		103	80 - 120
Manganese	1.00	1.035		mg/L		104	80 - 120
Molybdenum	1.00	1.083		mg/L		108	80 - 120
Nickel	1.00	1.021		mg/L		102	80 - 120
Selenium	1.00	1.068		mg/L		107	80 - 120

Lab Sample ID: MB 600-261179/1-A
Matrix: Water
Analysis Batch: 261326

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 261179

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		03/26/19 09:29	03/27/19 15:04	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		03/26/19 09:29	03/27/19 15:04	1
Barium	0.002800	J	0.0200	0.000530	mg/L		03/26/19 09:29	03/27/19 15:04	1
Boron	0.02510	J	0.200	0.0116	mg/L		03/26/19 09:29	03/27/19 15:04	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		03/26/19 09:29	03/27/19 15:04	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		03/26/19 09:29	03/27/19 15:04	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		03/26/19 09:29	03/27/19 15:04	1
Iron	0.0270	U	0.400	0.0270	mg/L		03/26/19 09:29	03/27/19 15:04	1
Lead	0.00219	U	0.0100	0.00219	mg/L		03/26/19 09:29	03/27/19 15:04	1
Manganese	0.000360	U	0.0100	0.000360	mg/L		03/26/19 09:29	03/27/19 15:04	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		03/26/19 09:29	03/27/19 15:04	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		03/26/19 09:29	03/27/19 15:04	1
Selenium	0.003100	J	0.0400	0.00287	mg/L		03/26/19 09:29	03/27/19 15:04	1

Lab Sample ID: LCS 600-261179/2-A
Matrix: Water
Analysis Batch: 261326

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261179

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	10.40		mg/L		104	80 - 120
Arsenic	1.00	1.098		mg/L		110	80 - 120
Barium	1.00	1.090		mg/L		109	80 - 120
Boron	1.00	1.025		mg/L		103	80 - 120
Cadmium	0.500	0.5313		mg/L		106	80 - 120
Chromium	1.00	1.012		mg/L		101	80 - 120
Cobalt	1.00	0.9930		mg/L		99	80 - 120
Iron	10.0	10.34		mg/L		103	80 - 120
Lead	1.00	1.035		mg/L		104	80 - 120
Manganese	1.00	1.034		mg/L		103	80 - 120
Molybdenum	1.00	1.104		mg/L		110	80 - 120

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: LCS 600-261179/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 261326 — **Prep Batch: 261179**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nickel	1.00	1.023		mg/L		102	80 - 120
Selenium	1.00	1.088		mg/L		109	80 - 120

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Lab Sample ID: LB 600-260475/1-P — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 260997 — **Prep Batch: 260912**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		03/21/19 13:49	03/22/19 11:37	1

Lab Sample ID: MB 600-260912/1-B — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 260997 — **Prep Batch: 260912**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		03/21/19 13:49	03/22/19 11:33	1

Lab Sample ID: LCS 600-260912/2-B — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 260997 — **Prep Batch: 260912**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00375	0.003877		mg/L		103	70 - 130

Lab Sample ID: 600-181877-4 MS — **Client Sample ID: SJRP-MW19-03122019**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 260997 — **Prep Batch: 260912**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.000103	U	0.00375	0.003525		mg/L		94	75 - 125

Lab Sample ID: 600-181877-4 MSD — **Client Sample ID: SJRP-MW19-03122019**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 260997 — **Prep Batch: 260912**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.000103	U	0.00375	0.003534		mg/L		94	75 - 125	0	20

Lab Sample ID: MB 600-261077/7-B — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 261142 — **Prep Batch: 261077**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		03/25/19 09:21	03/25/19 13:13	1

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) (Continued)

Lab Sample ID: LCS 600-261077/8-B
Matrix: Water
Analysis Batch: 261142

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261077

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00375	0.003779		mg/L		101	70 - 130		

Lab Sample ID: 600-181877-1 MS
Matrix: Water
Analysis Batch: 261142

Client Sample ID: SJRP-MW12-03122019
Prep Type: Total/NA
Prep Batch: 261077

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.000103	U	0.00375	0.003860		mg/L		103	75 - 125		

Lab Sample ID: 600-181877-1 DU
Matrix: Water
Analysis Batch: 261142

Client Sample ID: SJRP-MW12-03122019
Prep Type: Total/NA
Prep Batch: 261077

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Mercury	0.000103	U		0.000103	U	mg/L				NC	20

Lab Sample ID: MB 600-261241/7-A
Matrix: Water
Analysis Batch: 261344

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 261241

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		03/26/19 15:02	03/27/19 12:23	1

Lab Sample ID: LCS 600-261241/8-A
Matrix: Water
Analysis Batch: 261344

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261241

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00375	0.003682		mg/L		98	70 - 130		

Lab Sample ID: 600-181877-3 MS
Matrix: Water
Analysis Batch: 261344

Client Sample ID: SJRP-MW13-03122019
Prep Type: Total/NA
Prep Batch: 261241

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.000103	U	0.00375	0.003795		mg/L		101	75 - 125		

Lab Sample ID: 600-181877-3 DU
Matrix: Water
Analysis Batch: 261344

Client Sample ID: SJRP-MW13-03122019
Prep Type: Total/NA
Prep Batch: 261241

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Mercury	0.000103	U		0.000103	U	mg/L				NC	20

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1

Method: 2320B-1997 - Alkalinity, Total - SM Online, 2011

Lab Sample ID: MB 600-260537/4
Matrix: Water
Analysis Batch: 260537

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	20.0	U	20.0	20.0	mg/L			03/15/19 16:58	1
Bicarbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			03/15/19 16:58	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			03/15/19 16:58	1

Lab Sample ID: LCS 600-260537/5
Matrix: Water
Analysis Batch: 260537

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	100	90.11		mg/L		90	90 - 110

Lab Sample ID: MB 600-261079/4
Matrix: Water
Analysis Batch: 261079

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	20.0	U	20.0	20.0	mg/L			03/24/19 16:10	1
Bicarbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			03/24/19 16:10	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			03/24/19 16:10	1

Lab Sample ID: LCS 600-261079/5
Matrix: Water
Analysis Batch: 261079

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	100	91.01		mg/L		91	90 - 110

Lab Sample ID: 600-181877-4 MS
Matrix: Water
Analysis Batch: 261079

Client Sample ID: SJRP-MW19-03122019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	179		250	401.2		mg/L		89	75 - 125

Lab Sample ID: 600-181877-4 MSD
Matrix: Water
Analysis Batch: 261079

Client Sample ID: SJRP-MW19-03122019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Alkalinity	179		250	399.4		mg/L		88	75 - 125	0	20

Lab Sample ID: MB 600-261245/4
Matrix: Water
Analysis Batch: 261245

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	20.0	U	20.0	20.0	mg/L			03/25/19 19:38	1
Bicarbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			03/25/19 19:38	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			03/25/19 19:38	1

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1

Method: 2320B-1997 - Alkalinity, Total - SM Online, 2011 (Continued)

Lab Sample ID: LCS 600-261245/5
Matrix: Water
Analysis Batch: 261245

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Alkalinity			100	98.60		mg/L		99	90 - 110		

Lab Sample ID: 600-181877-7 DU
Matrix: Water
Analysis Batch: 261245

Client Sample ID: SJRP-MW16-03122019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity	2720			2632		mg/L				3	20
Bicarbonate Alkalinity as CaCO3	2720			2632		mg/L				3	20
Carbonate Alkalinity as CaCO3	20.0	U		20.0	U	mg/L				NC	20

Method: 2540 C-1997 - Total Dissolved Solids (Dried at 180 °C)

Lab Sample ID: MB 600-260707/1
Matrix: Water
Analysis Batch: 260707

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10.0	U	10.0	10.0	mg/L			03/19/19 14:57	1

Lab Sample ID: LCS 600-260707/2
Matrix: Water
Analysis Batch: 260707

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			1800	1726		mg/L		96	90 - 110		

Lab Sample ID: 600-181877-1 DU
Matrix: Water
Analysis Batch: 260707

Client Sample ID: SJRP-MW12-03122019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	6680			6730		mg/L				0.7	10

Lab Sample ID: 600-181877-8 DU
Matrix: Water
Analysis Batch: 260707

Client Sample ID: SJRP-MW15-03122019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	21300			21000		mg/L				1	10

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1

GC/MS VOA

Analysis Batch: 260439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181877-1	SJRP-MW12-03122019	Total/NA	Water	8260B	
600-181877-2	SJRP-TB02-03122019	Total/NA	Water	8260B	
600-181877-3	SJRP-MW13-03122019	Total/NA	Water	8260B	
600-181877-4	SJRP-MW19-03122019	Total/NA	Water	8260B	
600-181877-5	SJRP-MW14-03122019	Total/NA	Water	8260B	
600-181877-6	SJRP-MW9-03122019	Total/NA	Water	8260B	
600-181877-7	SJRP-MW16-03122019	Total/NA	Water	8260B	
600-181877-8	SJRP-MW15-03122019	Total/NA	Water	8260B	
600-181877-10	SJRP-MW8-03122019	Total/NA	Water	8260B	
600-181877-12	SJRP-PMW2-03122019	Total/NA	Water	8260B	
600-181877-12 - DL	SJRP-PMW2-03122019	Total/NA	Water	8260B	
MB 600-260439/6	Method Blank	Total/NA	Water	8260B	
LCS 600-260439/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-260439/4	Lab Control Sample Dup	Total/NA	Water	8260B	
600-181877-4 MS	SJRP-MW19-03122019	Total/NA	Water	8260B	
600-181877-4 MSD	SJRP-MW19-03122019	Total/NA	Water	8260B	

Analysis Batch: 260510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181877-3 - DL	SJRP-MW13-03122019	Total/NA	Water	8260B	
600-181877-7 - DL	SJRP-MW16-03122019	Total/NA	Water	8260B	
600-181877-8 - DL	SJRP-MW15-03122019	Total/NA	Water	8260B	
600-181877-9	SJRP-MW15-03122019-2	Total/NA	Water	8260B	
600-181877-9 - DL	SJRP-MW15-03122019-2	Total/NA	Water	8260B	
600-181877-11	SJRP-MW21-03122019	Total/NA	Water	8260B	
MB 600-260510/6	Method Blank	Total/NA	Water	8260B	
LCS 600-260510/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-260510/4	Lab Control Sample Dup	Total/NA	Water	8260B	

HPLC/IC

Analysis Batch: 260324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181877-1	SJRP-MW12-03122019	Total/NA	Water	300.0	
MB 600-260324/4	Method Blank	Total/NA	Water	300.0	
LCS 600-260324/5	Lab Control Sample	Total/NA	Water	300.0	
600-181877-4 MS	SJRP-MW19-03122019	Total/NA	Water	300.0	
600-181877-4 MSD	SJRP-MW19-03122019	Total/NA	Water	300.0	

Analysis Batch: 260325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181877-1	SJRP-MW12-03122019	Total/NA	Water	300.0	
600-181877-3	SJRP-MW13-03122019	Total/NA	Water	300.0	
600-181877-4	SJRP-MW19-03122019	Total/NA	Water	300.0	
600-181877-5	SJRP-MW14-03122019	Total/NA	Water	300.0	
600-181877-6	SJRP-MW9-03122019	Total/NA	Water	300.0	
600-181877-7	SJRP-MW16-03122019	Total/NA	Water	300.0	
600-181877-8	SJRP-MW15-03122019	Total/NA	Water	300.0	
600-181877-9	SJRP-MW15-03122019-2	Total/NA	Water	300.0	
600-181877-10	SJRP-MW8-03122019	Total/NA	Water	300.0	
600-181877-11	SJRP-MW21-03122019	Total/NA	Water	300.0	

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1

HPLC/IC (Continued)

Analysis Batch: 260325 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181877-12	SJRP-PMW2-03122019	Total/NA	Water	300.0	
MB 600-260325/4	Method Blank	Total/NA	Water	300.0	
LCS 600-260325/5	Lab Control Sample	Total/NA	Water	300.0	
600-181877-4 MS	SJRP-MW19-03122019	Total/NA	Water	300.0	
600-181877-4 MSD	SJRP-MW19-03122019	Total/NA	Water	300.0	

Analysis Batch: 260429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181877-1	SJRP-MW12-03122019	Total/NA	Water	300.0	
600-181877-3	SJRP-MW13-03122019	Total/NA	Water	300.0	
600-181877-4	SJRP-MW19-03122019	Total/NA	Water	300.0	
600-181877-5	SJRP-MW14-03122019	Total/NA	Water	300.0	
600-181877-6	SJRP-MW9-03122019	Total/NA	Water	300.0	
600-181877-7	SJRP-MW16-03122019	Total/NA	Water	300.0	
600-181877-9	SJRP-MW15-03122019-2	Total/NA	Water	300.0	
600-181877-10	SJRP-MW8-03122019	Total/NA	Water	300.0	
600-181877-11	SJRP-MW21-03122019	Total/NA	Water	300.0	
600-181877-12	SJRP-PMW2-03122019	Total/NA	Water	300.0	
MB 600-260429/4	Method Blank	Total/NA	Water	300.0	
LCS 600-260429/5	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 260514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-260514/4	Method Blank	Total/NA	Water	300.0	
LCS 600-260514/5	Lab Control Sample	Total/NA	Water	300.0	
600-181877-3 MS	SJRP-MW13-03122019	Total/NA	Water	300.0	
600-181877-3 MSD	SJRP-MW13-03122019	Total/NA	Water	300.0	

Analysis Batch: 260515

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181877-3	SJRP-MW13-03122019	Total/NA	Water	300.0	
MB 600-260515/4	Method Blank	Total/NA	Water	300.0	
LCS 600-260515/5	Lab Control Sample	Total/NA	Water	300.0	
600-181877-3 MS	SJRP-MW13-03122019	Total/NA	Water	300.0	
600-181877-3 MSD	SJRP-MW13-03122019	Total/NA	Water	300.0	

Analysis Batch: 260545

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181877-3	SJRP-MW13-03122019	Total/NA	Water	300.0	
MB 600-260545/4	Method Blank	Total/NA	Water	300.0	
LCS 600-260545/5	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 261426

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181877-8	SJRP-MW15-03122019	Total/NA	Water	300.0	
MB 600-261426/35	Method Blank	Total/NA	Water	300.0	
LCS 600-261426/36	Lab Control Sample	Total/NA	Water	300.0	

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1

Metals

Leach Batch: 260475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 600-260475/1-P	Method Blank	Total/NA	Water	1311	

Prep Batch: 260912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181877-4	SJRP-MW19-03122019	Total/NA	Water	7470A	
LB 600-260475/1-P	Method Blank	Total/NA	Water	7470A	260475
MB 600-260912/1-B	Method Blank	Total/NA	Water	7470A	
LCS 600-260912/2-B	Lab Control Sample	Total/NA	Water	7470A	
600-181877-4 MS	SJRP-MW19-03122019	Total/NA	Water	7470A	
600-181877-4 MSD	SJRP-MW19-03122019	Total/NA	Water	7470A	

Prep Batch: 260946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181877-1	SJRP-MW12-03122019	Total/NA	Water	3010A	
600-181877-4	SJRP-MW19-03122019	Total/NA	Water	3010A	
600-181877-5	SJRP-MW14-03122019	Total/NA	Water	3010A	
600-181877-6	SJRP-MW9-03122019	Total/NA	Water	3010A	
600-181877-11	SJRP-MW21-03122019	Total/NA	Water	3010A	
MB 600-260946/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-260946/2-A	Lab Control Sample	Total/NA	Water	3010A	
600-181877-4 MS	SJRP-MW19-03122019	Total/NA	Water	3010A	
600-181877-4 MSD	SJRP-MW19-03122019	Total/NA	Water	3010A	

Analysis Batch: 260997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181877-4	SJRP-MW19-03122019	Total/NA	Water	7470A	260912
LB 600-260475/1-P	Method Blank	Total/NA	Water	7470A	260912
MB 600-260912/1-B	Method Blank	Total/NA	Water	7470A	260912
LCS 600-260912/2-B	Lab Control Sample	Total/NA	Water	7470A	260912
600-181877-4 MS	SJRP-MW19-03122019	Total/NA	Water	7470A	260912
600-181877-4 MSD	SJRP-MW19-03122019	Total/NA	Water	7470A	260912

Analysis Batch: 261001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181877-1	SJRP-MW12-03122019	Total/NA	Water	6010B	260946
600-181877-4	SJRP-MW19-03122019	Total/NA	Water	6010B	260946
600-181877-5	SJRP-MW14-03122019	Total/NA	Water	6010B	260946
600-181877-6	SJRP-MW9-03122019	Total/NA	Water	6010B	260946
600-181877-11	SJRP-MW21-03122019	Total/NA	Water	6010B	260946
MB 600-260946/1-A	Method Blank	Total/NA	Water	6010B	260946
LCS 600-260946/2-A	Lab Control Sample	Total/NA	Water	6010B	260946
600-181877-4 MS	SJRP-MW19-03122019	Total/NA	Water	6010B	260946
600-181877-4 MSD	SJRP-MW19-03122019	Total/NA	Water	6010B	260946

Prep Batch: 261077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181877-1	SJRP-MW12-03122019	Total/NA	Water	7470A	
600-181877-5	SJRP-MW14-03122019	Total/NA	Water	7470A	
600-181877-6	SJRP-MW9-03122019	Total/NA	Water	7470A	
600-181877-7	SJRP-MW16-03122019	Total/NA	Water	7470A	
600-181877-8	SJRP-MW15-03122019	Total/NA	Water	7470A	

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1

Metals (Continued)

Prep Batch: 261077 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181877-9	SJRP-MW15-03122019-2	Total/NA	Water	7470A	
600-181877-10	SJRP-MW8-03122019	Total/NA	Water	7470A	
600-181877-11	SJRP-MW21-03122019	Total/NA	Water	7470A	
600-181877-12	SJRP-PMW2-03122019	Total/NA	Water	7470A	
MB 600-261077/7-B	Method Blank	Total/NA	Water	7470A	
LCS 600-261077/8-B	Lab Control Sample	Total/NA	Water	7470A	
600-181877-1 MS	SJRP-MW12-03122019	Total/NA	Water	7470A	
600-181877-1 DU	SJRP-MW12-03122019	Total/NA	Water	7470A	

Analysis Batch: 261126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181877-1	SJRP-MW12-03122019	Total/NA	Water	6010B	260946
600-181877-4	SJRP-MW19-03122019	Total/NA	Water	6010B	260946
600-181877-4	SJRP-MW19-03122019	Total/NA	Water	6010B	260946
600-181877-5	SJRP-MW14-03122019	Total/NA	Water	6010B	260946
600-181877-6	SJRP-MW9-03122019	Total/NA	Water	6010B	260946
600-181877-11	SJRP-MW21-03122019	Total/NA	Water	6010B	260946
MB 600-260946/1-A	Method Blank	Total/NA	Water	6010B	260946
LCS 600-260946/2-A	Lab Control Sample	Total/NA	Water	6010B	260946
600-181877-4 MS	SJRP-MW19-03122019	Total/NA	Water	6010B	260946
600-181877-4 MS	SJRP-MW19-03122019	Total/NA	Water	6010B	260946
600-181877-4 MSD	SJRP-MW19-03122019	Total/NA	Water	6010B	260946
600-181877-4 MSD	SJRP-MW19-03122019	Total/NA	Water	6010B	260946

Analysis Batch: 261142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181877-1	SJRP-MW12-03122019	Total/NA	Water	7470A	261077
600-181877-5	SJRP-MW14-03122019	Total/NA	Water	7470A	261077
600-181877-6	SJRP-MW9-03122019	Total/NA	Water	7470A	261077
600-181877-7	SJRP-MW16-03122019	Total/NA	Water	7470A	261077
600-181877-8	SJRP-MW15-03122019	Total/NA	Water	7470A	261077
600-181877-9	SJRP-MW15-03122019-2	Total/NA	Water	7470A	261077
600-181877-10	SJRP-MW8-03122019	Total/NA	Water	7470A	261077
600-181877-11	SJRP-MW21-03122019	Total/NA	Water	7470A	261077
600-181877-12	SJRP-PMW2-03122019	Total/NA	Water	7470A	261077
MB 600-261077/7-B	Method Blank	Total/NA	Water	7470A	261077
LCS 600-261077/8-B	Lab Control Sample	Total/NA	Water	7470A	261077
600-181877-1 MS	SJRP-MW12-03122019	Total/NA	Water	7470A	261077
600-181877-1 DU	SJRP-MW12-03122019	Total/NA	Water	7470A	261077

Prep Batch: 261147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181877-7	SJRP-MW16-03122019	Total/NA	Water	3010A	
600-181877-8	SJRP-MW15-03122019	Total/NA	Water	3010A	
600-181877-9	SJRP-MW15-03122019-2	Total/NA	Water	3010A	
600-181877-10	SJRP-MW8-03122019	Total/NA	Water	3010A	
600-181877-12	SJRP-PMW2-03122019	Total/NA	Water	3010A	
MB 600-261147/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-261147/2-A	Lab Control Sample	Total/NA	Water	3010A	

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1

Metals

Prep Batch: 261179

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181877-3	SJRP-MW13-03122019	Total/NA	Water	3010A	
MB 600-261179/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-261179/2-A	Lab Control Sample	Total/NA	Water	3010A	

Prep Batch: 261241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181877-3	SJRP-MW13-03122019	Total/NA	Water	7470A	
MB 600-261241/7-A	Method Blank	Total/NA	Water	7470A	
LCS 600-261241/8-A	Lab Control Sample	Total/NA	Water	7470A	
600-181877-3 MS	SJRP-MW13-03122019	Total/NA	Water	7470A	
600-181877-3 DU	SJRP-MW13-03122019	Total/NA	Water	7470A	

Analysis Batch: 261326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181877-3	SJRP-MW13-03122019	Total/NA	Water	6010B	261179
600-181877-7	SJRP-MW16-03122019	Total/NA	Water	6010B	261147
600-181877-8	SJRP-MW15-03122019	Total/NA	Water	6010B	261147
600-181877-9	SJRP-MW15-03122019-2	Total/NA	Water	6010B	261147
600-181877-10	SJRP-MW8-03122019	Total/NA	Water	6010B	261147
600-181877-12	SJRP-PMW2-03122019	Total/NA	Water	6010B	261147
MB 600-261147/1-A	Method Blank	Total/NA	Water	6010B	261147
MB 600-261179/1-A	Method Blank	Total/NA	Water	6010B	261179
LCS 600-261147/2-A	Lab Control Sample	Total/NA	Water	6010B	261147
LCS 600-261179/2-A	Lab Control Sample	Total/NA	Water	6010B	261179

Analysis Batch: 261344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181877-3	SJRP-MW13-03122019	Total/NA	Water	7470A	261241
MB 600-261241/7-A	Method Blank	Total/NA	Water	7470A	261241
LCS 600-261241/8-A	Lab Control Sample	Total/NA	Water	7470A	261241
600-181877-3 MS	SJRP-MW13-03122019	Total/NA	Water	7470A	261241
600-181877-3 DU	SJRP-MW13-03122019	Total/NA	Water	7470A	261241

General Chemistry

Analysis Batch: 260537

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181877-1	SJRP-MW12-03122019	Total/NA	Water	2320B-1997	
600-181877-5	SJRP-MW14-03122019	Total/NA	Water	2320B-1997	
600-181877-6	SJRP-MW9-03122019	Total/NA	Water	2320B-1997	
600-181877-9	SJRP-MW15-03122019-2	Total/NA	Water	2320B-1997	
600-181877-11	SJRP-MW21-03122019	Total/NA	Water	2320B-1997	
MB 600-260537/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 600-260537/5	Lab Control Sample	Total/NA	Water	2320B-1997	

Analysis Batch: 260707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181877-1	SJRP-MW12-03122019	Total/NA	Water	2540 C-1997	
600-181877-3	SJRP-MW13-03122019	Total/NA	Water	2540 C-1997	
600-181877-4	SJRP-MW19-03122019	Total/NA	Water	2540 C-1997	
600-181877-5	SJRP-MW14-03122019	Total/NA	Water	2540 C-1997	

QC Association Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1

General Chemistry (Continued)

Analysis Batch: 260707 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181877-6	SJRP-MW9-03122019	Total/NA	Water	2540 C-1997	
600-181877-7	SJRP-MW16-03122019	Total/NA	Water	2540 C-1997	
600-181877-8	SJRP-MW15-03122019	Total/NA	Water	2540 C-1997	
600-181877-9	SJRP-MW15-03122019-2	Total/NA	Water	2540 C-1997	
600-181877-10	SJRP-MW8-03122019	Total/NA	Water	2540 C-1997	
600-181877-11	SJRP-MW21-03122019	Total/NA	Water	2540 C-1997	
600-181877-12	SJRP-PMW2-03122019	Total/NA	Water	2540 C-1997	
MB 600-260707/1	Method Blank	Total/NA	Water	2540 C-1997	
LCS 600-260707/2	Lab Control Sample	Total/NA	Water	2540 C-1997	
600-181877-1 DU	SJRP-MW12-03122019	Total/NA	Water	2540 C-1997	
600-181877-8 DU	SJRP-MW15-03122019	Total/NA	Water	2540 C-1997	

Analysis Batch: 261079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181877-4	SJRP-MW19-03122019	Total/NA	Water	2320B-1997	
600-181877-8	SJRP-MW15-03122019	Total/NA	Water	2320B-1997	
MB 600-261079/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 600-261079/5	Lab Control Sample	Total/NA	Water	2320B-1997	
600-181877-4 MS	SJRP-MW19-03122019	Total/NA	Water	2320B-1997	
600-181877-4 MSD	SJRP-MW19-03122019	Total/NA	Water	2320B-1997	

Analysis Batch: 261245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-181877-3	SJRP-MW13-03122019	Total/NA	Water	2320B-1997	
600-181877-7	SJRP-MW16-03122019	Total/NA	Water	2320B-1997	
600-181877-10	SJRP-MW8-03122019	Total/NA	Water	2320B-1997	
600-181877-12	SJRP-PMW2-03122019	Total/NA	Water	2320B-1997	
MB 600-261245/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 600-261245/5	Lab Control Sample	Total/NA	Water	2320B-1997	
600-181877-7 DU	SJRP-MW16-03122019	Total/NA	Water	2320B-1997	

Lab Chronicle

Client: CH2M Hill, Inc.
Job ID: 600-181877-1
Project/Site: San Juan Kinder Morgan

Client Sample ID: SJRP-MW12-03122019
Lab Sample ID: 600-181877-1
Date Collected: 03/12/19 09:00
Matrix: Water
Date Received: 03/13/19 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	260439	03/14/19 15:59	YX1	TAL HOU
Total/NA	Analysis	300.0		1			260324	03/13/19 15:33	SKR	TAL HOU
Total/NA	Analysis	300.0		1			260325	03/13/19 15:33	SKR	TAL HOU
Total/NA	Analysis	300.0		50			260429	03/14/19 17:16	SKR	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	260946	03/22/19 08:21	DCL	TAL HOU
Total/NA	Analysis	6010B		1			261001	03/22/19 16:57	DCL	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	260946	03/22/19 08:21	DCL	TAL HOU
Total/NA	Analysis	6010B		1			261126	03/25/19 13:01	KP1	TAL HOU
Total/NA	Prep	7470A			40 mL	50 mL	261077	03/25/19 09:21	SOT	TAL HOU
Total/NA	Analysis	7470A		1			261142	03/25/19 13:17	SOT	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	260537	03/15/19 18:00	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	10 mL	100 mL	260707	03/19/19 14:57	DTN	TAL HOU

Client Sample ID: SJRP-TB02-03122019
Lab Sample ID: 600-181877-2
Date Collected: 03/12/19 08:55
Matrix: Water
Date Received: 03/13/19 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	260439	03/14/19 15:35	YX1	TAL HOU

Client Sample ID: SJRP-MW13-03122019
Lab Sample ID: 600-181877-3
Date Collected: 03/12/19 09:30
Matrix: Water
Date Received: 03/13/19 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	20 mL	20 mL	260439	03/14/19 17:59	YX1	TAL HOU
Total/NA	Analysis	8260B	DL	250	20 mL	20 mL	260510	03/15/19 19:29	YX1	TAL HOU
Total/NA	Analysis	300.0		1			260325	03/13/19 15:53	SKR	TAL HOU
Total/NA	Analysis	300.0		500			260545	03/16/19 18:49	SKR	TAL HOU
Total/NA	Analysis	300.0		200			260429	03/14/19 18:10	SKR	TAL HOU
Total/NA	Analysis	300.0		250			260515	03/15/19 15:43	SKR	TAL HOU
Total/NA	Prep	3010A			50.0 mL	50.0 mL	261179	03/26/19 09:29	AML	TAL HOU
Total/NA	Analysis	6010B		1			261326	03/27/19 16:07	DCL	TAL HOU
Total/NA	Prep	7470A			40 mL	50 mL	261241	03/26/19 15:02	SOT	TAL HOU
Total/NA	Analysis	7470A		1			261344	03/27/19 12:27	SOT	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	261245	03/25/19 20:15	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	10 mL	100 mL	260707	03/19/19 14:57	DTN	TAL HOU

Client Sample ID: SJRP-MW19-03122019
Lab Sample ID: 600-181877-4
Date Collected: 03/12/19 10:10
Matrix: Water
Date Received: 03/13/19 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	260439	03/14/19 17:11	YX1	TAL HOU

Lab Chronicle

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1

Client Sample ID: SJRP-MW19-03122019

Lab Sample ID: 600-181877-4
Matrix: Water
Date Collected: 03/12/19 10:10
Date Received: 03/13/19 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			260325	03/13/19 17:13	SKR	TAL HOU
Total/NA	Analysis	300.0		500			260429	03/14/19 18:46	SKR	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	260946	03/22/19 08:21	DCL	TAL HOU
Total/NA	Analysis	6010B		1			261001	03/22/19 16:59	DCL	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	260946	03/22/19 08:21	DCL	TAL HOU
Total/NA	Analysis	6010B		1			261126	03/25/19 13:03	KP1	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	260946	03/22/19 08:21	DCL	TAL HOU
Total/NA	Analysis	6010B		2			261126	03/25/19 13:06	KP1	TAL HOU
Total/NA	Prep	7470A			40 mL	50 mL	260912	03/21/19 13:49	SOT	TAL HOU
Total/NA	Analysis	7470A		1			260997	03/22/19 12:26	TWR	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	261079	03/24/19 16:24	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	10 mL	100 mL	260707	03/19/19 14:57	DTN	TAL HOU

Client Sample ID: SJRP-MW14-03122019

Lab Sample ID: 600-181877-5
Matrix: Water
Date Collected: 03/12/19 11:25
Date Received: 03/13/19 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	260439	03/14/19 16:23	YX1	TAL HOU
Total/NA	Analysis	300.0		1			260325	03/13/19 18:13	SKR	TAL HOU
Total/NA	Analysis	300.0		500			260429	03/14/19 19:04	SKR	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	260946	03/22/19 08:21	DCL	TAL HOU
Total/NA	Analysis	6010B		1			261001	03/22/19 17:05	DCL	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	260946	03/22/19 08:21	DCL	TAL HOU
Total/NA	Analysis	6010B		1			261126	03/25/19 13:23	KP1	TAL HOU
Total/NA	Prep	7470A			40 mL	50 mL	261077	03/25/19 09:21	SOT	TAL HOU
Total/NA	Analysis	7470A		1			261142	03/25/19 13:23	SOT	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	260537	03/15/19 18:14	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	10 mL	100 mL	260707	03/19/19 14:57	DTN	TAL HOU

Client Sample ID: SJRP-MW9-03122019

Lab Sample ID: 600-181877-6
Matrix: Water
Date Collected: 03/12/19 11:50
Date Received: 03/13/19 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	260439	03/14/19 16:47	YX1	TAL HOU
Total/NA	Analysis	300.0		1			260325	03/13/19 18:53	SKR	TAL HOU
Total/NA	Analysis	300.0		1000			260429	03/14/19 20:16	SKR	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	260946	03/22/19 08:21	DCL	TAL HOU
Total/NA	Analysis	6010B		1			261001	03/22/19 17:08	DCL	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	260946	03/22/19 08:21	DCL	TAL HOU
Total/NA	Analysis	6010B		1			261126	03/25/19 13:25	KP1	TAL HOU
Total/NA	Prep	7470A			40 mL	50 mL	261077	03/25/19 09:21	SOT	TAL HOU
Total/NA	Analysis	7470A		1			261142	03/25/19 13:25	SOT	TAL HOU

Lab Chronicle

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1

Client Sample ID: SJRP-MW9-03122019

Lab Sample ID: 600-181877-6
Matrix: Water
Date Collected: 03/12/19 11:50
Date Received: 03/13/19 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	260537	03/15/19 18:04	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	5 mL	100 mL	260707	03/19/19 14:57	DTN	TAL HOU

Client Sample ID: SJRP-MW16-03122019

Lab Sample ID: 600-181877-7
Matrix: Water
Date Collected: 03/12/19 12:05
Date Received: 03/13/19 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	20 mL	20 mL	260439	03/14/19 18:23	YX1	TAL HOU
Total/NA	Analysis	8260B	DL	100	20 mL	20 mL	260510	03/15/19 19:54	YX1	TAL HOU
Total/NA	Analysis	300.0		1			260325	03/13/19 19:33	SKR	TAL HOU
Total/NA	Analysis	300.0		500			260429	03/14/19 20:51	SKR	TAL HOU
Total/NA	Prep	3010A			50.0 mL	50.0 mL	261147	03/25/19 17:09	AML	TAL HOU
Total/NA	Analysis	6010B		1			261326	03/27/19 13:33	DCL	TAL HOU
Total/NA	Prep	7470A			40 mL	50 mL	261077	03/25/19 09:21	SOT	TAL HOU
Total/NA	Analysis	7470A		1			261142	03/25/19 13:27	SOT	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	261245	03/25/19 19:55	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	5 mL	100 mL	260707	03/19/19 14:57	DTN	TAL HOU

Client Sample ID: SJRP-MW15-03122019

Lab Sample ID: 600-181877-8
Matrix: Water
Date Collected: 03/12/19 12:40
Date Received: 03/13/19 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	20 mL	20 mL	260439	03/14/19 18:47	YX1	TAL HOU
Total/NA	Analysis	8260B	DL	200	20 mL	20 mL	260510	03/15/19 20:18	YX1	TAL HOU
Total/NA	Analysis	300.0		1			260325	03/13/19 19:53	SKR	TAL HOU
Total/NA	Analysis	300.0		1000			261426	03/29/19 02:16	SKR	TAL HOU
Total/NA	Prep	3010A			50.0 mL	50.0 mL	261147	03/25/19 17:09	AML	TAL HOU
Total/NA	Analysis	6010B		1			261326	03/27/19 13:41	DCL	TAL HOU
Total/NA	Prep	7470A			40 mL	50 mL	261077	03/25/19 09:21	SOT	TAL HOU
Total/NA	Analysis	7470A		1			261142	03/25/19 13:29	SOT	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	261079	03/24/19 17:49	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	5 mL	100 mL	260707	03/19/19 14:57	DTN	TAL HOU

Client Sample ID: SJRP-MW15-03122019-2

Lab Sample ID: 600-181877-9
Matrix: Water
Date Collected: 03/12/19 12:50
Date Received: 03/13/19 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	20 mL	20 mL	260510	03/15/19 20:42	YX1	TAL HOU
Total/NA	Analysis	8260B	DL	200	20 mL	20 mL	260510	03/15/19 21:06	YX1	TAL HOU
Total/NA	Analysis	300.0		1			260325	03/13/19 20:53	SKR	TAL HOU

Lab Chronicle

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan

Job ID: 600-181877-1

Client Sample ID: SJRP-MW15-03122019-2

Lab Sample ID: 600-181877-9
Matrix: Water
Date Collected: 03/12/19 12:50
Date Received: 03/13/19 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		500			260429	03/14/19 21:45	SKR	TAL HOU
Total/NA	Prep	3010A			50.0 mL	50.0 mL	261147	03/25/19 17:09	AML	TAL HOU
Total/NA	Analysis	6010B		1			261326	03/27/19 13:43	DCL	TAL HOU
Total/NA	Prep	7470A			40 mL	50 mL	261077	03/25/19 09:21	SOT	TAL HOU
Total/NA	Analysis	7470A		1			261142	03/25/19 13:31	SOT	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	260537	03/15/19 18:33	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	5 mL	100 mL	260707	03/19/19 14:57	DTN	TAL HOU

Client Sample ID: SJRP-MW8-03122019

Lab Sample ID: 600-181877-10
Matrix: Water
Date Collected: 03/12/19 13:45
Date Received: 03/13/19 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	260439	03/14/19 17:35	YX1	TAL HOU
Total/NA	Analysis	300.0		1			260325	03/13/19 21:33	SKR	TAL HOU
Total/NA	Analysis	300.0		500			260429	03/14/19 22:21	SKR	TAL HOU
Total/NA	Prep	3010A			50.0 mL	50.0 mL	261147	03/25/19 17:09	AML	TAL HOU
Total/NA	Analysis	6010B		1			261326	03/27/19 13:46	DCL	TAL HOU
Total/NA	Prep	7470A			40 mL	50 mL	261077	03/25/19 09:21	SOT	TAL HOU
Total/NA	Analysis	7470A		1			261142	03/25/19 13:37	SOT	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	261245	03/25/19 20:36	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	10 mL	100 mL	260707	03/19/19 14:57	DTN	TAL HOU

Client Sample ID: SJRP-MW21-03122019

Lab Sample ID: 600-181877-11
Matrix: Water
Date Collected: 03/12/19 14:15
Date Received: 03/13/19 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	20 mL	20 mL	260510	03/15/19 21:30	YX1	TAL HOU
Total/NA	Analysis	300.0		1			260325	03/13/19 21:53	SKR	TAL HOU
Total/NA	Analysis	300.0		500			260429	03/14/19 22:39	SKR	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	260946	03/22/19 08:21	DCL	TAL HOU
Total/NA	Analysis	6010B		1			261001	03/22/19 17:10	DCL	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	260946	03/22/19 08:21	DCL	TAL HOU
Total/NA	Analysis	6010B		1			261126	03/25/19 13:27	KP1	TAL HOU
Total/NA	Prep	7470A			40 mL	50 mL	261077	03/25/19 09:21	SOT	TAL HOU
Total/NA	Analysis	7470A		1			261142	03/25/19 13:39	SOT	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	260537	03/15/19 19:09	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	5 mL	100 mL	260707	03/19/19 14:57	DTN	TAL HOU

Lab Chronicle

Client: CH2M Hill, Inc.
Job ID: 600-181877-1
Project/Site: San Juan Kinder Morgan

Client Sample ID: SJRP-PMW2-03122019
Lab Sample ID: 600-181877-12
Date Collected: 03/12/19 16:00
Matrix: Water
Date Received: 03/13/19 10:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	20 mL	20 mL	260439	03/14/19 20:22	YX1	TAL HOU
Total/NA	Analysis	8260B	DL	250	20 mL	20 mL	260439	03/14/19 20:45	YX1	TAL HOU
Total/NA	Analysis	300.0		1			260325	03/13/19 22:33	SKR	TAL HOU
Total/NA	Analysis	300.0		50			260429	03/14/19 23:15	SKR	TAL HOU
Total/NA	Prep	3010A			50.0 mL	50.0 mL	261147	03/25/19 17:09	AML	TAL HOU
Total/NA	Analysis	6010B		1			261326	03/27/19 13:48	DCL	TAL HOU
Total/NA	Prep	7470A			40 mL	50 mL	261077	03/25/19 09:21	SOT	TAL HOU
Total/NA	Analysis	7470A		1			261142	03/25/19 13:41	SOT	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	261245	03/25/19 20:25	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	25 mL	100 mL	260707	03/19/19 14:57	DTN	TAL HOU

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Accreditation/Certification Summary

Client: CH2M Hill, Inc. Job ID: 600-181877-1
Project/Site: San Juan Kinder Morgan

Laboratory: Eurofins TestAmerica, Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	18-061-0	08-04-19
Louisiana	NELAP	6	01967	06-30-19
Oklahoma	State Program	6	2018-052	08-31-19
Texas	NELAP	6	T104704223-18-23	10-31-19
USDA	Federal		P330-18-00130	04-30-21

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: A Forsberg	Lab PM: McDaniel, Bethany A	Carrier Tracking No(s):	COC No: 600-67174-18376.3
Client Contact: Aleeca Forsberg	Phone: 505 918 1800	E-Mail: bethany.mcdaniel@testamericainc.com		Page: 1 of 2
Company: CH2M Hill, Inc.				Job #:
Address: 3721 Rutledge Rd. NE Suite B-1	Due Date Requested:			
City: Albuquerque	TAT Requested (days):			
State, Zip: NM, 87109				
Phone: 505-855-5239(Tel)	PO #: WD285077			
Email: aleeca.forsberg@jacobs.com	WO #: WD285077			
Project Name: Kinder Morgan Bloomfield, NM San Juan	Project #: 60005961			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - BTEX	2320B - Alkalinity	6010B, 7470A - NMWQCC Dissolved Metals	300_ORGFM_28D - chloride, sulfate	300_ORGFM - Nitrite, nitrite **	2540C_Calcd - TDS	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	D	N	N	N		
SJRP-MW12-03122019	3/12/19	0900	G	Water	Y	N	X	X	X	X	X	X		**Short Hold Samples**
SJRP-MW12-03122019		0955	G	Water	N	N	X							
SJRP-MW13-03122019		0936	G	Water	Y	N	X	X	X	X	X	X		
SJRP-MW19-03122019		1010	G	Water	Y	Y	X	X	X	X	X	X		MS/MSD
SJRP-MW14-03122019		1125	G	Water	Y	N	X	X	X	X	X	X		
SJRP-MW9-03122019		1150	G	Water	Y	N	X	X	X	X	X	X		
SJRP-MW16-03122019		1205	G	Water	Y	N	X	X	X	X	X	X		
SJRP-MW15-03122019		1240	G	Water	Y	N	X	X	X	X	X	X		
SJRP-MW15-03122019-2		1250	G	Water	Y	N	X	X	X	X	X	X		
SJRP-MW8-03122019		1345	G	Water	Y	N	X	X	X	X	X	X		
SJRP-MW21-03122019		1415	G	Water	Y	N	X	X	X	X	X	X		

600-181877 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				3/13/19 1012	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

4840 2905 1276

Client Information	Sampler: A. Forsberg	Lab PM: McDaniel, Bethany A	Carrier Tracking No(s): Fed-Ex 4840 2905 1265	COC No: 600-67174-18376.3
Client Contact: Aleeca Forsberg	Phone: 505 918 1800	E-Mail: bethany.mcdaniel@testamericainc.com		Page: 2 of 2
Company: CH2M Hill, Inc.				Job #:
Address: 3721 Rutledge Rd. NE Suite B-1	Due Date Requested:			
City: Albuquerque	TAT Requested (days):			
State, Zip: NM, 87109				
Phone: 505-855-5239(Tel)	PO #: WD285077			
Email: aleeca.forsberg@jacobs.com	WO #: WD285077			
Project Name: Kinder Morgan Bloomfield, NM San Juan	Project #: 60005961			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - BTEX	2320B - Alkalinity	6010B, 7470A - NMWQCC Dissolved Metals	300_ORGFM_28D - chloride, sulfate	300_ORGFM - Nitrite, nitrite **	2540C_Calcd - TDS	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	D	N	N	N		
SJRP-PMW2-03122019	3/12/19	1600	G	Water	Y	N	X	X	X	X	X	X		**Short Hold Samples**
				Water										
				Water										
				Water										
				Water										
				Water										
				Water										
				Water										
				Water										
				Water										
				Water										

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				WD	3/13/19 1012	ZPA
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Loc: 600
181877

TestAmerica Houston

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Receipt Checklist

Date/Time Received: '19 MAR 13 10:12

JOB NUMBER: 47

CLIENT: CH2M

UNPACKED BY: 47

CARRIER/DRIVER: FE

Custody Seal Present: ☒ YES ☐ NO

Number of Coolers Received: 2

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Them CF	Corrected Temp (°C)
BW	Y / N	Y / N	2.1	1676	+.1	2.2
BW	Y / N	Y / N	3.0			3.1
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☒ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☒ YES ☐ NO

pH paper Lot # HC854592

VOA headspace acceptable (5-6mm): ☒ YES ☐ NO ☐ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X	

COMMENTS:

Client did not relinquish COC.
Sample 12 & 9 Not comp: filled (~900mL)
4 (MS/MSD), 5, 7 half filled.

3/13/19

HS-SA-WI-013 Rev. 3; 07/01/2014

Login Sample Receipt Checklist

Client: CH2M Hill, Inc. Job Number: 600-181877-1

Login Number: 181877 **List Source: Eurofins TestAmerica, Houston**
List Number: 1
Creator: Taylor, Jacquelyn R

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.2, 3.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-183730-1
Client Project/Site: San Juan Kinder Morgan 04/15/19
Revision: 1

For:
CH2M Hill, Inc.
3721 Rutledge Rd. NE
Suite B-1
Albuquerque, New Mexico 87109

Attn: Aleeca Forsberg

Steve A Stepanski

Authorized for release by:
12/7/2020 5:09:12 PM
Steve Stepanski, Project Mgmt. Assistant
(713)690-4444
steve.stepanski@Eurofinset.com

Designee for

Bethany McDaniel, Senior Project Manager
(713)358-2005
bethany.mcdaniel@testamericainc.com

LINKS
Review your project results through TotalAccess
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: CH2M Hill, Inc. Job ID: 600-183730-1
Project/Site: San Juan Kinder Morgan 04/15/19

Job ID: 600-183730-1

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative
600-183730-1

Comments
This report was revised to a Level 2 deliverable per client's request.

This report was revised on May 17, 2019 for the case narrative and replaces the original report dated May 2, 2019.

Receipt
The samples were received on 4/16/2019 8:46 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.5º C.

GC/MS VOA
Method(s) 8260B: Surrogate (1,2-Dichloroethane-d4) recovery for the following sample was outside the upper control limit: SJRP-MW18-04152019 (600-183730-1). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: The following sample was diluted due to the nature of the sample matrix (floating particles): SJRP-MW23-04152019 (600-183730-5). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: SJRP-MW17-04152019 (600-183730-3) and SJRP-MW21-04152019 (600-183730-4). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for arsenic, cadmium and selenium for preparation batch 600-263457 and analytical batch 600-263662 were high outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 6010B: Due to the high concentration of manganese, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 600-263457 and analytical batch 600-263765 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
Method(s) 300.0: Due to the high concentration of Chloride and Sulfate, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 600-262924 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method(s) 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 600-262925 were outside control limits for Nitrate as N and Nitrite as N. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 300.0:Due to the high concentration of Sulfate, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 600-263047 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: CH2M Hill, Inc. Job ID: 600-183730-1
Project/Site: San Juan Kinder Morgan 04/15/19

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2320B-1997	Alkalinity, Total - SM Online, 2011	SM-Online	TAL HOU
2540 C-1997	Total Dissolved Solids (Dried at 180 °C)	SM	TAL HOU
3010A	Acid Digestion of Aqueous Samples and Extracts for Total Metals	SW846	TAL HOU
5030B	Purge and Trap	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)/Preparation	SW846	TAL HOU

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM = "Standard Methods For The Examination Of Water And Wastewater"
SM-Online = Standard Methods Online
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: CH2M Hill, Inc.
Job ID: 600-183730-1
Project/Site: San Juan Kinder Morgan 04/15/19

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-183730-1	SJRP-MW18-04152019	Water	04/15/19 10:45	04/16/19 08:46
600-183730-2	SJRP-TB01-04152019	Water	04/15/19 10:40	04/16/19 08:46
600-183730-3	SJRP-MW17-04152019	Water	04/15/19 11:50	04/16/19 08:46
600-183730-4	SJRP-MW21-04152019	Water	04/15/19 12:25	04/16/19 08:46
600-183730-5	SJRP-MW23-04152019	Water	04/15/19 13:20	04/16/19 08:46

Client Sample Results

Client: CH2M Hill, Inc. Job ID: 600-183730-1
Project/Site: San Juan Kinder Morgan 04/15/19

Client Sample ID: SJRP-MW18-04152019 Lab Sample ID: 600-183730-1

Date Collected: 04/15/19 10:45 **Matrix: Water**
Date Received: 04/16/19 08:46

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/23/19 12:56	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/23/19 12:56	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/23/19 12:56	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/23/19 12:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*135*	*X*	*50 - 134*		*04/23/19 12:56*	*1*
Dibromofluoromethane	*120*		*62 - 130*		*04/23/19 12:56*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*04/23/19 12:56*	*1*
4-Bromofluorobenzene	*113*		*67 - 139*		*04/23/19 12:56*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1140**		200	26.7	mg/L			04/17/19 18:55	500
Nitrate as N	0.0251	U F2 F1	0.200	0.0251	mg/L			04/16/19 16:14	1
Nitrate Nitrite as N	0.0251	U	0.200	0.0251	mg/L			04/16/19 16:14	1
Sulfate	**13200**		250	47.9	mg/L			04/17/19 18:55	500
Nitrite as N	0.0297	U F1	0.200	0.0297	mg/L			04/16/19 16:14	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.221**	**J**	0.500	0.0926	mg/L		04/23/19 11:16	04/25/19 12:27	1
Arsenic	0.00285	U F1	0.0100	0.00285	mg/L		04/23/19 11:16	04/25/19 12:27	1
Barium	**0.0254**		0.0200	0.000530	mg/L		04/23/19 11:16	04/25/19 12:27	1
Boron	**0.882**		0.200	0.0116	mg/L		04/23/19 11:16	04/25/19 12:27	1
Cadmium	**0.0130**	**F1**	0.00500	0.000280	mg/L		04/23/19 11:16	04/25/19 12:27	1
Chromium	**0.00230**	**J**	0.0100	0.00159	mg/L		04/23/19 11:16	04/25/19 12:27	1
Cobalt	**0.128**		0.0100	0.000310	mg/L		04/23/19 11:16	04/25/19 12:27	1
Iron	**0.0822**	**J**	0.400	0.0270	mg/L		04/23/19 11:16	04/25/19 12:27	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/23/19 11:16	04/25/19 12:27	1
Manganese	**11.3**		0.0200	0.000720	mg/L		04/23/19 11:16	04/26/19 11:54	2
Molybdenum	**0.000700**	**J**	0.0100	0.000540	mg/L		04/23/19 11:16	04/25/19 12:27	1
Nickel	**0.255**		0.0100	0.000800	mg/L		04/23/19 11:16	04/25/19 12:27	1
Selenium	0.00287	U F1	0.0400	0.00287	mg/L		04/23/19 11:16	04/25/19 12:27	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		04/24/19 15:44	04/25/19 12:54	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**247**		20.0	20.0	mg/L			04/23/19 17:21	1
Bicarbonate Alkalinity as CaCO3	**247**		20.0	20.0	mg/L			04/23/19 17:21	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			04/23/19 17:21	1
Total Dissolved Solids	**19800**		100	100	mg/L			04/18/19 14:23	1

Client Sample Results

Client: CH2M Hill, Inc. Job ID: 600-183730-1
Project/Site: San Juan Kinder Morgan 04/15/19

Client Sample ID: SJRP-TB01-04152019 Lab Sample ID: 600-183730-2

Date Collected: 04/15/19 10:40 **Matrix: Water**
Date Received: 04/16/19 08:46

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/23/19 12:32	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/23/19 12:32	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/23/19 12:32	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/23/19 12:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*50 - 134*		*04/23/19 12:32*	*1*
Dibromofluoromethane	*114*		*62 - 130*		*04/23/19 12:32*	*1*
Toluene-d8 (Surr)	*107*		*70 - 130*		*04/23/19 12:32*	*1*
4-Bromofluorobenzene	*115*		*67 - 139*		*04/23/19 12:32*	*1*

Client Sample ID: SJRP-MW17-04152019 Lab Sample ID: 600-183730-3

Date Collected: 04/15/19 11:50 **Matrix: Water**
Date Received: 04/16/19 08:46

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	0.00530	U	0.0250	0.00530	mg/L			04/23/19 19:52	25
Toluene	**0.329**		0.0250	0.00495	mg/L			04/23/19 19:52	25
Xylenes, Total	**3.65**		0.0500	0.00915	mg/L			04/23/19 19:52	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*50 - 134*		*04/23/19 19:52*	*25*
Dibromofluoromethane	*105*		*62 - 130*		*04/23/19 19:52*	*25*
Toluene-d8 (Surr)	*109*		*70 - 130*		*04/23/19 19:52*	*25*
4-Bromofluorobenzene	*115*		*67 - 139*		*04/23/19 19:52*	*25*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**3.83**		0.200	0.0352	mg/L			04/24/19 12:34	200

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*50 - 134*		*04/24/19 12:34*	*200*
Dibromofluoromethane	*107*		*62 - 130*		*04/24/19 12:34*	*200*
Toluene-d8 (Surr)	*109*		*70 - 130*		*04/24/19 12:34*	*200*
4-Bromofluorobenzene	*117*		*67 - 139*		*04/24/19 12:34*	*200*

Client Sample ID: SJRP-MW21-04152019 Lab Sample ID: 600-183730-4

Date Collected: 04/15/19 12:25 **Matrix: Water**
Date Received: 04/16/19 08:46

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/23/19 13:21	1
Ethylbenzene	**0.0342**		0.00100	0.000212	mg/L			04/23/19 13:21	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/23/19 13:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*50 - 134*		*04/23/19 13:21*	*1*
Dibromofluoromethane	*115*		*62 - 130*		*04/23/19 13:21*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*04/23/19 13:21*	*1*
4-Bromofluorobenzene	*102*		*67 - 139*		*04/23/19 13:21*	*1*

Client Sample Results

Client: CH2M Hill, Inc. Job ID: 600-183730-1
Project/Site: San Juan Kinder Morgan 04/15/19

Client Sample ID: SJRP-MW21-04152019 Lab Sample ID: 600-183730-4

Date Collected: 04/15/19 12:25 **Matrix: Water**
Date Received: 04/16/19 08:46

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	**0.0975**		0.0100	0.00183	mg/L			04/23/19 20:41	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*50 - 134*		*04/23/19 20:41*	*5*
Dibromofluoromethane	*110*		*62 - 130*		*04/23/19 20:41*	*5*
Toluene-d8 (Surr)	*109*		*70 - 130*		*04/23/19 20:41*	*5*
4-Bromofluorobenzene	*116*		*67 - 139*		*04/23/19 20:41*	*5*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2110**		200	26.7	mg/L			04/17/19 18:37	500
Nitrate as N	0.0251	U	0.200	0.0251	mg/L			04/16/19 15:02	1
Nitrate Nitrite as N	0.0251	U	0.200	0.0251	mg/L			04/16/19 15:02	1
Sulfate	**8700**		250	47.9	mg/L			04/17/19 18:37	500
Nitrite as N	0.0297	U	0.200	0.0297	mg/L			04/16/19 15:02	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.148**	**J**	0.500	0.0926	mg/L		04/23/19 11:16	04/25/19 12:33	1
Arsenic	**0.00390**	**J**	0.0100	0.00285	mg/L		04/23/19 11:16	04/25/19 12:33	1
Barium	**0.0286**		0.0200	0.000530	mg/L		04/23/19 11:16	04/25/19 12:33	1
Boron	**0.769**		0.200	0.0116	mg/L		04/23/19 11:16	04/25/19 12:33	1
Cadmium	**0.00110**	**J**	0.00500	0.000280	mg/L		04/23/19 11:16	04/25/19 12:33	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/23/19 11:16	04/25/19 12:33	1
Cobalt	**0.00810**	**J**	0.0100	0.000310	mg/L		04/23/19 11:16	04/25/19 12:33	1
Iron	**7.52**		0.400	0.0270	mg/L		04/23/19 11:16	04/25/19 12:33	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/23/19 11:16	04/25/19 12:33	1
Manganese	**2.82**		0.0100	0.000360	mg/L		04/23/19 11:16	04/25/19 12:33	1
Molybdenum	**0.0123**		0.0100	0.000540	mg/L		04/23/19 11:16	04/25/19 12:33	1
Nickel	**0.00770**	**J**	0.0100	0.000800	mg/L		04/23/19 11:16	04/25/19 12:33	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/23/19 11:16	04/25/19 12:33	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		04/24/19 15:44	04/25/19 13:00	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**842**		20.0	20.0	mg/L			04/23/19 17:51	1
Bicarbonate Alkalinity as CaCO3	**842**		20.0	20.0	mg/L			04/23/19 17:51	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			04/23/19 17:51	1
Total Dissolved Solids	**23400**		200	200	mg/L			04/18/19 14:23	1

Client Sample ID: SJRP-MW23-04152019 Lab Sample ID: 600-183730-5

Date Collected: 04/15/19 13:20 **Matrix: Water**
Date Received: 04/16/19 08:46

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000880	U	0.00500	0.000880	mg/L			04/23/19 18:15	5
Ethylbenzene	0.00106	U	0.00500	0.00106	mg/L			04/23/19 18:15	5

Client Sample Results

Client: CH2M Hill, Inc. Job ID: 600-183730-1
Project/Site: San Juan Kinder Morgan 04/15/19

Client Sample ID: SJRP-MW23-04152019 **Lab Sample ID: 600-183730-5**
Date Collected: 04/15/19 13:20 **Matrix: Water**
Date Received: 04/16/19 08:46

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.000990	U	0.00500	0.000990	mg/L			04/23/19 18:15	5
Xylenes, Total	0.00183	U	0.0100	0.00183	mg/L			04/23/19 18:15	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*50 - 134*		*04/23/19 18:15*	*5*
Dibromofluoromethane	*105*		*62 - 130*		*04/23/19 18:15*	*5*
Toluene-d8 (Surr)	*108*		*70 - 130*		*04/23/19 18:15*	*5*
4-Bromofluorobenzene	*119*		*67 - 139*		*04/23/19 18:15*	*5*

Definitions/Glossary

Client: CH2M Hill, Inc. Job ID: 600-183730-1
Project/Site: San Juan Kinder Morgan 04/15/19

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Surrogate Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan 04/15/19

Job ID: 600-183730-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCA (50-134)	DBFM (62-130)	TOL (70-130)	BFB (67-139)
600-183730-1	SJRP-MW18-04152019	135 X	120	102	113
600-183730-1 MS	SJRP-MW18-04152019	133	126	104	114
600-183730-1 MSD	SJRP-MW18-04152019	129	125	101	115
600-183730-2	SJRP-TB01-04152019	120	114	107	115
600-183730-3	SJRP-MW17-04152019	99	105	109	115
600-183730-3 - DL	SJRP-MW17-04152019	103	107	109	117
600-183730-4	SJRP-MW21-04152019	122	115	103	102
600-183730-4 - DL	SJRP-MW21-04152019	101	110	109	116
600-183730-5	SJRP-MW23-04152019	99	105	108	119
LCS 600-263435/3	Lab Control Sample	115	120	108	113
LCS 600-263518/3	Lab Control Sample	102	114	114	117
LCSD 600-263435/4	Lab Control Sample Dup	112	116	108	114
LCSD 600-263518/4	Lab Control Sample Dup	105	115	112	117
MB 600-263435/6	Method Blank	113	112	105	109
MB 600-263518/6	Method Blank	104	107	106	112

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan 04/15/19

Job ID: 600-183730-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-263435/6
Matrix: Water
Analysis Batch: 263435

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/23/19 11:17	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/23/19 11:17	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/23/19 11:17	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/23/19 11:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*50 - 134*		*04/23/19 11:17*	*1*
Dibromofluoromethane	*112*		*62 - 130*		*04/23/19 11:17*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*04/23/19 11:17*	*1*
4-Bromofluorobenzene	*109*		*67 - 139*		*04/23/19 11:17*	*1*

Lab Sample ID: LCS 600-263435/3
Matrix: Water
Analysis Batch: 263435

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0100	0.008951		mg/L		90	70 - 130
Ethylbenzene	0.0100	0.009311		mg/L		93	70 - 130
Toluene	0.0100	0.008795		mg/L		88	70 - 130
Xylenes, Total	0.0200	0.01934		mg/L		97	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*115*		*50 - 134*
Dibromofluoromethane	*120*		*62 - 130*
Toluene-d8 (Surr)	*108*		*70 - 130*
4-Bromofluorobenzene	*113*		*67 - 139*

Lab Sample ID: LCSD 600-263435/4
Matrix: Water
Analysis Batch: 263435

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0100	0.009551		mg/L		96	70 - 130	6	20
Ethylbenzene	0.0100	0.009995		mg/L		100	70 - 130	7	20
Toluene	0.0100	0.009363		mg/L		94	70 - 130	6	20
Xylenes, Total	0.0200	0.02064		mg/L		103	70 - 130	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*112*		*50 - 134*
Dibromofluoromethane	*116*		*62 - 130*
Toluene-d8 (Surr)	*108*		*70 - 130*
4-Bromofluorobenzene	*114*		*67 - 139*

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan 04/15/19

Job ID: 600-183730-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 600-183730-1 MS
Matrix: Water
Analysis Batch: 263435

Client Sample ID: SJRP-MW18-04152019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.000176	U	0.0100	0.009831		mg/L		98	70 - 130
Ethylbenzene	0.000212	U	0.0100	0.009582		mg/L		96	70 - 130
Toluene	0.000198	U	0.0100	0.008892		mg/L		89	70 - 130
Xylenes, Total	0.000366	U	0.0200	0.02021		mg/L		101	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*133*		*50 - 134*
Dibromofluoromethane	*126*		*62 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*
4-Bromofluorobenzene	*114*		*67 - 139*

Lab Sample ID: 600-183730-1 MSD
Matrix: Water
Analysis Batch: 263435

Client Sample ID: SJRP-MW18-04152019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.000176	U	0.0100	0.009371		mg/L		94	70 - 130	5	30
Ethylbenzene	0.000212	U	0.0100	0.008939		mg/L		89	70 - 130	7	30
Toluene	0.000198	U	0.0100	0.008565		mg/L		86	70 - 130	4	30
Xylenes, Total	0.000366	U	0.0200	0.01889		mg/L		94	70 - 130	7	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*129*		*50 - 134*
Dibromofluoromethane	*125*		*62 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*
4-Bromofluorobenzene	*115*		*67 - 139*

Lab Sample ID: MB 600-263518/6
Matrix: Water
Analysis Batch: 263518

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/24/19 11:21	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/24/19 11:21	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/24/19 11:21	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/24/19 11:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*50 - 134*		*04/24/19 11:21*	*1*
Dibromofluoromethane	*107*		*62 - 130*		*04/24/19 11:21*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*04/24/19 11:21*	*1*
4-Bromofluorobenzene	*112*		*67 - 139*		*04/24/19 11:21*	*1*

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan 04/15/19

Job ID: 600-183730-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-263518/3
Matrix: Water
Analysis Batch: 263518

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0100	0.01024		mg/L		102	70 - 130		
Ethylbenzene			0.0100	0.01045		mg/L		104	70 - 130		
Toluene			0.0100	0.01012		mg/L		101	70 - 130		
Xylenes, Total			0.0200	0.02166		mg/L		108	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*50 - 134*
Dibromofluoromethane	*114*		*62 - 130*
Toluene-d8 (Surr)	*114*		*70 - 130*
4-Bromofluorobenzene	*117*		*67 - 139*

Lab Sample ID: LCSD 600-263518/4
Matrix: Water
Analysis Batch: 263518

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0100	0.009637		mg/L		96	70 - 130	6	20
Ethylbenzene			0.0100	0.009608		mg/L		96	70 - 130	8	20
Toluene			0.0100	0.009486		mg/L		95	70 - 130	6	20
Xylenes, Total			0.0200	0.01996		mg/L		100	70 - 130	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*50 - 134*
Dibromofluoromethane	*115*		*62 - 130*
Toluene-d8 (Surr)	*112*		*70 - 130*
4-Bromofluorobenzene	*117*		*67 - 139*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-262924/4
Matrix: Water
Analysis Batch: 262924

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.0534	U	0.400	0.0534	mg/L			04/16/19 12:39	1
Sulfate	0.0957	U	0.500	0.0957	mg/L			04/16/19 12:39	1

Lab Sample ID: LCS 600-262924/5
Matrix: Water
Analysis Batch: 262924

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			20.0	20.90		mg/L		104	90 - 110		
Sulfate			20.0	19.91		mg/L		100	90 - 110		

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan 04/15/19

Job ID: 600-183730-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 600-183730-1 MS
Matrix: Water
Analysis Batch: 262924

Client Sample ID: SJRP-MW18-04152019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	864	E	10.0	810.0	E 4	mg/L		-535	80 - 120
Sulfate	18600	E	10.0	17360	E 4	mg/L		-1195	80 - 120
								0	

Lab Sample ID: 600-183730-1 MSD
Matrix: Water
Analysis Batch: 262924

Client Sample ID: SJRP-MW18-04152019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	864	E	10.0	831.3	E 4	mg/L		-322	80 - 120	3	20
Sulfate	18600	E	10.0	18040	E 4	mg/L		-5122	80 - 120	4	20

Lab Sample ID: MB 600-262925/4
Matrix: Water
Analysis Batch: 262925

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.0251	U	0.200	0.0251	mg/L			04/16/19 12:39	1
Nitrate Nitrite as N	0.0251	U	0.200	0.0251	mg/L			04/16/19 12:39	1
Nitrite as N	0.0297	U	0.200	0.0297	mg/L			04/16/19 12:39	1

Lab Sample ID: LCS 600-262925/5
Matrix: Water
Analysis Batch: 262925

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	10.0	9.808		mg/L		98	90 - 110
Nitrite as N	10.0	9.816		mg/L		98	90 - 110

Lab Sample ID: 600-183730-1 MS
Matrix: Water
Analysis Batch: 262925

Client Sample ID: SJRP-MW18-04152019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.0251	U F2 F1	2.00	0.4679	F1	mg/L		23	80 - 120
Nitrite as N	0.0297	U F1	2.00	0.0297	U F1	mg/L		0	80 - 120

Lab Sample ID: 600-183730-1 MSD
Matrix: Water
Analysis Batch: 262925

Client Sample ID: SJRP-MW18-04152019
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	0.0251	U F2 F1	2.00	0.2034	F2 F1	mg/L		10	80 - 120	79	20
Nitrite as N	0.0297	U F1	2.00	0.0297	U F1	mg/L		0	80 - 120	NC	20

QC Sample Results

Client: CH2M Hill, Inc. Job ID: 600-183730-1
Project/Site: San Juan Kinder Morgan 04/15/19

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 600-263047/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 263047

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.0534	U	0.400	0.0534	mg/L			04/17/19 13:51	1
Sulfate	0.0957	U	0.500	0.0957	mg/L			04/17/19 13:51	1

Lab Sample ID: LCS 600-263047/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 263047

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	20.0	21.00		mg/L		105	90 - 110
Sulfate	20.0	19.89		mg/L		99	90 - 110

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-263457/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 263662 — **Prep Batch: 263457**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		04/23/19 11:16	04/25/19 11:31	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		04/23/19 11:16	04/25/19 11:31	1
Barium	0.000530	U	0.0200	0.000530	mg/L		04/23/19 11:16	04/25/19 11:31	1
Boron	0.0116	U	0.200	0.0116	mg/L		04/23/19 11:16	04/25/19 11:31	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		04/23/19 11:16	04/25/19 11:31	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/23/19 11:16	04/25/19 11:31	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		04/23/19 11:16	04/25/19 11:31	1
Iron	0.0270	U	0.400	0.0270	mg/L		04/23/19 11:16	04/25/19 11:31	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/23/19 11:16	04/25/19 11:31	1
Manganese	0.000360	U	0.0100	0.000360	mg/L		04/23/19 11:16	04/25/19 11:31	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		04/23/19 11:16	04/25/19 11:31	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		04/23/19 11:16	04/25/19 11:31	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/23/19 11:16	04/25/19 11:31	1

Lab Sample ID: MB 600-263457/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 263765 — **Prep Batch: 263457**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		04/23/19 11:16	04/26/19 11:14	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		04/23/19 11:16	04/26/19 11:14	1
Barium	0.000530	U	0.0200	0.000530	mg/L		04/23/19 11:16	04/26/19 11:14	1
Boron	0.0116	U	0.200	0.0116	mg/L		04/23/19 11:16	04/26/19 11:14	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		04/23/19 11:16	04/26/19 11:14	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/23/19 11:16	04/26/19 11:14	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		04/23/19 11:16	04/26/19 11:14	1
Iron	0.0270	U	0.400	0.0270	mg/L		04/23/19 11:16	04/26/19 11:14	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/23/19 11:16	04/26/19 11:14	1
Manganese	0.000360	U	0.0100	0.000360	mg/L		04/23/19 11:16	04/26/19 11:14	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		04/23/19 11:16	04/26/19 11:14	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		04/23/19 11:16	04/26/19 11:14	1

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan 04/15/19

Job ID: 600-183730-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: MB 600-263457/1-A
Matrix: Water
Analysis Batch: 263765

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 263457

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/23/19 11:16	04/26/19 11:14	1

Lab Sample ID: LCS 600-263457/2-A
Matrix: Water
Analysis Batch: 263662

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 263457

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	10.10		mg/L		101	80 - 120
Arsenic	1.00	1.054		mg/L		105	80 - 120
Barium	1.00	1.038		mg/L		104	80 - 120
Boron	1.00	0.9684		mg/L		97	80 - 120
Cadmium	0.500	0.5402		mg/L		108	80 - 120
Chromium	1.00	0.9930		mg/L		99	80 - 120
Cobalt	1.00	1.045		mg/L		105	80 - 120
Iron	10.0	10.15		mg/L		102	80 - 120
Lead	1.00	1.032		mg/L		103	80 - 120
Manganese	1.00	1.041		mg/L		104	80 - 120
Molybdenum	1.00	1.101		mg/L		110	80 - 120
Nickel	1.00	1.029		mg/L		103	80 - 120
Selenium	1.00	1.047		mg/L		105	80 - 120

Lab Sample ID: LCS 600-263457/2-A
Matrix: Water
Analysis Batch: 263765

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 263457

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	9.908		mg/L		99	80 - 120
Arsenic	1.00	1.073		mg/L		107	80 - 120
Barium	1.00	1.045		mg/L		105	80 - 120
Boron	1.00	1.007		mg/L		101	80 - 120
Cadmium	0.500	0.5426		mg/L		109	80 - 120
Chromium	1.00	1.081		mg/L		108	80 - 120
Cobalt	1.00	1.040		mg/L		104	80 - 120
Iron	10.0	10.35		mg/L		104	80 - 120
Lead	1.00	1.026		mg/L		103	80 - 120
Manganese	1.00	1.043		mg/L		104	80 - 120
Molybdenum	1.00	1.114		mg/L		111	80 - 120
Nickel	1.00	1.029		mg/L		103	80 - 120
Selenium	1.00	1.084		mg/L		108	80 - 120

Lab Sample ID: 600-183730-1 MS
Matrix: Water
Analysis Batch: 263662

Client Sample ID: SJRP-MW18-04152019
Prep Type: Total/NA
Prep Batch: 263457

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.221	J	10.0	12.12		mg/L		119	75 - 125
Arsenic	0.00285	U F1	1.00	1.387	F1	mg/L		139	75 - 125
Barium	0.0254		1.00	1.091		mg/L		107	75 - 125
Boron	0.882		1.00	1.910		mg/L		103	75 - 125

QC Sample Results

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan 04/15/19

Job ID: 600-183730-1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry (Continued)

Lab Sample ID: 600-183730-1 MS — **Client Sample ID: SJRP-MW18-04152019**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 263662 — **Prep Batch: 263457**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.0130	F1	0.500	0.7352	F1	mg/L		144	75 - 125
Chromium	0.00230	J	1.00	0.8909		mg/L		89	75 - 125
Cobalt	0.128		1.00	1.242		mg/L		111	75 - 125
Iron	0.0822	J	10.0	10.41		mg/L		103	75 - 125
Lead	0.00219	U	1.00	1.012		mg/L		101	75 - 125
Molybdenum	0.000700	J	1.00	1.040		mg/L		104	75 - 125
Nickel	0.255		1.00	1.314		mg/L		106	75 - 125
Selenium	0.00287	U F1	1.00	1.657	F1	mg/L		166	75 - 125

Lab Sample ID: 600-183730-1 MS — **Client Sample ID: SJRP-MW18-04152019**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 263765 — **Prep Batch: 263457**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	11.3		1.00	11.72	4	mg/L		47	75 - 125

Lab Sample ID: 600-183730-1 MSD — **Client Sample ID: SJRP-MW18-04152019**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 263662 — **Prep Batch: 263457**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.221	J	10.0	12.00		mg/L		118	75 - 125	1	20
Arsenic	0.00285	U F1	1.00	1.380	F1	mg/L		138	75 - 125	1	20
Barium	0.0254		1.00	1.092		mg/L		107	75 - 125	0	20
Boron	0.882		1.00	1.891		mg/L		101	75 - 125	1	20
Cadmium	0.0130	F1	0.500	0.7361	F1	mg/L		145	75 - 125	0	20
Chromium	0.00230	J	1.00	0.8778		mg/L		88	75 - 125	1	20
Cobalt	0.128		1.00	1.252		mg/L		112	75 - 125	1	20
Iron	0.0822	J	10.0	10.41		mg/L		103	75 - 125	0	20
Lead	0.00219	U	1.00	1.017		mg/L		102	75 - 125	0	20
Molybdenum	0.000700	J	1.00	1.047		mg/L		105	75 - 125	1	20
Nickel	0.255		1.00	1.322		mg/L		107	75 - 125	1	20
Selenium	0.00287	U F1	1.00	1.656	F1	mg/L		166	75 - 125	0	20

Lab Sample ID: 600-183730-1 MSD — **Client Sample ID: SJRP-MW18-04152019**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 263765 — **Prep Batch: 263457**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Manganese	11.3		1.00	11.83	4	mg/L		58	75 - 125	1	20

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Lab Sample ID: LB 600-263322/1-I — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 263683 — **Prep Batch: 263596**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		04/24/19 15:44	04/25/19 12:08	1

QC Sample Results

Client: CH2M Hill, Inc. Job ID: 600-183730-1
Project/Site: San Juan Kinder Morgan 04/15/19

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) (Continued)

Lab Sample ID: MB 600-263596/7-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 263683 — **Prep Batch: 263596**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		04/24/19 15:44	04/25/19 11:53	1

Lab Sample ID: LCS 600-263596/8-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 263683 — **Prep Batch: 263596**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00375	0.003554		mg/L		95	70 - 130

Lab Sample ID: 600-183730-1 MS — **Client Sample ID: SJRP-MW18-04152019**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 263683 — **Prep Batch: 263596**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.000103	U	0.00375	0.003767		mg/L		100	75 - 125

Lab Sample ID: 600-183730-1 MSD — **Client Sample ID: SJRP-MW18-04152019**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 263683 — **Prep Batch: 263596**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.000103	U	0.00375	0.003701		mg/L		99	75 - 125	2	20

Method: 2320B-1997 - Alkalinity, Total - SM Online, 2011

Lab Sample ID: MB 600-263603/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 263603

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	20.0	U	20.0	20.0	mg/L			04/23/19 17:06	1
Bicarbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			04/23/19 17:06	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			04/23/19 17:06	1

Lab Sample ID: LCS 600-263603/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 263603

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	100	101.1		mg/L		101	90 - 110

Lab Sample ID: 600-183730-1 MS — **Client Sample ID: SJRP-MW18-04152019**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 263603

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	247		250	504.5		mg/L		103	75 - 125

QC Sample Results

Client: CH2M Hill, Inc. Job ID: 600-183730-1
Project/Site: San Juan Kinder Morgan 04/15/19

Method: 2320B-1997 - Alkalinity, Total - SM Online, 2011 (Continued)

Lab Sample ID: 600-183730-1 MSD **Client Sample ID: SJRP-MW18-04152019**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 263603

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Alkalinity	247		250	517.1		mg/L		108	75 - 125	2	20

Method: 2540 C-1997 - Total Dissolved Solids (Dried at 180 °C)

Lab Sample ID: MB 600-263159/1 **Client Sample ID: Method Blank**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 263159

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10.0	U	10.0	10.0	mg/L			04/18/19 14:23	1

Lab Sample ID: LCS 600-263159/2 **Client Sample ID: Lab Control Sample**
Matrix: Water **Prep Type: Total/NA**
Analysis Batch: 263159

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1800	1871		mg/L		104	90 - 110

QC Association Summary

Client: CH2M Hill, Inc. Job ID: 600-183730-1
Project/Site: San Juan Kinder Morgan 04/15/19

GC/MS VOA

Analysis Batch: 263435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-183730-1	SJRP-MW18-04152019	Total/NA	Water	8260B	
600-183730-2	SJRP-TB01-04152019	Total/NA	Water	8260B	
600-183730-3	SJRP-MW17-04152019	Total/NA	Water	8260B	
600-183730-4	SJRP-MW21-04152019	Total/NA	Water	8260B	
600-183730-4 - DL	SJRP-MW21-04152019	Total/NA	Water	8260B	
600-183730-5	SJRP-MW23-04152019	Total/NA	Water	8260B	
MB 600-263435/6	Method Blank	Total/NA	Water	8260B	
LCS 600-263435/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-263435/4	Lab Control Sample Dup	Total/NA	Water	8260B	
600-183730-1 MS	SJRP-MW18-04152019	Total/NA	Water	8260B	
600-183730-1 MSD	SJRP-MW18-04152019	Total/NA	Water	8260B	

Analysis Batch: 263518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-183730-3 - DL	SJRP-MW17-04152019	Total/NA	Water	8260B	
MB 600-263518/6	Method Blank	Total/NA	Water	8260B	
LCS 600-263518/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-263518/4	Lab Control Sample Dup	Total/NA	Water	8260B	

HPLC/IC

Analysis Batch: 262924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-262924/4	Method Blank	Total/NA	Water	300.0	
LCS 600-262924/5	Lab Control Sample	Total/NA	Water	300.0	
600-183730-1 MS	SJRP-MW18-04152019	Total/NA	Water	300.0	
600-183730-1 MSD	SJRP-MW18-04152019	Total/NA	Water	300.0	

Analysis Batch: 262925

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-183730-1	SJRP-MW18-04152019	Total/NA	Water	300.0	
600-183730-4	SJRP-MW21-04152019	Total/NA	Water	300.0	
MB 600-262925/4	Method Blank	Total/NA	Water	300.0	
LCS 600-262925/5	Lab Control Sample	Total/NA	Water	300.0	
600-183730-1 MS	SJRP-MW18-04152019	Total/NA	Water	300.0	
600-183730-1 MSD	SJRP-MW18-04152019	Total/NA	Water	300.0	

Analysis Batch: 263047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-183730-1	SJRP-MW18-04152019	Total/NA	Water	300.0	
600-183730-4	SJRP-MW21-04152019	Total/NA	Water	300.0	
MB 600-263047/4	Method Blank	Total/NA	Water	300.0	
LCS 600-263047/5	Lab Control Sample	Total/NA	Water	300.0	

Metals

Leach Batch: 263322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 600-263322/1-I	Method Blank	Total/NA	Water	1311	

QC Association Summary

Client: CH2M Hill, Inc.
Job ID: 600-183730-1
Project/Site: San Juan Kinder Morgan 04/15/19

Metals

Prep Batch: 263457

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-183730-1	SJRP-MW18-04152019	Total/NA	Water	3010A	
600-183730-4	SJRP-MW21-04152019	Total/NA	Water	3010A	
MB 600-263457/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-263457/2-A	Lab Control Sample	Total/NA	Water	3010A	
600-183730-1 MS	SJRP-MW18-04152019	Total/NA	Water	3010A	
600-183730-1 MSD	SJRP-MW18-04152019	Total/NA	Water	3010A	

Prep Batch: 263596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-183730-1	SJRP-MW18-04152019	Total/NA	Water	7470A	
600-183730-4	SJRP-MW21-04152019	Total/NA	Water	7470A	
LB 600-263322/1-I	Method Blank	Total/NA	Water	7470A	263322
MB 600-263596/7-A	Method Blank	Total/NA	Water	7470A	
LCS 600-263596/8-A	Lab Control Sample	Total/NA	Water	7470A	
600-183730-1 MS	SJRP-MW18-04152019	Total/NA	Water	7470A	
600-183730-1 MSD	SJRP-MW18-04152019	Total/NA	Water	7470A	

Analysis Batch: 263662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-183730-1	SJRP-MW18-04152019	Total/NA	Water	6010B	263457
600-183730-4	SJRP-MW21-04152019	Total/NA	Water	6010B	263457
MB 600-263457/1-A	Method Blank	Total/NA	Water	6010B	263457
LCS 600-263457/2-A	Lab Control Sample	Total/NA	Water	6010B	263457
600-183730-1 MS	SJRP-MW18-04152019	Total/NA	Water	6010B	263457
600-183730-1 MSD	SJRP-MW18-04152019	Total/NA	Water	6010B	263457

Analysis Batch: 263683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-183730-1	SJRP-MW18-04152019	Total/NA	Water	7470A	263596
600-183730-4	SJRP-MW21-04152019	Total/NA	Water	7470A	263596
LB 600-263322/1-I	Method Blank	Total/NA	Water	7470A	263596
MB 600-263596/7-A	Method Blank	Total/NA	Water	7470A	263596
LCS 600-263596/8-A	Lab Control Sample	Total/NA	Water	7470A	263596
600-183730-1 MS	SJRP-MW18-04152019	Total/NA	Water	7470A	263596
600-183730-1 MSD	SJRP-MW18-04152019	Total/NA	Water	7470A	263596

Analysis Batch: 263765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-183730-1	SJRP-MW18-04152019	Total/NA	Water	6010B	263457
MB 600-263457/1-A	Method Blank	Total/NA	Water	6010B	263457
LCS 600-263457/2-A	Lab Control Sample	Total/NA	Water	6010B	263457
600-183730-1 MS	SJRP-MW18-04152019	Total/NA	Water	6010B	263457
600-183730-1 MSD	SJRP-MW18-04152019	Total/NA	Water	6010B	263457

General Chemistry

Analysis Batch: 263159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-183730-1	SJRP-MW18-04152019	Total/NA	Water	2540 C-1997	
600-183730-4	SJRP-MW21-04152019	Total/NA	Water	2540 C-1997	
MB 600-263159/1	Method Blank	Total/NA	Water	2540 C-1997	

QC Association Summary

Client: CH2M Hill, Inc. Job ID: 600-183730-1
Project/Site: San Juan Kinder Morgan 04/15/19

General Chemistry (Continued)

Analysis Batch: 263159 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 600-263159/2	Lab Control Sample	Total/NA	Water	2540 C-1997	
600-183730-1 MS	SJRP-MW18-04152019	Total/NA	Water	2540 C-1997	
600-183730-1 MSD	SJRP-MW18-04152019	Total/NA	Water	2540 C-1997	

Analysis Batch: 263603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-183730-1	SJRP-MW18-04152019	Total/NA	Water	2320B-1997	
600-183730-4	SJRP-MW21-04152019	Total/NA	Water	2320B-1997	
MB 600-263603/4	Method Blank	Total/NA	Water	2320B-1997	
LCS 600-263603/5	Lab Control Sample	Total/NA	Water	2320B-1997	
600-183730-1 MS	SJRP-MW18-04152019	Total/NA	Water	2320B-1997	
600-183730-1 MSD	SJRP-MW18-04152019	Total/NA	Water	2320B-1997	

Lab Chronicle

Client: CH2M Hill, Inc.
Job ID: 600-183730-1
Project/Site: San Juan Kinder Morgan 04/15/19

Client Sample ID: SJRP-MW18-04152019
Lab Sample ID: 600-183730-1
Date Collected: 04/15/19 10:45
Matrix: Water
Date Received: 04/16/19 08:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	263435	04/23/19 12:56	WS1	TAL HOU
Total/NA	Analysis	300.0		1			262925	04/16/19 16:14	SKR	TAL HOU
Total/NA	Analysis	300.0		500			263047	04/17/19 18:55	SKR	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	263457	04/23/19 11:16	DCL	TAL HOU
Total/NA	Analysis	6010B		1			263662	04/25/19 12:27	KP1	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	263457	04/23/19 11:16	DCL	TAL HOU
Total/NA	Analysis	6010B		2			263765	04/26/19 11:54	KP1	TAL HOU
Total/NA	Prep	7470A			40 mL	50 mL	263596	04/24/19 15:44	SOT	TAL HOU
Total/NA	Analysis	7470A		1			263683	04/25/19 12:54	SOT	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	263603	04/23/19 17:21	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	10 mL	100 mL	263159	04/18/19 14:23	DTN	TAL HOU

Client Sample ID: SJRP-TB01-04152019
Lab Sample ID: 600-183730-2
Date Collected: 04/15/19 10:40
Matrix: Water
Date Received: 04/16/19 08:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	263435	04/23/19 12:32	WS1	TAL HOU

Client Sample ID: SJRP-MW17-04152019
Lab Sample ID: 600-183730-3
Date Collected: 04/15/19 11:50
Matrix: Water
Date Received: 04/16/19 08:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		25	20 mL	20 mL	263435	04/23/19 19:52	WS1	TAL HOU
Total/NA	Analysis	8260B	DL	200	20 mL	20 mL	263518	04/24/19 12:34	WS1	TAL HOU

Client Sample ID: SJRP-MW21-04152019
Lab Sample ID: 600-183730-4
Date Collected: 04/15/19 12:25
Matrix: Water
Date Received: 04/16/19 08:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	263435	04/23/19 13:21	WS1	TAL HOU
Total/NA	Analysis	8260B	DL	5	20 mL	20 mL	263435	04/23/19 20:41	WS1	TAL HOU
Total/NA	Analysis	300.0		1			262925	04/16/19 15:02	SKR	TAL HOU
Total/NA	Analysis	300.0		500			263047	04/17/19 18:37	SKR	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	263457	04/23/19 11:16	DCL	TAL HOU
Total/NA	Analysis	6010B		1			263662	04/25/19 12:33	KP1	TAL HOU
Total/NA	Prep	7470A			40 mL	50 mL	263596	04/24/19 15:44	SOT	TAL HOU
Total/NA	Analysis	7470A		1			263683	04/25/19 13:00	SOT	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	263603	04/23/19 17:51	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	5 mL	100 mL	263159	04/18/19 14:23	DTN	TAL HOU

Lab Chronicle

Client: CH2M Hill, Inc. Job ID: 600-183730-1
Project/Site: San Juan Kinder Morgan 04/15/19

Client Sample ID: SJRP-MW23-04152019 Lab Sample ID: 600-183730-5

Date Collected: 04/15/19 13:20 **Matrix: Water**
Date Received: 04/16/19 08:46

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	20 mL	20 mL	263435	04/23/19 18:15	WS1	TAL HOU

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Accreditation/Certification Summary

Client: CH2M Hill, Inc. Job ID: 600-183730-1
Project/Site: San Juan Kinder Morgan 04/15/19

Laboratory: Eurofins TestAmerica, Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	18-061-0	08-04-19
Louisiana	NELAP	6	01967	06-30-19
Oklahoma	State Program	6	2018-052	08-31-19
Texas	NELAP	6	T104704223-18-23	10-31-19
USDA	Federal		P330-18-00130	04-30-21

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Dallas/Ft. Worth #238

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Forsberg	Lab PM: McDaniel, Bethany A	Carrier Tracking No(s): FedEx 6025 5778 2284	COC No: 600-67876-18578.1
Client Contact: Jeffrey Minchak	Phone: 5059181800	E-Mail: bethany.mcdaniel@testamericainc.com		Page: Page 1 of 2
Company: CH2M Hill, Inc.				Job #:
Address: 3721 Rutledge Rd. NE Suite B-1	Due Date Requested:			
City: Albuquerque	TAT Requested (days): See ARF			
State, Zip: NM, 87109				
Phone: 505-855-5239(Tel)	PO #: WD794541			
Email: jeffrey.minchak@jacobs.com	WO #: WD794541			
Project Name: Kinder Morgan Bloomfield, NM San Juan	Project #: 60005961			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 7470A - NMWQCC Metals	8260B_LL - BTEX	2320B - Alkalinity	8015C_DRO - Diesel & Oil Range Organics	8015C_GRO - GRO Range (C6-C10)	2540C_Calcd - TDS	300_ORGFM_28D - Chloride, Sulfate	300_ORGFMS - Nitrate, Nitrite	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	N	N	N	N	N	N		
SJRP-MW18-04152019	4/15/19	1045	G	Water	Y	X	X	X	X			X	X	X		MS/MSD
SJRP-TB01-04152019		1040	G	Water	N	N		X								HCl preserved
SJRP-MW17-04152019		1150	G	Water	N	N		X								
SJRP-MW21-04152019		1225	G	Water	Y	N	X	X	X			X	X	X		
SJRP-MW23-04152019		1320	G	Water	N	N		2								very muddy H_2O
				Water												
				Water												
				Water												
				Water												
				Water												
				Water												

600-183730 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		4/15/19 1600	Jacobs	FedEx 6025 5798 2284		
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
					4-16-19 0846	TA Houston
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

TestAmerica Houston

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Loc: 600 eipt Checklist
183730

'19 APR 16 8:4

Date/Time Received: _____

JOB NUMBER: _____ CLIENT: CH2m Hill

UNPACKED BY: J. A. CARRIER/DRIVER: Fedex

Custody Seal Present: ☑ YES ☐ NO Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Them CF	Corrected Temp (°C)
BW	Y / N	Y / N	3.4	IR678	+0.1	3.5
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

J. A. 4-16-19

CF = correction factor

Samples received on ice? ☑ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☑ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☐ YES ☐ NO

pH paper Lot #_____

VOA headspace acceptable (5-6mm): ☑ YES ☐ NO ☐ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	☑	

COMMENTS:

J. A. 4-16-19

HS-SA-WI-013 Rev. 3; 07/01/2014



600.183730 Wayl

Login Sample Receipt Checklist

Client: CH2M Hill, Inc. Job Number: 600-183730-1

Login Number: 183730 **List Source: Eurofins TestAmerica, Houston**
List Number: 1
Creator: Snow, Tiffany B

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

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ANALYTICAL REPORT

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-183790-1
Client Project/Site: San Juan Kinder Morgan 04/16/19
Revision: 1

For:
CH2M Hill, Inc.
3721 Rutledge Rd. NE
Suite B-1
Albuquerque, New Mexico 87109

Attn: Aleeca Forsberg

Steve A Stepanski

Authorized for release by:
12/7/2020 5:10:33 PM
Steve Stepanski, Project Mgmt. Assistant
(713)690-4444
steve.stepanski@Eurofinset.com

Designee for

Bethany McDaniel, Senior Project Manager
(713)358-2005
bethany.mcdaniel@testamericainc.com

LINKS
Review your project results through TotalAccess
Have a Question? Ask The Expert
Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan 04/16/19

Laboratory Job ID: 600-183790-1

Table of Contents

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Case Narrative

Client: CH2M Hill, Inc. Job ID: 600-183790-1
Project/Site: San Juan Kinder Morgan 04/16/19

Job ID: 600-183790-1

Laboratory: Eurofins TestAmerica, Houston

Narrative

Job Narrative
600-183790-1

Comments
This report was revised to a Level 2 deliverable per client's request.

Receipt
The samples were received on 4/17/2019 8:49 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.3º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method(s) 6010B: The serial dilution performed for the following sample associated with batch 600-263765 was outside control limits for Barium (12%): (600-183437-B-2-A SD ^5)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Method Summary

Client: CH2M Hill, Inc. Job ID: 600-183790-1
Project/Site: San Juan Kinder Morgan 04/16/19

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU
6010B	Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
2320B-1997	Alkalinity, Total - SM Online, 2011	SM-Online	TAL HOU
2540 C-1997	Total Dissolved Solids (Dried at 180 °C)	SM	TAL HOU
3010A	Acid Digestion of Aqueous Samples and Extracts for Total Metals	SW846	TAL HOU
5030B	Purge and Trap	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)/Preparation	SW846	TAL HOU

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater"

SM-Online = Standard Methods Online

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: CH2M Hill, Inc.
Job ID: 600-183790-1
Project/Site: San Juan Kinder Morgan 04/16/19

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-183790-1	SJRP-TB02-04162019	Water	04/16/19 08:20	04/17/19 08:49
600-183790-2	SJRP-PMW4-04162019	Water	04/16/19 08:30	04/17/19 08:49
600-183790-3	SJRP-PMW4-04162019-2	Water	04/16/19 08:40	04/17/19 08:49
600-183790-4	SJRP-PMW1-04162019	Water	04/16/19 09:10	04/17/19 08:49

Client Sample Results

Client: CH2M Hill, Inc. Job ID: 600-183790-1
Project/Site: San Juan Kinder Morgan 04/16/19

Client Sample ID: SJRP-TB02-04162019 Lab Sample ID: 600-183790-1

Date Collected: 04/16/19 08:20 **Matrix: Water**
Date Received: 04/17/19 08:49

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/20/19 17:56	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/20/19 17:56	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/20/19 17:56	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/20/19 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*50 - 134*		*04/20/19 17:56*	*1*
Dibromofluoromethane	*85*		*62 - 130*		*04/20/19 17:56*	*1*
Toluene-d8 (Surr)	*85*		*70 - 130*		*04/20/19 17:56*	*1*
4-Bromofluorobenzene	*88*		*67 - 139*		*04/20/19 17:56*	*1*

Client Sample ID: SJRP-PMW4-04162019 Lab Sample ID: 600-183790-2

Date Collected: 04/16/19 08:30 **Matrix: Water**
Date Received: 04/17/19 08:49

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/20/19 18:25	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/20/19 18:25	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/20/19 18:25	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/20/19 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*79*		*50 - 134*		*04/20/19 18:25*	*1*
Dibromofluoromethane	*83*		*62 - 130*		*04/20/19 18:25*	*1*
Toluene-d8 (Surr)	*80*		*70 - 130*		*04/20/19 18:25*	*1*
4-Bromofluorobenzene	*79*		*67 - 139*		*04/20/19 18:25*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3010**		200	26.7	mg/L			04/18/19 15:56	500
Nitrate as N	0.0251	U	0.200	0.0251	mg/L			04/17/19 15:20	1
Nitrate Nitrite as N	0.0251	U	0.200	0.0251	mg/L			04/17/19 15:20	1
Sulfate	**4540**		250	47.9	mg/L			04/18/19 15:56	500
Nitrite as N	0.0297	U	0.200	0.0297	mg/L			04/17/19 15:20	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.558**		0.500	0.0926	mg/L		04/25/19 09:17	04/26/19 10:11	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		04/25/19 09:17	04/26/19 10:11	1
Barium	**0.0183**	**J**	0.0200	0.000530	mg/L		04/25/19 09:17	04/26/19 10:11	1
Boron	**0.439**		0.200	0.0116	mg/L		04/25/19 09:17	04/26/19 10:11	1
Cadmium	**0.000500**	**J**	0.00500	0.000280	mg/L		04/25/19 09:17	04/26/19 10:11	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/25/19 09:17	04/26/19 10:11	1
Cobalt	**0.00370**	**J**	0.0100	0.000310	mg/L		04/25/19 09:17	04/26/19 10:11	1
Iron	**0.419**		0.400	0.0270	mg/L		04/25/19 09:17	04/26/19 10:11	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/25/19 09:17	04/26/19 10:11	1
Manganese	**0.734**		0.0100	0.000360	mg/L		04/25/19 09:17	04/26/19 10:11	1
Molybdenum	**0.00210**	**J**	0.0100	0.000540	mg/L		04/25/19 09:17	04/26/19 10:11	1
Nickel	**0.00360**	**J**	0.0100	0.000800	mg/L		04/25/19 09:17	04/26/19 10:11	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/25/19 09:17	04/26/19 10:11	1

Client Sample Results

Client: CH2M Hill, Inc. Job ID: 600-183790-1
Project/Site: San Juan Kinder Morgan 04/16/19

Client Sample ID: SJRP-PMW4-04162019 Lab Sample ID: 600-183790-2

Date Collected: 04/16/19 08:30 **Matrix: Water**
Date Received: 04/17/19 08:49

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		04/25/19 14:42	04/26/19 11:52	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**220**		20.0	20.0	mg/L			04/20/19 04:50	1
Bicarbonate Alkalinity as CaCO3	**220**		20.0	20.0	mg/L			04/20/19 04:50	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			04/20/19 04:50	1
Total Dissolved Solids	**12400**		200	200	mg/L			04/22/19 12:34	1

Client Sample ID: SJRP-PMW4-04162019-2 Lab Sample ID: 600-183790-3

Date Collected: 04/16/19 08:40 **Matrix: Water**
Date Received: 04/17/19 08:49

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/20/19 18:53	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/20/19 18:53	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/20/19 18:53	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/20/19 18:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*76*		*50 - 134*		*04/20/19 18:53*	*1*
Dibromofluoromethane	*77*		*62 - 130*		*04/20/19 18:53*	*1*
Toluene-d8 (Surr)	*80*		*70 - 130*		*04/20/19 18:53*	*1*
4-Bromofluorobenzene	*86*		*67 - 139*		*04/20/19 18:53*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6470**		200	26.7	mg/L			04/18/19 16:14	500
Nitrate as N	0.0251	U	0.200	0.0251	mg/L			04/17/19 15:38	1
Nitrate Nitrite as N	0.0251	U	0.200	0.0251	mg/L			04/17/19 15:38	1
Sulfate	**13900**		250	47.9	mg/L			04/18/19 16:14	500
Nitrite as N	0.0297	U	0.200	0.0297	mg/L			04/17/19 15:38	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.757**		0.500	0.0926	mg/L		04/25/19 09:17	04/26/19 10:19	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		04/25/19 09:17	04/26/19 10:19	1
Barium	**0.0195**	**J**	0.0200	0.000530	mg/L		04/25/19 09:17	04/26/19 10:19	1
Boron	**0.446**		0.200	0.0116	mg/L		04/25/19 09:17	04/26/19 10:19	1
Cadmium	**0.000700**	**J**	0.00500	0.000280	mg/L		04/25/19 09:17	04/26/19 10:19	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/25/19 09:17	04/26/19 10:19	1
Cobalt	**0.00320**	**J**	0.0100	0.000310	mg/L		04/25/19 09:17	04/26/19 10:19	1
Iron	**0.563**		0.400	0.0270	mg/L		04/25/19 09:17	04/26/19 10:19	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/25/19 09:17	04/26/19 10:19	1
Manganese	**0.736**		0.0100	0.000360	mg/L		04/25/19 09:17	04/26/19 10:19	1
Molybdenum	**0.00260**	**J**	0.0100	0.000540	mg/L		04/25/19 09:17	04/26/19 10:19	1
Nickel	**0.00450**	**J**	0.0100	0.000800	mg/L		04/25/19 09:17	04/26/19 10:19	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/25/19 09:17	04/26/19 10:19	1

Client Sample Results

Client: CH2M Hill, Inc. Job ID: 600-183790-1
Project/Site: San Juan Kinder Morgan 04/16/19

Client Sample ID: SJRP-PMW4-04162019-2 Lab Sample ID: 600-183790-3

Date Collected: 04/16/19 08:40 **Matrix: Water**
Date Received: 04/17/19 08:49

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		04/25/19 14:42	04/26/19 11:55	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**229**		20.0	20.0	mg/L			04/20/19 04:58	1
Bicarbonate Alkalinity as CaCO3	**229**		20.0	20.0	mg/L			04/20/19 04:58	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			04/20/19 04:58	1
Total Dissolved Solids	**12200**		100	100	mg/L			04/22/19 12:34	1

Client Sample ID: SJRP-PMW1-04162019 Lab Sample ID: 600-183790-4

Date Collected: 04/16/19 09:10 **Matrix: Water**
Date Received: 04/17/19 08:49

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/20/19 19:21	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/20/19 19:21	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/20/19 19:21	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/20/19 19:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*74*		*50 - 134*		*04/20/19 19:21*	*1*
Dibromofluoromethane	*78*		*62 - 130*		*04/20/19 19:21*	*1*
Toluene-d8 (Surr)	*86*		*70 - 130*		*04/20/19 19:21*	*1*
4-Bromofluorobenzene	*85*		*67 - 139*		*04/20/19 19:21*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1200**		200	26.7	mg/L			04/18/19 16:32	500
Nitrate as N	**0.0281**	**J**	0.200	0.0251	mg/L			04/17/19 15:56	1
Nitrate Nitrite as N	**0.0281**	**J**	0.200	0.0251	mg/L			04/17/19 15:56	1
Sulfate	**5050**		250	47.9	mg/L			04/18/19 16:32	500
Nitrite as N	0.0297	U	0.200	0.0297	mg/L			04/17/19 15:56	1

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.370**	**J**	0.500	0.0926	mg/L		04/25/19 09:17	04/26/19 10:21	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		04/25/19 09:17	04/26/19 10:21	1
Barium	**0.0131**	**J**	0.0200	0.000530	mg/L		04/25/19 09:17	04/26/19 10:21	1
Boron	**0.467**		0.200	0.0116	mg/L		04/25/19 09:17	04/26/19 10:21	1
Cadmium	**0.000400**	**J**	0.00500	0.000280	mg/L		04/25/19 09:17	04/26/19 10:21	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/25/19 09:17	04/26/19 10:21	1
Cobalt	**0.00130**	**J**	0.0100	0.000310	mg/L		04/25/19 09:17	04/26/19 10:21	1
Iron	**0.313**	**J**	0.400	0.0270	mg/L		04/25/19 09:17	04/26/19 10:21	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/25/19 09:17	04/26/19 10:21	1
Manganese	**0.285**		0.0100	0.000360	mg/L		04/25/19 09:17	04/26/19 10:21	1
Molybdenum	**0.00440**	**J**	0.0100	0.000540	mg/L		04/25/19 09:17	04/26/19 10:21	1
Nickel	**0.00160**	**J**	0.0100	0.000800	mg/L		04/25/19 09:17	04/26/19 10:21	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/25/19 09:17	04/26/19 10:21	1

Client Sample Results

Client: CH2M Hill, Inc. Job ID: 600-183790-1
Project/Site: San Juan Kinder Morgan 04/16/19

Client Sample ID: SJRP-PMW1-04162019 Lab Sample ID: 600-183790-4

Date Collected: 04/16/19 09:10 **Matrix: Water**
Date Received: 04/17/19 08:49

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		04/25/19 14:42	04/26/19 11:47	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**195**		20.0	20.0	mg/L			04/20/19 05:05	1
Bicarbonate Alkalinity as CaCO3	**195**		20.0	20.0	mg/L			04/20/19 05:05	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			04/20/19 05:05	1
Total Dissolved Solids	**9800**		100	100	mg/L			04/22/19 12:34	1

Definitions/Glossary

Client: CH2M Hill, Inc. Job ID: 600-183790-1
Project/Site: San Juan Kinder Morgan 04/16/19

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Surrogate Summary

Client: CH2M Hill, Inc.
Project/Site: San Juan Kinder Morgan 04/16/19

Job ID: 600-183790-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(50-134)	(62-130)	(70-130)	(67-139)
600-183790-1	SJRP-TB02-04162019	81	85	85	88
600-183790-2	SJRP-PMW4-04162019	79	83	80	79
600-183790-3	SJRP-PMW4-04162019-2	76	77	80	86
600-183790-4	SJRP-PMW1-04162019	74	78	86	85
LCS 600-263293/12	Lab Control Sample	76	78	83	87
LCSD 600-263293/13	Lab Control Sample Dup	82	85	82	90
MB 600-263293/15	Method Blank	76	80	79	78

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene

QC Sample Results

Client: CH2M Hill, Inc.
Job ID: 600-183790-1
Project/Site: San Juan Kinder Morgan 04/16/19

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-263293/15
Matrix: Water
Analysis Batch: 263293

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			04/20/19 17:29	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			04/20/19 17:29	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			04/20/19 17:29	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			04/20/19 17:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*76*		*50 - 134*		*04/20/19 17:29*	*1*
Dibromofluoromethane	*80*		*62 - 130*		*04/20/19 17:29*	*1*
Toluene-d8 (Surr)	*79*		*70 - 130*		*04/20/19 17:29*	*1*
4-Bromofluorobenzene	*78*		*67 - 139*		*04/20/19 17:29*	*1*

Lab Sample ID: LCS 600-263293/12
Matrix: Water
Analysis Batch: 263293

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.0100	0.009378		mg/L		94	70 - 130		
Ethylbenzene			0.0100	0.009948		mg/L		99	70 - 130		
Toluene			0.0100	0.01010		mg/L		101	70 - 130		
Xylenes, Total			0.0200	0.02006		mg/L		100	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*76*		*50 - 134*
Dibromofluoromethane	*78*		*62 - 130*
Toluene-d8 (Surr)	*83*		*70 - 130*
4-Bromofluorobenzene	*87*		*67 - 139*

Lab Sample ID: LCSD 600-263293/13
Matrix: Water
Analysis Batch: 263293

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0100	0.008871		mg/L		89	70 - 130	6	20
Ethylbenzene			0.0100	0.009172		mg/L		92	70 - 130	8	20
Toluene			0.0100	0.008771		mg/L		88	70 - 130	14	20
Xylenes, Total			0.0200	0.01793		mg/L		90	70 - 130	11	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*82*		*50 - 134*
Dibromofluoromethane	*85*		*62 - 130*
Toluene-d8 (Surr)	*82*		*70 - 130*
4-Bromofluorobenzene	*90*		*67 - 139*

QC Sample Results

Client: CH2M Hill, Inc.
Job ID: 600-183790-1
Project/Site: San Juan Kinder Morgan 04/16/19

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-263048/4
Matrix: Water
Analysis Batch: 263048
Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.0251	U	0.200	0.0251	mg/L			04/17/19 13:51	1
Nitrate Nitrite as N	0.0251	U	0.200	0.0251	mg/L			04/17/19 13:51	1
Nitrite as N	0.0297	U	0.200	0.0297	mg/L			04/17/19 13:51	1

Lab Sample ID: LCS 600-263048/5
Matrix: Water
Analysis Batch: 263048
Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	10.0	10.03		mg/L		100	90 - 110
Nitrite as N	10.0	9.907		mg/L		99	90 - 110

Lab Sample ID: MB 600-263132/4
Matrix: Water
Analysis Batch: 263132
Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.0534	U	0.400	0.0534	mg/L			04/18/19 14:27	1
Sulfate	0.0957	U	0.500	0.0957	mg/L			04/18/19 14:27	1

Lab Sample ID: LCS 600-263132/5
Matrix: Water
Analysis Batch: 263132
Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	20.0	19.61		mg/L		98	90 - 110
Sulfate	20.0	19.37		mg/L		97	90 - 110

Lab Sample ID: MB 600-263133/4
Matrix: Water
Analysis Batch: 263133
Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.0251	U	0.200	0.0251	mg/L			04/18/19 14:27	1
Nitrate Nitrite as N	0.0251	U	0.200	0.0251	mg/L			04/18/19 14:27	1
Nitrite as N	0.0297	U	0.200	0.0297	mg/L			04/18/19 14:27	1

Lab Sample ID: LCS 600-263133/5
Matrix: Water
Analysis Batch: 263133
Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	10.0	9.474		mg/L		95	90 - 110
Nitrite as N	10.0	9.862		mg/L		99	90 - 110

QC Sample Results

Client: CH2M Hill, Inc.
Job ID: 600-183790-1
Project/Site: San Juan Kinder Morgan 04/16/19

Method: 6010B - Inductively Coupled Plasma - Atomic Emission Spectrometry

Lab Sample ID: MB 600-263639/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 263765 — **Prep Batch: 263639**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.0926	U	0.500	0.0926	mg/L		04/25/19 09:17	04/26/19 09:27	1
Arsenic	0.00285	U	0.0100	0.00285	mg/L		04/25/19 09:17	04/26/19 09:27	1
Barium	0.000530	U	0.0200	0.000530	mg/L		04/25/19 09:17	04/26/19 09:27	1
Boron	0.0116	U	0.200	0.0116	mg/L		04/25/19 09:17	04/26/19 09:27	1
Cadmium	0.000280	U	0.00500	0.000280	mg/L		04/25/19 09:17	04/26/19 09:27	1
Chromium	0.00159	U	0.0100	0.00159	mg/L		04/25/19 09:17	04/26/19 09:27	1
Cobalt	0.000310	U	0.0100	0.000310	mg/L		04/25/19 09:17	04/26/19 09:27	1
Iron	0.0270	U	0.400	0.0270	mg/L		04/25/19 09:17	04/26/19 09:27	1
Lead	0.00219	U	0.0100	0.00219	mg/L		04/25/19 09:17	04/26/19 09:27	1
Manganese	0.000360	U	0.0100	0.000360	mg/L		04/25/19 09:17	04/26/19 09:27	1
Molybdenum	0.000540	U	0.0100	0.000540	mg/L		04/25/19 09:17	04/26/19 09:27	1
Nickel	0.000800	U	0.0100	0.000800	mg/L		04/25/19 09:17	04/26/19 09:27	1
Selenium	0.00287	U	0.0400	0.00287	mg/L		04/25/19 09:17	04/26/19 09:27	1

Lab Sample ID: LCS 600-263639/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 263765 — **Prep Batch: 263639**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	5.00	4.937		mg/L		99	80 - 120
Arsenic	1.00	1.011		mg/L		101	80 - 120
Barium	1.00	1.018		mg/L		102	80 - 120
Boron	1.00	0.9999		mg/L		100	80 - 120
Cadmium	1.00	1.035		mg/L		104	80 - 120
Chromium	1.00	1.037		mg/L		104	80 - 120
Cobalt	1.00	1.008		mg/L		101	80 - 120
Iron	5.00	5.031		mg/L		101	80 - 120
Lead	1.00	1.005		mg/L		101	80 - 120
Manganese	1.00	1.011		mg/L		101	80 - 120
Molybdenum	1.00	1.037		mg/L		104	80 - 120
Nickel	1.00	1.005		mg/L		101	80 - 120
Selenium	1.00	1.024		mg/L		102	80 - 120

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-263686/7-B — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 263793 — **Prep Batch: 263686**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000103	U	0.000250	0.000103	mg/L		04/25/19 14:42	04/26/19 11:15	1

Lab Sample ID: LCS 600-263686/8-B — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 263793 — **Prep Batch: 263686**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00375	0.003567		mg/L		95	70 - 130

QC Sample Results

Client: CH2M Hill, Inc. Job ID: 600-183790-1
Project/Site: San Juan Kinder Morgan 04/16/19

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) (Continued)

Lab Sample ID: 600-183790-4 MS Client Sample ID: SJRP-PMW1-04162019
Matrix: Water Prep Type: Total/NA
Analysis Batch: 263793 Prep Batch: 263686

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.000103	U	0.00375	0.003641		mg/L		97	75 - 125		

Lab Sample ID: 600-183790-4 DU Client Sample ID: SJRP-PMW1-04162019
Matrix: Water Prep Type: Total/NA
Analysis Batch: 263793 Prep Batch: 263686

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Mercury	0.000103	U		0.000103	U	mg/L				NC	20

Method: 2320B-1997 - Alkalinity, Total - SM Online, 2011

Lab Sample ID: MB 600-263348/44 Client Sample ID: Method Blank
Matrix: Water Prep Type: Total/NA
Analysis Batch: 263348

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	20.0	U	20.0	20.0	mg/L			04/20/19 00:35	1
Bicarbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			04/20/19 00:35	1
Carbonate Alkalinity as CaCO3	20.0	U	20.0	20.0	mg/L			04/20/19 00:35	1

Lab Sample ID: LCS 600-263348/45 Client Sample ID: Lab Control Sample
Matrix: Water Prep Type: Total/NA
Analysis Batch: 263348

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Alkalinity			100	101.6		mg/L		102	90 - 110		

Method: 2540 C-1997 - Total Dissolved Solids (Dried at 180 °C)

Lab Sample ID: MB 600-263374/1 Client Sample ID: Method Blank
Matrix: Water Prep Type: Total/NA
Analysis Batch: 263374

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10.0	U	10.0	10.0	mg/L			04/22/19 12:34	1

Lab Sample ID: LCS 600-263374/2 Client Sample ID: Lab Control Sample
Matrix: Water Prep Type: Total/NA
Analysis Batch: 263374

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			1800	1923		mg/L		107	90 - 110		

QC Association Summary

Client: CH2M Hill, Inc. Job ID: 600-183790-1
Project/Site: San Juan Kinder Morgan 04/16/19

GC/MS VOA

Analysis Batch: 263293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-183790-1	SJRP-TB02-04162019	Total/NA	Water	8260B	
600-183790-2	SJRP-PMW4-04162019	Total/NA	Water	8260B	
600-183790-3	SJRP-PMW4-04162019-2	Total/NA	Water	8260B	
600-183790-4	SJRP-PMW1-04162019	Total/NA	Water	8260B	
MB 600-263293/15	Method Blank	Total/NA	Water	8260B	
LCS 600-263293/12	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-263293/13	Lab Control Sample Dup	Total/NA	Water	8260B	

HPLC/IC

Analysis Batch: 263048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-183790-2	SJRP-PMW4-04162019	Total/NA	Water	300.0	
600-183790-3	SJRP-PMW4-04162019-2	Total/NA	Water	300.0	
600-183790-4	SJRP-PMW1-04162019	Total/NA	Water	300.0	
MB 600-263048/4	Method Blank	Total/NA	Water	300.0	
LCS 600-263048/5	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 263132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-183790-2	SJRP-PMW4-04162019	Total/NA	Water	300.0	
600-183790-3	SJRP-PMW4-04162019-2	Total/NA	Water	300.0	
600-183790-4	SJRP-PMW1-04162019	Total/NA	Water	300.0	
MB 600-263132/4	Method Blank	Total/NA	Water	300.0	
LCS 600-263132/5	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 263133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-263133/4	Method Blank	Total/NA	Water	300.0	
LCS 600-263133/5	Lab Control Sample	Total/NA	Water	300.0	

Metals

Prep Batch: 263639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-183790-2	SJRP-PMW4-04162019	Total/NA	Water	3010A	
600-183790-3	SJRP-PMW4-04162019-2	Total/NA	Water	3010A	
600-183790-4	SJRP-PMW1-04162019	Total/NA	Water	3010A	
MB 600-263639/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-263639/2-A	Lab Control Sample	Total/NA	Water	3010A	

Prep Batch: 263686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-183790-2	SJRP-PMW4-04162019	Total/NA	Water	7470A	
600-183790-3	SJRP-PMW4-04162019-2	Total/NA	Water	7470A	
600-183790-4	SJRP-PMW1-04162019	Total/NA	Water	7470A	
MB 600-263686/7-B	Method Blank	Total/NA	Water	7470A	
LCS 600-263686/8-B	Lab Control Sample	Total/NA	Water	7470A	
600-183790-4 MS	SJRP-PMW1-04162019	Total/NA	Water	7470A	
600-183790-4 DU	SJRP-PMW1-04162019	Total/NA	Water	7470A	

QC Association Summary

Client: CH2M Hill, Inc. Job ID: 600-183790-1
Project/Site: San Juan Kinder Morgan 04/16/19

Metals

Analysis Batch: 263765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-183790-2	SJRP-PMW4-04162019	Total/NA	Water	6010B	263639
600-183790-3	SJRP-PMW4-04162019-2	Total/NA	Water	6010B	263639
600-183790-4	SJRP-PMW1-04162019	Total/NA	Water	6010B	263639
MB 600-263639/1-A	Method Blank	Total/NA	Water	6010B	263639
LCS 600-263639/2-A	Lab Control Sample	Total/NA	Water	6010B	263639

Analysis Batch: 263793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-183790-2	SJRP-PMW4-04162019	Total/NA	Water	7470A	263686
600-183790-3	SJRP-PMW4-04162019-2	Total/NA	Water	7470A	263686
600-183790-4	SJRP-PMW1-04162019	Total/NA	Water	7470A	263686
MB 600-263686/7-B	Method Blank	Total/NA	Water	7470A	263686
LCS 600-263686/8-B	Lab Control Sample	Total/NA	Water	7470A	263686
600-183790-4 MS	SJRP-PMW1-04162019	Total/NA	Water	7470A	263686
600-183790-4 DU	SJRP-PMW1-04162019	Total/NA	Water	7470A	263686

General Chemistry

Analysis Batch: 263348

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-183790-2	SJRP-PMW4-04162019	Total/NA	Water	2320B-1997	
600-183790-3	SJRP-PMW4-04162019-2	Total/NA	Water	2320B-1997	
600-183790-4	SJRP-PMW1-04162019	Total/NA	Water	2320B-1997	
MB 600-263348/44	Method Blank	Total/NA	Water	2320B-1997	
LCS 600-263348/45	Lab Control Sample	Total/NA	Water	2320B-1997	

Analysis Batch: 263374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-183790-2	SJRP-PMW4-04162019	Total/NA	Water	2540 C-1997	
600-183790-3	SJRP-PMW4-04162019-2	Total/NA	Water	2540 C-1997	
600-183790-4	SJRP-PMW1-04162019	Total/NA	Water	2540 C-1997	
MB 600-263374/1	Method Blank	Total/NA	Water	2540 C-1997	
LCS 600-263374/2	Lab Control Sample	Total/NA	Water	2540 C-1997	

Lab Chronicle

Client: CH2M Hill, Inc. Job ID: 600-183790-1
Project/Site: San Juan Kinder Morgan 04/16/19

Client Sample ID: SJRP-TB02-04162019 Lab Sample ID: 600-183790-1

Date Collected: 04/16/19 08:20 **Matrix: Water**
Date Received: 04/17/19 08:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	263293	04/20/19 17:56	KLV	TAL HOU

Client Sample ID: SJRP-PMW4-04162019 Lab Sample ID: 600-183790-2

Date Collected: 04/16/19 08:30 **Matrix: Water**
Date Received: 04/17/19 08:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	263293	04/20/19 18:25	KLV	TAL HOU
Total/NA	Analysis	300.0		1			263048	04/17/19 15:20	SKR	TAL HOU
Total/NA	Analysis	300.0		500			263132	04/18/19 15:56	SKR	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	263639	04/25/19 09:17	DCL	TAL HOU
Total/NA	Analysis	6010B		1			263765	04/26/19 10:11	KP1	TAL HOU
Total/NA	Prep	7470A			40 mL	50 mL	263686	04/25/19 14:42	SOT	TAL HOU
Total/NA	Analysis	7470A		1			263793	04/26/19 11:52	SOT	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	263348	04/20/19 04:50	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	5 mL	100 mL	263374	04/22/19 12:34	DTN	TAL HOU

Client Sample ID: SJRP-PMW4-04162019-2 Lab Sample ID: 600-183790-3

Date Collected: 04/16/19 08:40 **Matrix: Water**
Date Received: 04/17/19 08:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	263293	04/20/19 18:53	KLV	TAL HOU
Total/NA	Analysis	300.0		1			263048	04/17/19 15:38	SKR	TAL HOU
Total/NA	Analysis	300.0		500			263132	04/18/19 16:14	SKR	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	263639	04/25/19 09:17	DCL	TAL HOU
Total/NA	Analysis	6010B		1			263765	04/26/19 10:19	KP1	TAL HOU
Total/NA	Prep	7470A			40 mL	50 mL	263686	04/25/19 14:42	SOT	TAL HOU
Total/NA	Analysis	7470A		1			263793	04/26/19 11:55	SOT	TAL HOU
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	263348	04/20/19 04:58	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	10 mL	100 mL	263374	04/22/19 12:34	DTN	TAL HOU

Client Sample ID: SJRP-PMW1-04162019 Lab Sample ID: 600-183790-4

Date Collected: 04/16/19 09:10 **Matrix: Water**
Date Received: 04/17/19 08:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	20 mL	20 mL	263293	04/20/19 19:21	KLV	TAL HOU
Total/NA	Analysis	300.0		1			263048	04/17/19 15:56	SKR	TAL HOU
Total/NA	Analysis	300.0		500			263132	04/18/19 16:32	SKR	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	263639	04/25/19 09:17	DCL	TAL HOU
Total/NA	Analysis	6010B		1			263765	04/26/19 10:21	KP1	TAL HOU
Total/NA	Prep	7470A			40 mL	50 mL	263686	04/25/19 14:42	SOT	TAL HOU
Total/NA	Analysis	7470A		1			263793	04/26/19 11:47	SOT	TAL HOU

Lab Chronicle

Client: CH2M Hill, Inc. Job ID: 600-183790-1
Project/Site: San Juan Kinder Morgan 04/16/19

Client Sample ID: SJRP-PMW1-04162019 **Lab Sample ID: 600-183790-4**
Date Collected: 04/16/19 09:10 **Matrix: Water**
Date Received: 04/17/19 08:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2320B-1997		1	50 mL	50 mL	263348	04/20/19 05:05	KRD	TAL HOU
Total/NA	Analysis	2540 C-1997		1	10 mL	100 mL	263374	04/22/19 12:34	DTN	TAL HOU

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Accreditation/Certification Summary

Client: CH2M Hill, Inc. Job ID: 600-183790-1
Project/Site: San Juan Kinder Morgan 04/16/19

Laboratory: Eurofins TestAmerica, Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	18-061-0	08-04-19
Louisiana	NELAP	6	01967	06-30-19
Oklahoma	State Program	6	2018-052	08-31-19
Texas	NELAP	6	T104704223-18-23	10-31-19
USDA	Federal		P330-18-00130	04-30-21

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Dallas/Ft. Worth
#238

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: TR Skeen	Lab PM: McDaniel, Bethany A	Carrier Tracking No(s): FedEx 6025 5778 2245	COC No: 600-67876-18578.1
Client Contact: Jeffrey Minchak	Phone: 505 914 1800	E-Mail: bethany.mcdaniel@testamericainc.com		Page: Page 1 of 2
Company: CH2M Hill, Inc.				Job #:
Address: 3721 Rutledge Rd. NE Suite B-1	Due Date Requested:			
City: Albuquerque	TAT Requested (days): 5 Day ARF			
State, Zip: NM, 87109				
Phone: 505-855-5239(Tel)	PO #: WD794541			
Email: jeffrey.minchak@jacobs.com	WO #: WD794541			
Project Name: Kinder Morgan Bloomfield, NM San Juan	Project #: 60005961			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 7470A - NMWQCC Metals	8260B_LL - BTEX	2320B - Alkalinity	8015C_DRO - Diesel & Oil Range Organics	8015C_GRO - GRO Range (C6-C10)	2540C_Calcd - TDS	300_ORGFM_28D - Chloride, Sulfate	300_ORGFMS - Nitrate, Nitrite							Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	N	N	N	N	N	N								
SJRP-TRIP BLANK-04162019	4/16/19	0820	G	Water	N	N		X														
SJRP-PMW4-04162019		0830	G	Water	Y	N	X	X	X			X	X	X								
SJRP-PMW4-04162019-2		0840	G	Water	Y	N	X	X	X			X	X	Y								
SJRP-PMW1-04162019		0910	G	Water	Y	N	X	X	X			X	X	X								
				Water																		
				Water																		
				Water																		
				Water																		
				Water																		
				Water																		
				Water																		

600-183790 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: 2367

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		4/16/19 1010	Jacobs	FedEx 6025 5778 2245		
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 4-17-19 /0849	Company TA Houston
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

TestAmerica Houston

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Receipt Checklist

Loc: 600
183790

Date/Time Received: '19APR17 8:49

JOB NUMBER: ___ ___ CLIENT: CH2M Hill

UNPACKED BY: [signature] CARRIER/DRIVER: Fedex

Custody Seal Present: ☒ YES ☐ NO Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Them CF	Corrected Temp (°C)
BW	(Y) / N	(Y) / N	4.2	IR678	+0.1	4.3
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N	J.A.	4-17-19		
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☒ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒ NO ☐ YES

Base samples are>pH 12: ☐ YES ☐ NO Acid preserved are<pH 2: ☐ YES ☐ NO

pH paper Lot #_____

VOA headspace acceptable (5-6mm): ☒ YES ☐ NO ☐ NA

	YES	NO
Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X	

COMMENTS:

J.A. 4-17-19

HS-SA-WI-013 Rev. 3; 07/01/2014

Login Sample Receipt Checklist

Client: CH2M Hill, Inc. Job Number: 600-183790-1

Login Number: 183790 **List Source: Eurofins TestAmerica, Houston**
List Number: 1
Creator: Snow, Tiffany B

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

JACOBS®

San Juan River Gas Plant
Kirtland, New Mexico

Site Characterization Report

November 2020

El Paso Natural Gas Company, LLC

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San Juan River Gas Plant
Kirtland, New Mexico

Project No:	707471CH
Document Title:	Site Characterization Report
Revision:	0
Date:	November 2020
Client Name:	El Paso Natural Gas Company, LLC
Project Manager:	Jeffrey Minchak

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Acronyms and Abbreviations

°F	degrees Fahrenheit
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylenes
btoc	below top of casing
CCI	Castleton Commodities International, LLC
CO_2	carbon dioxide
COC	chemical of concern
cy	cubic yard
DRO	diesel range organics
EPA	U.S. Environmental Protection Agency
EPNG	El Paso Natural Gas Company, LLC
GRO	gasoline range organics
HSA	hollow-stem auger
ID	inside diameter
IDW	investigation-derived waste
ITRC	Interstate Technology and Regulatory Council
LNAPL	light nonaqueous phase liquid
mg/L	milligrams per liter
mg/kg	milligrams per kilogram
NMOCD	New Mexico Oil Conservation Division
NMOSE	New Mexico Office of the State Engineer
NMWQCC	New Mexico Water Quality Control Commission
O&M	operation and maintenance
ORC	oxygen-releasing compound
ORO	oil range organics
PID	photoionization detector
PMW	Praxair Pond monitoring well
ppm	parts per million
PVC	polyvinyl chloride
RCRA	Resource Conservation and Recovery Act
SJRP	San Juan River Gas Plant
SVOCs	semivolatile organic compounds
TCLP	toxicity characteristic leaching procedure
TDS	total dissolved solids
TPH	total petroleum hydrocarbons
USCS	Unified Soil Classification System

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VOC	volatile organic compound

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1. Introduction

1.1 Site Background

This Site Characterization Report has been prepared on behalf of El Paso Natural Gas Company, LLC (EPNG) to report the results of the site investigation activities conducted at the former San Juan River Gas Plant (SJRP) site. The site is located at 99 Road 6500 in Kirtland, San Juan County, New Mexico, and is currently regulated by the New Mexico Oil Conservation Division (NMOCD). The site characterization was conducted to identify the nature and extent of environmental impacts that may have resulted from historical operations. The findings of the investigation will be used to guide future investigation and monitoring, as warranted, for the site.

Site investigation activities were performed in two separate phases from March to July 2017 and January to October 2019, and included drilling of soil borings, collection and analyses of soil samples, installation of monitoring wells, and collection and analyses of groundwater samples.

The site location map is shown on Figure 1 and the site plan is presented on Figure 2.

1.2 Site Location and Description

The project site is located near Kirtland, New Mexico, and currently operates as a natural gas collection, processing, and distribution facility. The SJRP receives natural gas from production wells located in the San Juan Basin of New Mexico and southern Utah. EPNG owned the SJRP until June 1992, when it was sold to Western Gas Resources, Inc., which is a subsidiary of Anadarko Petroleum Corporation. EPNG retained responsibility for environmental impacts known to exist prior to the 1992 sale of the facility. In May 2014, Western Gas Resources sold the facility to CCI San Juan, LLC, a subsidiary company of Castleton Commodities International, LLC (CCI). The SJRP is a 630-acre facility that contains natural gas processing facilities, a sulfur recovery plant, water and hydrocarbon tanks, a pigging station, flare, and several 16- to 24-inch-diameter natural gas pipelines that cross the facility. The facility also contained two raw water ponds and three wastewater evaporation ponds, which are now closed.

During 2002 and 2003, a Praxair nitrogen plant (Praxair Plant) was constructed north of the SJRP, approximately 300 yards south of monitoring wells MW-8 and MW-9. The nitrogen plant includes a 3.7-million-gallon, double synthetically lined evaporation pond with a leak detection system that is used to evaporate cooling tower blowdown and compressor foundation stormwater, and air compressor condensate (the Praxair Pond). The stormwater and condensate flow through an oil/water separator before discharging to and evaporating in the Praxair Pond (NMED, 2008). Closure of the evaporation ponds, flare pits, and other potential contaminant source areas associated with the SJRP was completed from 1992 through 1995. In general, the area surrounding the impacted portions at the site is not densely packed with industrial activity. Properties adjacent to the SJRP include undeveloped land to the north, a public golf course to the south, commercial and residential land to the east, and a coal mine to the west. The subject of this site characterization investigation is the Historic Burn Area located in the northwestern portion of the SJRP, generally east and northeast of the Praxair Pond, and between MW-9 and MW-14.

1.3 Summary of Previous Investigations

In 1985, the NMOCD issued a directive for oil and gas producers to cease discharging production fluids to unlined surface impoundments (pits) located in the groundwater recharge areas of the San Juan Basin and major river drainages to the San Juan, Animas, and La Plata Rivers. Once discharge had ceased, producers were required to investigate and remediate soil and groundwater contamination caused by these pits. In response, the following investigations and removal actions have been completed at the SJRP (MWH, 2012, except as noted):

- Multiple investigations were conducted at the SJRP between 1985 and 1995. During these investigations, 24 monitoring wells were installed at various locations at the site.

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- In 1992, the north and south flare pits were closed and 18,200 cubic yards (cy) and 3,520 cy of contaminated soil were removed from these flare pits, respectively. The former landfarm located southwest of the main production area is composed of the soil excavated from the north and south flare pits during their closure. On June 29, 1993, NMOCD granted closure of the flare pits with the condition that designated monitoring wells located downgradient of each former pit be monitored on an annual basis. On June 17, 1997, NMOCD granted closure of the soil landfarms. The former wastewater evaporation ponds were closed during 1995 and 1996. The pit and pond closure activities included capping with compacted, low-permeability soils. During the same period, EPNG abandoned 17 monitoring wells, upgraded two wells, and installed five new monitoring wells. In addition, a soil gas investigation was performed. The results of the investigation indicated the presence of shallow hydrocarbon contamination near monitoring wells MW-8 and MW-9.
- During January 2001, EPNG submitted a groundwater remediation work plan to NMOCD which addressed the elevated benzene in monitoring wells MW-8 and MW-9. This work plan included provisions to install an air sparging system with two air sparging wells and one injection point located within 10 feet of each monitoring well. NMOCD gave approval to begin remediation activities in June 2001. The air sparging injection wells (SW-8 and SW-9) were installed during October 2001 and developed during November 2001. Following installation, a prepilot air sparging test was conducted at both wells. The results of the test indicated good communication between SW-9 and MW-9, but poor communication between SW-8 and MW-8. As a result of poor communication between SW-8 and MW-8, magnesium peroxide oxygen-releasing compound (ORC) socks were utilized in MW-8 in lieu of air sparging. The air sparging system was installed near MW-9 and began operation on November 14, 2001.
- From February 2002 through December 2002, site activities consisted of continued operation and maintenance (O&M) of the air sparging system, and sitewide annual groundwater monitoring.
- In 2003, site activities included periodic O&M of the air sparging system, replacement of the ORC socks in MW-8, quarterly groundwater sampling of MW-8 and MW-9, and sitewide annual groundwater monitoring.
- As a result of benzene, toluene, ethyl benzene, and xylenes (BTEX) concentrations below the New Mexico Water Quality Control Commission (NMWQCC) standards, the air sparging system was shut down in February 2004 to assess static groundwater conditions at the site.
- During 2004 through 2006, site activities included replacement of the ORC socks in MW-8, quarterly groundwater sampling of MW-8 and MW-9, and sitewide annual groundwater monitoring.
- EPNG submitted a Stage 1 Abatement Plan to NMOCD in November 2005 to investigate hydrocarbon impacts in the groundwater near the Praxair Pond at the SJRP. NMOCD approved the work plan on January 23, 2006 (NMOCD, 2006), and investigative activities began. As a result of the ineffectiveness of direct push technology (DPT), which was found to be limited during investigation activities, a revised work plan was submitted to NMOCD in September 2006. The revised work plan recommended further investigation be performed using a hollow-stem auger (HSA).
- Monitoring well MW-7, located immediately adjacent to the Praxair Plant, was plugged and abandoned in May 2007 at the request of Praxair to accommodate new process construction at that location.
- During the May 2008 sampling event, it was observed that monitoring well MW-5 had been destroyed due to subsurface coal mining activities to the west of SJRP. The destruction of the well was determined to have occurred between February and May 2008.
- From May 2008 through the end of 2011, the environmental program at the SJRP consisted of remediation via the ORC socks in MW-8 and sitewide groundwater monitoring.
- In 2013, CH2M HILL Engineers, Inc. (CH2M[1]) became the consultant for the project. Annual groundwater samples were collected in December (CH2M, 2014). Sitewide groundwater elevation

[1] CH2M is now a part of Jacobs Engineering Group Inc. (Jacobs). On December 15, 2017, CH2M HILL Companies Ltd., including CH2M, was acquired by Jacobs.

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measurements were collected from monitoring wells MW-2, MW-4, MW-6, MW-8, and MW-9. Groundwater samples were collected from each of the five monitoring wells. NMWQCC exceedances included benzene [0.186 milligrams per liter (mg/L)] in MW-9 and other metals and inorganic constituents in each of the five wells.

- In 2014, annual groundwater samples were collected in December (CH2M, 2015). Sitewide groundwater elevation measurements were collected from monitoring wells MW-2, MW-4, MW-6, MW-8, and MW-9. Groundwater samples were collected from each of the five monitoring wells. NMWQCC exceedances included benzene (0.0461 mg/L) in MW-9 and other metals and inorganic constituents in each of the five wells.
- In 2015, annual groundwater samples were collected in December (CH2M, 2016a). Sitewide groundwater elevation measurements were collected from monitoring wells MW-2, MW-4, MW-6, MW-8, and MW-9. Groundwater samples were collected from each of the five monitoring wells. NMWQCC exceedances included benzene (0.104 mg/L) in MW-9 and other metals and inorganic constituents in each of the five wells.
- In 2016, annual groundwater samples were collected in December (CH2M, 2017). Sitewide groundwater elevation measurements were collected from monitoring wells MW-2, MW-4, MW-6, MW-8, and MW-9. Groundwater samples were collected from each of the five monitoring wells. NMWQCC exceedances included benzene (0.097 mg/L) in MW-9 and other metals and inorganic constituents in each of the five wells.
- In 2017, six monitoring wells and 19 soil borings were installed as part of the site characterization focused on the Historic Burn Area in the northern portion of the SJRP facility. The findings of the investigation are presented in this report.
- In 2017, annual groundwater samples were collected in November (CH2M, 2018). Sitewide groundwater elevation measurements were collected from monitoring wells MW-2, MW-4, MW-6, MW-8, MW-9, MW-11, MW-12, MW-13, MW-14, MW-15, and MW-16, and Praxair monitoring wells PMW-1a, PMW-2a, and PMW-4a. Groundwater samples were collected from each of the 14 monitoring wells. NMWQCC exceedances included benzene (PMW-2a, MW-9, MW-13, MW-15, and MW-16), toluene (PMW-2a), and total xylenes (PMW-2a, MW-13, and MW-16). Other metals and inorganic constituents exceeded NMWQCC standards in each of the 14 monitoring wells.
- In 2018, annual groundwater samples were collected in November (CH2M, 2019). Sitewide groundwater elevation measurements were collected from monitoring wells MW-2, MW-4, MW-6, MW-8, MW-9, MW-11, MW-12, MW-13, MW-14, MW-15, and MW-16, and Praxair monitoring wells PMW-1a, PMW-2a, and PMW-4a. Groundwater samples were collected from each of the 14 monitoring wells. NMWQCC exceedances included benzene (PMW-2a, MW-9, MW-13, MW-15, and MW-16), toluene (PMW-2a), and total xylenes (PMW-2a, MW-13, and MW-16). Other metals and inorganic constituents exceeded NMWQCC standards in each of the 14 monitoring wells.
- In January 2019, seven monitoring wells were installed as part of the second phase of the site characterization focused on the Historic Burn Area in the northern portion of the SJRP facility and upgradient of the Praxair Pond. The findings of the investigation are presented in this report.
- In October 2019, annual groundwater samples were collected. Sitewide groundwater elevation measurements were collected from monitoring wells MW-2, MW-4, MW-6, MW-8, MW-9, MW-11, MW-12, MW-13, MW-14, MW-15, MW-16, MW-17, MW-18, MW-19, MW-20, MW-21, MW-22, and MW-23, and PMW-1a, PMW-2a, and PMW-4a. Groundwater samples were collected from all monitoring wells except MW-20 (phase-separated hydrocarbons [PSH] on the water table), MW-22 (dry), and MW-23 (dry). Data are included in this report.

Prior to the 2019 site characterization activities, the most recent sitewide annual groundwater monitoring event was completed in October 2018 and reported in the *2018 Annual Groundwater Monitoring Report San Juan River Gas Plant, Kirtland, New Mexico* (Jacobs, 2019a). Sitewide groundwater elevation measurements collected from monitoring wells MW-2, MW-4, MW-6, MW-8, MW-9, MW-11, MW-12, MW-13, MW-14, MW-15, MW-16, PMW-1a, PMW-2a, and PMW-4a indicated the direction of groundwater flow in the vicinity of the Historic Burn Area to be to the northwest with an overall gradient of 0.05 feet per foot. The results of the October 2018 monitoring indicated that the concentrations of benzene exceeded

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NMWQCC standards of 0.01 mg/L in five monitoring wells (PMW-2a, MW-9, MW-13, MW-15, and MW-16); toluene exceeded the NMWQCC standard of 0.75 mg/L in one monitoring well (PMW-2a); and total xylenes exceeded the NMWQCC standard of 0.62 mg/L in three monitoring wells (PMW-2a, MW-13, and MW-16).

Concentrations of sulfate and total dissolved solids (TDS) were elevated above the NMWQCC standards of 600 mg/L and 1,000 mg/L, respectively, at each site monitoring well. Monitoring well MW-13 had the highest sulfate, with the concentration reported at 17,500 mg/L. TDS concentrations in each site monitoring well were greater than 4,500 mg/L, with the greatest concentration reported at 20,500 mg/L at MW-15.

Concentrations of chloride were elevated above the NMWQCC standard of 250 mg/L at each of the 14 monitoring wells, with the greatest concentration of 4,370 mg/L reported in PMW-4a. Concentrations of nitrate were elevated above the NMWQCC standard of 10 mg/L at monitoring wells MW-6 and MW-2.

Dissolved metals concentrations that exceeded the NMWQCC standard were aluminum (two locations); boron (five locations); cadmium (one location); cobalt (four locations); iron (seven locations); manganese (10 locations); nickel (three locations); and selenium (two locations).

1.4 Overview of Site Characterization Investigation

The site characterization investigation was developed by incorporating and utilizing data gathered from previous investigative work performed at the site, meetings with EPNG, the initial conceptual site model, a site visit conducted on August 28, 2013, and results from the 2017 site investigation activities. The following data gaps were identified:

- The presence of BTEX in vadose zone soils and groundwater near the Praxair Pond was uncertain. Soil and groundwater data were needed to address this data gap.
- There were insufficient soil characterization data to address uncertainty regarding the presence of soil contamination at the Historic Burn Area. Additional soil and groundwater data were needed to address this data gap.
- There was a loss of groundwater elevation measurement and groundwater contaminants of concern data with the destruction of MW-5 in 2008. Should the remains of MW-5 be found, the well will be abandoned. No additional action was required during the site investigation.
- The source of BTEX contamination in Praxair Pond monitoring wells was unknown. Groundwater samples were to be collected from existing Praxair Pond monitoring wells.
- Groundwater flow direction and communication between shallow zones in the aquifer were uncertain. Additionally, the potential for hydrogeologic impacts from the adjacent coal mine was unknown. Groundwater elevation measurements were needed to be periodically collected to allow for observation of changes in the groundwater table over time.
- The background TDS of the aquifer is not known, and uncertainty exists regarding TDS impacts to groundwater samples. Additional surface and groundwater data were required to better understand TDS concentrations in the aquifer.

An investigation was proposed to close the data gaps and was documented in the *Site Characterization Investigation Work Plan, San Juan River Gas Plant, Kirtland, San Juan County, New Mexico* (CH2M, 2016b). The site characterization included the following activities:

- Drilling of 19 soil borings to refusal of the HSA drill rig tooling, including collection of soil samples.
- Continuation of six of the soil borings into the water table by switching from HSA drilling methods to air rotary drilling methods, using the HSA drilling rig and construction of six monitoring wells.
- Collection of groundwater samples from each of the existing and newly installed site monitoring wells, including potentiometric surface data.

Site investigation activities proposed in the 2016 Work Plan (CH2M, 2016b) were completed in 2017, and analytical data indicated additional investigation activities were warranted. A *Phase 2 Site Characterization*

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Work Plan, San Juan River Gas Plant, Kirtland, San Juan County, New Mexico (Jacobs, 2019b) was prepared. The Phase 2 site characterization included the following activities:

- Drilling of seven soil borings to 15 feet below the observed water table using Rotosonic drilling techniques, including the collection of soil samples and construction of monitoring wells in each of the seven soil borings.
- Collection of groundwater samples from each of the existing and newly installed site monitoring wells, including potentiometric surface data.

1.5 Preliminary Conceptual Site Model

Previous investigations conducted at the site collected data to document site-related contamination in soil and groundwater. The results and findings of the previous investigations, and how they pertain to the development of a preliminary conceptual site model, are described in the following paragraphs.

1.5.1 Chemicals of Potential Concern

BTEX, total petroleum hydrocarbons (TPH), metals, TDS, nitrates, chloride, and sulfates have been previously identified as chemicals of concern (COCs) at the site. The locations of soil borings and monitoring wells installed in 2017 were chosen based on recommendations presented in the *Proposed Workplan for Additional Phase I Investigation of Potential Hydrocarbon Impacts as Part of a Stage I Abatement Plan at the San Juan River Plant San Juan River Basin, New Mexico* (Stage I Abatement Plan) (MWH, 2006), *Site Characterization Investigation Work Plan, San Juan River Gas Plant, Kirtland, San Juan County, New Mexico* (CH2M, 2016b), and *Phase 2 Site Characterization Work Plan, San Juan River Gas Plant, Kirtland, San Juan County, New Mexico* (Jacobs, 2019b).

The locations of monitoring wells installed in 2019 were chosen based on analytical soil and groundwater results collected during the 2017 site investigation activities and were presented in the *Phase 2 Site Characterization Work Plan, San Juan River Gas Plant, Kirtland, San Juan County, New Mexico* (Jacobs, 2019b).

1.5.2 Nature and Extent of COCs

Historical data show BTEX concentrations in groundwater at the Historic Burn Area exceeded the NMWQCC standards; the highest BTEX concentrations occur at monitoring wells MW-13, MW-15, MW-16, and MW-17. NMWQCC metals, TDS, chloride, and sulfate also historically exceed NMWQCC standards in groundwater at the Historic Burn Area.

Soil samples collected near the Praxair Pond during implementation of the Stage I Abatement Plan indicated the potential presence of hydrocarbons in the soil at soil borings GPH6, GPH8, and GPH10, located northeast of the Praxair Pond.

Historical data show hydrocarbons concentrations and free-product in groundwater at the Praxair Pond. Groundwater sampling data have been collected from Praxair Pond monitoring well PMW-2a since 2017; BTX concentrations have exceeded NMWQCC standards during each annual groundwater sampling event (CH2M, 2018; Jacobs, 2019a).

Metals and inorganic constituents routinely exceed NMWQCC standards at site monitoring wells, although the source of these constituents is unknown.

1.6 Current Regulatory Status

EPNG is responsible for the remediation of environmental conditions identified prior to the sale of the facility to Western Gas Resources in 1992. There is no Discharge Permit for this facility associated with the historical EPNG operations.

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In November 2005, a Stage I Abatement Plan was submitted to NMOCD to investigate petroleum hydrocarbon impacts encountered in groundwater near the Praxair Pond at the SJRP. Approval of this abatement plan was received from NMOCD on January 23, 2006 (NMOCD, 2006), and the investigation was performed in February 2006. Results of the initial investigation included in the Stage I Interim Report were submitted on September 28, 2006 along with a proposed work plan for additional investigation activities (MWH, 2006).

In October 2015, EPNG submitted a Site Characterization Investigation Work Plan to the NMOCD online portal (CH2M 2015b) to investigate the nature and extent of petroleum hydrocarbon compounds in soil and groundwater in the northern portion of the facility, at the Historic Burn Area. Analytical data collected during the site characterization activities indicated additional characterization activities were warranted. In January 2019, a Phase 2 Site Characterization Work Plan was prepared to further investigate the nature and extent of petroleum hydrocarbon compounds in soil and groundwater in the areas of the Historic Burn Area and the Praxair Pond. Phase 2 characterization activities were completed in 2019.

1.7 Report Organization

This report is organized as follows:

- **Section 1 – Introduction**. Provides summary-level descriptions of the site background, site location and description, previous investigations conducted, site characterization investigation, the preliminary conceptual site model, and the current regulatory status.
- **Section 2 – Site Physical Setting**. Describes the physical characteristics of the study area, integrating information from available literature, previous investigations, and site-specific information gathered during the site characterization investigation.
- **Section 3 – Site Investigation Activities**. Describes the activities conducted during the site characterization investigation.
- **Section 4 – Findings**. Describes the findings of the current investigation.
- **Section 5 – Conclusions**. Presents the conclusions for the site.
- **Section 6 – References**. Lists the references cited in this report.
- **Tables and Figures.** Tables and figures cited in this report follow the text.
- **Appendixes.** Additional supporting materials are provided in the following appendixes at the end of this report:
  - Appendix A, New Mexico Office of the State Engineer (NMOSE) Well Installation Permit Approvals
  - Appendix B, Soil Boring Logs and Well Completion Diagrams
  - Appendix C, Investigation-Derived Waste (IDW) Disposal Paperwork
  - Appendix D, Laboratory Analytical Reports
  - Appendix E, Possible Pit or Surface Impoundment Near MW-20, circa 1978

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2. Site Physical Setting

The SJRP is located on the eastern Colorado Plateau with an average elevation of 5,180 feet. The climate of the SJRP area is semiarid and can be characterized by hot summers and cold winters with low precipitation throughout the year. The average annual snowfall is 10.9 inches and the average annual rainfall is 7.8 inches. The highest average temperatures occur in July (93 degrees Fahrenheit [^{o}F]) and the lowest average temperatures occur in January (16.8^{o}F). The site location is presented on Figure 1.

2.1 Topography and Hydrology

The topography surrounding the site is composed of plains and valleys dissected by mesas, buttes, and canyons. Surrounding uplands exceed elevations of 9,000 feet above mean sea level.

The San Juan River and its tributaries comprise the main drainage system in the area. The San Juan River flows through the City of Kirtland, approximately 2 miles south of the site. An irrigation ditch, known as the Farmers Mutual Ditch, is located approximately 0.5 mile south of the plant property boundary and Stevens Arroyo is located approximately 0.2 mile west of the SJRP. Stevens Arroyo is an intermittent watercourse.

2.2 Geology

Philip Environmental (Philip Environmental, 1998) and MWH (MWH, 2006) summarized the geology of the site during their investigations. Based on drilling logs from 1995 and prior activities, the soils consist of fine sand to fine sandy clay, with some gravel and cobbles. The soil samples from borings located in the valley or alluvial fans (such as P-10, P-7, P-9, MW-5, MW-8, and MW-9) consist of fine sand to clay. The soil samples from the borings located on the mesas, plateaus, and terraces consist of fine sand with some gravel and cobble layers and some unconsolidated sandstone and shales.

The uppermost and most prevalent lithology at the site comprises alluvial sediments, which consist of fluvial deposits and, to a lesser extent, terrace deposits of gravel and cobbles. Beneath the alluvium are the consolidated sedimentary units of the Kirtland Shale Formation, which contains both shales and sandstone members. The portion of the site to the north of the plant is underlain by a shale member of the Kirtland Formation. The SJRP area and Flare Hill to the west are underlain by a sandstone member of the Kirtland Formation. During closure of the south flare pit in September 1992, a distinct clay layer was encountered at a depth of approximately 15 feet below the original bottom of the pit.

During the 2006 DPT investigation, refusal was met in hard shale, siltstone, a silty sand mix, and sandstone at depths of 8 to 15 feet below ground surface (bgs). Lithology generally changed from a clay soil near the surface to alternating weathered shale and sandstone. This interpretation was considered consistent with previous assessments of the geology, and it was reported that the majority of the soil borings likely met refusal in the Kirtland Formation.

During the site characterization activities described in this report, the geology at the site was described from soil samples collected from the soil borings. Drilling activities are described in Section 3. Borings were advanced to depths ranging from 8 to 80 feet bgs. Alluvium consisting of silt and clay was encountered and varied in thickness from 10 feet to as much as 41 feet bgs. Alluvium was underlain by sandstone in 8 of 39 boreholes and shale in 31 of 39 boreholes. The geological assessment performed during this site investigation was consistent with the results summarized in the 1998 Philip Environmental and 2006 MWH investigations. Geologic cross-sections are presented in Section 4 of this report.

2.3 Hydrogeology

Regional groundwater flow in the San Juan Basin is from the topographically high outcrop areas around the edges of the basin, towards the lower outcrop areas. The San Juan River Valley is indicated as the main discharge area of the San Juan Basin (Stone, 1983). The San Juan River is located approximately

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2 miles to the south of the SJRP site. The results of potentiometric surface measurements collected at the site in 2018 indicated a groundwater flow divide just north of the SJRP facility that directs flow to the southwest through the southern portion of the site, and to the northwest through the northern portion of the site, including the Praxair Pond area, towards the coal mining operation to the north and west. The addition of new monitoring wells in the northern portion of the site in 2017 and 2019 provides additional groundwater elevation data, indicating that groundwater flows toward Stevens Arroyo from the southeast. The groundwater flow direction in the southern portion of the site is unchanged with the addition of the new wells.

Historically, groundwater elevations at the three Praxair Pond monitoring wells (PMW-1a, PMW-2a, and PMW-4a) differed by approximately 75 feet from southeast to northwest and total well depths vary from 78 feet bgs at PMW-2a to 140 feet bgs at PMW-4a. Soil boring logs and well completion diagrams are not available for these monitoring wells to confirm the lithology or initial depth at which groundwater was observed during drilling. Based on historical site documents, recharge from the wastewater ponds generated an artificial perched aquifer on the north side of the groundwater flow divide (K.W. Brown & Associates, 1991). Based on the depth to groundwater at site wells, all site monitoring wells except PMW-1a and PMW-4a are installed within the shallow aquifer.

Other possible explanations for the disparity in groundwater elevations at the three Praxair Pond wells include:

- PMW-1a and PMW-4a are installed in the sandstone aquifer while all other site monitoring wells are installed in a shallow shale aquifer zone.
- Long-wall coal mining, oriented in a north-south configuration, has occurred beneath the western portion of the Praxair Pond. It appears that the mining operations, perhaps dewatering or ground settlement (that is, faulting) into the mined void, are having a significant local effect on the groundwater table in the vicinity of the Praxair Pond.

During the site characterization activities, monitoring well MW-23 was installed adjacent to Praxair Pond monitoring well PMW-4a (Figure 2) and water was first encountered at 40 feet bgs, directly atop the shale bedrock in a thin water bearing layer in the unconsolidated sediments. The depth of groundwater found during well installation and the shale bedrock indicate monitoring wells PMW-1a and PMW-4a are likely installed in a deeper sandstone bedrock aquifer.

During site characterization activities, depth to groundwater at the newly installed monitoring wells ranged from approximately 8 to 58 feet bgs, in both the alluvial basin fill and the sandstone/shale bedrock.

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3. Site Investigation Activities

This section describes the objectives and procedures for the activities conducted during the site characterization investigations to further identify the nature and extent of environmental impacts at the site. Site characterization activities included obtaining permits to install wells, soil sampling, monitoring well installation and development, groundwater sampling, and a survey of existing and newly installed monitoring wells.

3.1 Monitoring Well Permits

Prior to initiating fieldwork activities, permits to install new monitoring wells were obtained from the NMOSE. During the permitting process to install new monitoring wells, the NMOSE indicated that existing site wells (MW-2, MW-4, MW-6, MW-8, and MW-9) had not been permitted after installation; the NMOSE requested the wells be permitted.

NMOSE approval to install nonconsumptive use wells MW-11 through MW-16 was received on March 23, 2017. Approval to install nonconsumptive use wells MW-17 through MW-23 was received on July 27, 2018, and a permit for existing wells MW-2, MW-4, MW-6, MW-8, and MW-9 was received on September 4, 2018. All wells are included under permit approval number SJ-4231 POD1 through POD18. Permit approvals are included in Appendix A and well details are included on Table 1.

3.2 Monitoring Well Abandonment

The remains of monitoring well MW-5 were not located during a search of the area conducted in 2017. Information was found indicating that monitoring well MW-5 was destroyed due to subsurface coal mining activities to the northwest of SJRP. The destruction of the well was determined to have occurred between February and May 2008.

3.3 Utility Clearance

A New Mexico 811 utility locate was submitted prior to the onset of intrusive activities. All underground utilities were marked as appropriate for each utility (e.g., electrical, gas, water, and communication) with spray paint, pin flags, or both by the utility owner.

In addition, all drilling locations were cleared for subsurface utilities to approximately 10 feet bgs and at least 12-inches in diameter using hydro-excavation techniques. Hydro-excavation for subsurface utility clearances were performed by Riley Industrial Services, Inc. and Badger Daylighting, Inc. in 2017 and 2019, respectively. Soil and water cuttings produced during hydro-excavation activities were transported to the Envirotech, Inc. landfarm under U.S. Department of Transportation transport manifest documentation or Bills of Lading.

3.4 Drilling and Soil Sampling Activities

3.4.1 Soil Borings

Soil borings were completed to collect soil samples and evaluate the nature and extent of potentially impacted soil at the site. Borings were advanced to the top of bedrock for visual inspections, lithologic characterization, photoionization detector (PID) screening for total volatile organic compounds (VOCs), and laboratory analyses. Soil boring locations are shown on Figure 2; geologic cross-sections of the site, including their locations, are presented on Figures 3, 4, 5, and 6. A summary of drilling and soil sampling activities conducted in April 2017 and January through February 2019 is provided below.

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3.4.1.1 April 2017

A total of 25 soil borings were installed using a Central Mining Equipment Model 85 HSA drill rig with nominal 4.25-inch inside diameter (ID) HSAs and a 5-foot-long by 3-inch-diameter continuous soil core barrel. Six soil borings, MW-11 through MW-16, were then completed as monitoring wells as described in Section 3.5 (Figure 2). After drilling and soil sampling, borings that were not completed as monitoring wells were backfilled using cement-bentonite grout slurry consisting of 95 percent Portland cement and 5 percent sodium bentonite. The grout was emplaced in the borehole using a tremie pipe, based on NMOSE requirements for borehole abandonment (New Mexico Administrative Code §19.27.4) and as required in the NMOSE Permit to Drill a Well with No Water Right, Conditions of Approval (Appendix A).

3.4.2 January/February 2019

A total of seven soil borings were installed using a PS-600 Rotosonic drill rig with nominal 8-inch ID casing and a 10-foot-long by 6-inch-diameter continuous soil core barrel. All seven soil borings were then completed as monitoring wells (MW-17 through MW-23) as described in Section 3.5 (Figure 2).

3.4.3 Soil Sample Collection

Soil cores were collected continuously from the soil borings using 5-foot-long split-barrel samplers with HSA drilling (2017) or the 10-foot-long continuous core barrels with Rotosonic drilling (2019). A total of 107 soil samples, including 14 duplicate samples, were collected from the 32 soil borings. Eighty-four soil samples, including eleven field duplicates, were collected during the April 2017 activities. Twenty-three soil samples, including three field duplicates, were collected during the January/February 2019 activities. Soil analytical results are presented in Table 2. During drilling and soil sampling activities, visual observations including odors and/or staining of soil were recorded on the soil boring logs (Appendix B). Soil was screened for VOCs with a PID along the entire length of the core and soil from the top, middle, and bottom of each core sample was placed into a 1-gallon-size zip-top bag for headspace screening. The headspace screening method involved the following process:

1. Approximately 4 ounces of soil was placed into a 1-gallon zip-top bag and the bag was sealed.
2. After approximately 10 minutes, the tip of the PID probe was inserted through the plastic bag and the highest observed PID reading was recorded on the boring log.

Soil cores were logged following Unified Soil Classification System (USCS) methods and recorded onto field boring log sheets. Detailed soil boring logs are included in Appendix B.

Soil samples were collected from the portions of the soil cores where potential soil contamination was observed, defined as elevated heated headspace readings, staining, or odors. If there was no indication of potential contamination, soil samples were collected where changes in lithology were observed or at a minimum of every 10 feet to refusal or the top of the observed water table.

3.4.4 Soil Sample Analyses

Soil samples collected for laboratory analysis were shipped to TestAmerica Laboratories in Houston, Texas, for the following analyses:

- BTEX by United States Environmental Protection Agency (EPA) Method 8260B
- TPH as gasoline range organics (GRO), diesel range organics (DRO), and oil range organics (ORO) via EPA Method 8015
- NMWQCC metals using EPA Method 6010B and 7470A

Quality assurance/quality control samples were also collected to ensure proper sample handling and to provide information for laboratory data validation.

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3.5 Monitoring Well Installation

Thirteen of the 32 soil borings were completed as monitoring wells. Figure 2 shows the locations of Phase 1 and Phase 2 monitoring wells at the site. Well completion details are included in Table 1; well completion diagrams are included in Appendix B. A summary of monitoring well installation activities is provided below.

3.5.1 April 2017

Soil borings identified to be completed as monitoring wells were drilled to approximately 25 feet below the top of the water table, as defined by water levels in nearby boreholes, depth to water reported in historical documents, and observed moist soil in the soil core. During HSA drilling, the water table was not identified in soil cores due to the fine-grained, slightly indurated, and partially confined nature of the aquifer. Because of the difficulty identifying the water table during drilling operations, soil samples were collected below the water table, which ranged from 10 feet bgs at MW-14 to 28 feet bgs at MW-15 and MW-16. The following nine soil samples were inadvertently collected below the water table, MW-11 (29-30 ft bgs), MW-12 (16-17 ft bgs), MW-13 (19-20 ft bgs, 29-30 ft bgs, and 34-35 ft bgs), MW-14 (15-16 ft bgs, 20-21 ft bgs, 25-26 ft bgs), and MW-15 (26-27 ft bgs).

After the HSA drill rig reached refusal, the HSA sample tooling was switched to 7.25-inch diameter drill bit and air rotary tooling. The borehole was then over-reamed with the 7.25-inch-ID augers to the bedrock depth and then air rotary drilling continued to the total depth of the borehole and the well was installed as described below. Monitoring wells were constructed so that the screened interval intersected the surface of the first-encountered groundwater; a minimum of 15 feet of open, unsaturated screen remained above the top of the water table to allow for water table fluctuations. Total well depths ranged from 40 feet bgs at MW-14, MW-15, and MW-16 to 55 feet bgs at MW-11 and 13. At monitoring well locations where depth to groundwater was less than 10 feet bgs in nearby soil borings or monitoring wells, the top of the well screen was set at 5 feet bgs to allow for proper thickness of a sanitary seal between the water table and ground surface.

Monitoring wells MW-11, MW-12, MW-13 were originally drilled to a depth of 77 to 80 feet bgs and wells were installed. However, water levels in the monitoring wells continued to rise, submerging the well screens. These monitoring wells were removed, the boreholes were cleaned out, and bentonite chips were installed from the total depth of the well to approximately 55 feet bgs. No additional drilling or soil sampling was conducted since the same boreholes were used. Monitoring wells MW-11 through MW-13 were then reinstalled within the same borehole to depths listed on Table 1.

The following monitoring wells were installed in April 2017:

- MW-11 through MW-13 – Three new wells between the Praxair Pond and Historic Burn Area
- MW-14 through MW-16 – Three new wells in the Historic Burn Area

3.5.2 January/February 2019

During the January/February drilling event, the water table was identified in soil cores as a thin sandy clay to clay layer located directly above the shale or sandstone bedrock. No soil samples were collected below the water table during Rotosonic drilling. Soil boring were drilled to at least 15 feet below the top of the water table. Monitoring wells were screened across both the alluvial fill and sandstone/shale bedrock. Monitoring wells were constructed so that the screened interval intersected the surface of the first-encountered groundwater and a minimum of 10-feet of open, unsaturated screen above the top of the water table to allow of water table fluctuations. Total well depths ranged from 34 feet bgs at MW-19 to 55 feet bgs at MW-23. At monitoring well locations where depth to groundwater was less than 10 feet bgs in nearby soil borings or monitoring wells, the top of the well screen was set at 5 feet bgs to allow for proper thickness of a sanitary seal between the water table and ground surface.

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The following monitoring wells were installed during January/February 2019:

- MW-20 – One new well upgradient of Praxair Pond well PMW-2a
- MW-23 – One new well near Praxair Pond well PMW-4a
- MW-17 through MW-19 and MW-21 through MW-22 – Five new wells surrounding the Historic Burn Area

3.5.3 Well Development

Following installation, monitoring wells were developed by swabbing and bailing the well dry, except MW-19, which was also purged using a submersible pump until the water was visibly clear. Purge water was containerized and transported to the onsite temporary water storage tank. Well development information is included in Appendix B, as part of the well completion diagram.

3.6 Decontamination

The drill rigs and support equipment arrived at the site clean and ready for drilling activities. Decontamination of augers, drilling rods, casings, and downhole equipment was conducted between sampling and drilling locations and at the completion of site work to avoid site cross-contamination and offsite transport of contamination. Decontamination consisted of a Liquinox solution wash/scrub for soil core barrels between samples, potable water high-pressure wash, hot water rinse (steam cleaning), and potable water rinse. A decontamination trailer or constructed sheet plastic pad was used for decontamination processes containing overspray, liquids, and solids generated during decontamination procedures. Decontamination fluids were transported to the onsite storage tank and solids were transferred to the onsite roll-off containers daily.

3.7 Site Characterization Groundwater Sampling

For each of the two phases of investigation, groundwater samples were collected from the new and existing monitoring wells following well development; a total of five groundwater sampling events were completed. Groundwater samples were collected 2 months after development of the Phase 1 investigation wells and 1 month after development of the Phase 2 investigation wells. In addition, groundwater samples were also collected as part of the NMOCD-required annual groundwater monitoring program and the results were presented in the annual groundwater monitoring reports for calendar years 2017, 2018, and 2019 (CH2M 2018, Jacobs 2019a, and Jacobs 2020, respectively). Following are details of each groundwater monitoring event.

3.7.1 July 2017

During the July 2017 sampling event depth to water measurements were collected at each monitoring well (see Table 3). Groundwater samples were collected from the eight existing and six new monitoring wells during July 2017. HydraSleeves were installed in new monitoring wells after well development, and in existing wells where HydraSleeves had been previous installed, HydraSleeves were retrieved during the sampling event and replaced with new equipment. As Praxair uses their monitoring wells for their groundwater monitoring program, HydraSleeves cannot remain in those wells and HydraSleeves were installed in Praxair Pond wells immediately prior to sample collection. A total of 14 samples were collected (including two field duplicates) and submitted to TestAmerica Laboratories in Houston, Texas.

3.7.2 November 2017

During the November 2017 annual groundwater sampling event depth to water measurements were collected at each monitoring well (see Table 3). Groundwater samples were collected from the 14 site monitoring wells using HydraSleeves. Previously installed HydraSleeves were retrieved during the sampling event; HydraSleeves were installed in Praxair Pond wells immediately prior to sample collection. Samples were collected (including two field duplicates) and submitted to TestAmerica Laboratories in Houston, Texas.

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3.7.3 November 2018

During the November 2018 annual groundwater sampling event depth to water measurements were collected at each monitoring well (see Table 3). Groundwater samples were collected from the 14 site monitoring wells using HydraSleeves. Previously installed HydraSleeves were retrieved during the sampling event; HydraSleeves were installed in Praxair Pond wells immediately prior to sample collection. Samples were collected (including two field duplicates) and submitted to TestAmerica Laboratories in Houston, Texas.

3.7.4 March/April 2019

Depth to water measurements were collected at each monitoring well (see Table 3). Groundwater samples were collected from the 14 existing and four of the seven new monitoring wells during March 2019; one cooler containing five groundwater samples was lost during shipping and samples were recollected in April 2019. HydraSleeves were installed in new monitoring wells after well development, and in existing wells where HydraSleeves had been previous installed, HydraSleeves were retrieved during the sampling event and replaced with new equipment. HydraSleeves were installed in Praxair Pond wells immediately prior to sample collection. A total of 24 samples were collected (including three field duplicates) and submitted to TestAmerica Laboratories in Houston, Texas.

A HydraSleeve was not installed in MW-20 due to the presence of PSH and also not in MW-22 because only approximately 0.01 foot of water was measured in the well screen. A PSH sample was collected from MW-20 and shipped to TestAmerica Laboratories in Houston, Texas.

3.7.5 October 2019

During the October 2019 annual groundwater sampling event depth to water and PSH measurements were collected at each monitoring well (see Table 3). Groundwater samples were collected from 18 of the 21 site monitoring wells using HydraSleeves. Previously installed HydraSleeves were retrieved during the sampling event; HydraSleeves were installed in Praxair Pond wells immediately prior to sample collection. Samples were collected (including three field duplicates) and submitted to TestAmerica Laboratories in Houston, Texas.

Samples were not collected from MW-22 or MW-23 because they were dry. A PSH sample was collected from MW-20 and shipped to TestAmerica Laboratories in Houston, Texas.

3.7.6 Laboratory Analyses of Groundwater Samples

For each sampling event, quality control samples were collected at a 10 percent rate for field duplicates and a trip blank accompanied all samples for VOC analyses. Samples were analyzed via the following methods:

- BTEX using EPA SW-846 Method 8260B
- Nitrate, chloride, and sulfate via EPA Method 300
- Dissolved NMWQCC metals via EPA Method 6020/7470A
- Alkalinity via EPA Method SM 2320B
- TDS via EPA Method SM 2540C
- TPH-DRO, TPH-GRO, and TPH-ORO via EPA Method 8015C for site investigation samples collected in July 2017 and for the PSH sample at MW-20 in March and October 2019

3.8 Management of Investigation-Derived Wastes

Five types of investigation-derived waste (IDW) were generated during site characterization activities:

- Construction debris, including polyvinyl chloride (PVC) pipe and well installation materials

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- Trash from food containers and personnel
- Mud from hydro-excavation during utility avoidance activities
- Soil cuttings from soil borings and sampling
- Decontamination and development water from drilling, well installation, and well development

Construction and well installation waste were placed into a designated roll-off box by the drilling subcontractor. Site trash generated during site investigation activities (for example, plastic/paper bags, disposable and uncontaminated personal protective equipment) was also transferred to the onsite roll-off. At the conclusion of field activities, the roll-off container was transported to the local solid waste landfill for disposal.

Mud generated during hydro-excavation at each drilling location was containerized directly in the vacuum truck and then transported offsite for disposal at the Envirotech landfarm.

Soil cuttings, including solids from equipment decontamination, were transferred to water-tight, lined, and covered roll-off containers for bulk storage. For waste characterization purposes and to determine the appropriate disposal method, one IDW sample was collected from a roll-off and shipped to TestAmerica Laboratories in Houston, Texas, and analyzed for toxicity characteristic leaching procedure (TCLP) VOCs, semivolatile organic compounds (SVOCs), and Resource Conservation and Recovery Act (RCRA) 8 metals. IDW sampling results indicated the soil cuttings from both areas met criteria for disposal, and roll-off containers were transported to the Envirotech landfarm for disposal under U.S. Department of Transportation approved manifest documents.

Water generated during well development and decontamination activities was containerized at the source and transferred to an onsite water storage tank at least daily. For waste characterization purposes and to determine appropriate disposal method, one IDW sample was collected from the water storage tank, shipped to TestAmerica Laboratories in Houston, Texas, and analyzed for the RCRA 8 metals, VOCs, SVOCs, flashpoint, and corrosivity. At the conclusion of the investigation activities, the water was vacuumed from the storage tank and transported to Basin Disposal, Inc., for disposal under U.S. Department of Transportation manifest documents.

Water generated during groundwater sampling activities was containerized at the source. Waste characterization samples were not collected due to the RCRA exempt status of the water as an oil field waste generated from oil and gas exploration and production operations and not mixed with nonexempt waste. Wastewater was transported to Basin Disposal, Inc., for disposal using the New Mexico Energy, Minerals, and Natural Resources Department Form C-138.

IDW generated during the 2019 site characterization activities was not characterized based on the RCRA exemption status of the waste as generated from oil and gas production operations. Soil IDW was sent to the Envirotech, Inc., landfarm and water IDW was sent to Basin Disposal, Inc., using New Mexico Energy, Minerals, and Natural Resources Department Form C-138.

Waste disposal paperwork is included in Appendix C.

3.9 Location and Elevation Survey

The new and existing monitoring well locations at the site were surveyed for vertical elevation and horizontal location. Surveying activities were performed by Sakura Engineering, a New Mexico-licensed surveyor. The ground surface, well pad, and PVC casing were surveyed for horizontal location relative to New Mexico State Plane West coordinates and vertical location using North American Datum 1983 vertical datum. Monitoring well survey data are presented on Table 1. Soil boring locations not completed as monitoring wells were surveyed for horizontal location with a hand-held global positioning system unit with submeter accuracy and plotted on the site figures.

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4. Findings

The nature and extent of contamination at the site were evaluated based on analytical sampling results and are discussed in this section. This section discusses pertinent field observations, including soil and bedrock types, staining and/or odors noted during boring installation, and soil and groundwater analytical results. Headspace measurements are also discussed (see Section 3.4.3 for a description of headspace readings).

Lithologic cross-sections were prepared to illustrate the soil and bedrock lithology and groundwater elevation at the site. Figure 3 shows the locations of three cross-sections through the study area.

Cross-section A to A' (Figure 4) was constructed using the soil boring logs and groundwater elevations from MW-17 south to MW-20, through the center of the site. Soil boring and monitoring well locations are shown on Figure 2.

Cross-section B to B' (Figure 5) was constructed using the soil boring logs and groundwater elevations from MW-8 southeast to SB-16, through the Historic Burn Area. Soil boring and monitoring well locations are shown on Figure 2.

Cross-section C to C' (Figure 6) was constructed using the soil boring logs and groundwater elevations from MW-23 east to SB-18, which is through the center of the site. Soil boring and monitoring well locations are shown on Figure 2.

Figure 7 presents the elevations at which sandstone and shale bedrock were first encountered in the boreholes where bedrock was encountered. The elevations of the top of the sandstone, which is the shallowest bedrock encountered, have been contoured to give an approximation of the sandstone bedrock surface.

4.1 Field Observations

Staining and/or odors were observed in the soil cores from twenty borings. Borings for MW-13, MW-14, MW-15, MW-16, MW-17, MW-19, MW-20, MW-21, MW-22, SB-03, SB-05, SB-06, SB-08, SB-10, SB-11, SB-12, SB-14, and SB-17 had PID measurements in headspace of greater than 25 parts per million (ppm) and the highest PID reading of 1,006.5 ppm was measured in the 18.5- to 20-feet bgs zone in the boring for MW-21. Additionally, boring SB-04 noted a slight odor at 10-feet bgs and boring SB-09 noted a slight odor and staining at 9-feet bgs. Elevated PID measurements are clustered in and around the Historic Burn Area, located roughly between MW-9 and MW-14 (Figure 2), and downgradient of a potential historic condensate discharge pipe near MW-14. The PID readings are included on the soil boring logs in Appendix B.

4.2 Soil Analytical Results

Soil analytical data were evaluated against the New Mexico Industrial/Occupational Soil Screening Levels for BTEX and metals, and NMOCD *Guidelines for Remediation of Leaks, Spills, and Releases* (NMOCD Guidelines) (NMOCD, 1993) criteria for TPH. Soil boring locations are shown on Figure 2. Soil analytical results are summarized in Table 2. Laboratory analytical reports are provided in Appendix D. Exceedances of the NMOCD Guidelines of 100 milligrams per kilogram (mg/kg) for TPH and 10 mg/kg for benzene are presented on Figure 8. Although there are no Recommended Remediation Action Levels for the individual compounds ethylbenzene, toluene, or xylenes in the NMOCD Guidelines, a summation of all BTEX constituents exceeding 50 mg/kg in soil is considered an exceedance.

Benzene concentration exceeded the NMOCD Guidelines of 10 mg/kg in one soil sample collected from each of the soil borings SB-08, SB-11, and MW-13. The highest detected benzene concentration was found in the 29- to 30-foot bgs sample at monitoring well MW-13 (46.8 mg/kg). BTEX exceeded the 50 mg/kg Recommended Remediation Action Level in at least one sample collected from SB-03, SB-05, SB-08, SB-

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11, MW-13, MW-15, MW-17, MW-21, and MW-22. The highest detected total BTEX concentration was found in the 19- to 20-foot bgs sample at MW-21 (1,604.4 mg/kg).

The TPH GRO fraction exceeded the NMOCD Guidelines of 100 mg/kg in at least one soil sample collected from soil borings SB-03, SB-05, SB-06, SB-08, SB-10, SB-11, SB-12, MW-15, MW-17, MW-21, and MW-22. The highest detected TPH GRO concentration was found in the 9 to 10-foot bgs sample at MW-17 with a concentration of 3,490 mg/kg. Soil staining and petroleum odors were noted in this depth interval of the soil boring (see Appendix B). TPH DRO exceedances were also found in at least one soil sample collected from soil borings SB-05, SB-06, SB-08, SB-11, MW-15, MW-17, MW-21, and MW-22 with the greatest detected concentration of 1,560 mg/kg from the 19- to 20-foot bgs interval at MW-21. The TPH ORO fraction was detected in 49 soil samples but did not exceed the NMOCD Guidelines of 100 mg/kg at any location.

Eighty-three percent of GRO and DRO exceedances were detected in soil samples collected from 10 to 20 feet bgs, which is just above or below the water table; essentially indicating a petroleum hydrocarbon smear zone. Additionally, detected GRO and DRO concentrations decreased with depth in the soil. For example, at MW-15, GRO and DRO concentrations decreased from 1,910 and 1,000 mg/kg, respectively, in the soil sample collected from 9 to 10 feet bgs to 124 and 21.4 mg/kg, respectively, in the soil sample collected from 26 to 27 feet bgs (Table 2). The 26- to 27-foot bgs sample was collected just below the water table.

GRO and DRO in soil occur in silt and lean clay units at the Historic Burn Area and are centrally distributed within and downgradient of the Historic Burn Area in the area between MW-9 and MW-14 (Figure 8). Additionally, a comparison of the soil boring logs, including recorded PID measurements (Appendix B) and the analytical soil data (Table 2), indicate elevated concentrations of GRO and DRO occur above the shale/sandstone bedrock, in the alluvium and weathered bedrock.

Though elevated GRO and DRO concentrations in the soil do not directly correlate with DRO and GRO exceedances in groundwater, it is important to note that soil samples collected during the 2017 site investigation were not necessarily collected at the top of the water table due to the presence of bedrock, as opposed to unconsolidated soils, which necessitated a switch in drilling methods from hollow stem auger to air rotary. Soil samples were not collected from below the water table during the 2019 site investigation.

Finally, arsenic concentration exceeded the New Mexico Industrial/Occupational Soil Screening Criteria at SB-05, SB-06, and SB-14; the greatest concentration was found in the 1- to 2-foot bgs sample at SB-05 (60.4 mg/kg). However, arsenic concentrations did not exceed the NMWQCC standard in groundwater.

No other COCs exceeded their respective soil screening criteria.

4.3 Groundwater Results

Groundwater analytical results and the site hydrogeology, based on updated groundwater elevations, are discussed in this section. Groundwater analytical data were evaluated against the most recent NMWQCC standards.

4.3.1 Groundwater Elevation and Gradient

Prior to installation of HydraSleeves at the site, depth to water measurements were collected at all site monitoring wells. During October 2019 depth to water in the shallow aquifer ranged from approximately 10 feet below top of casing (btoc) in the east (MW-9 and MW-14) to 66 feet btoc in the west (PMW-1a). Less than 2 feet of water was present in monitoring wells MW-17, MW-22, and MW-23 during March 2019 depth to water measurements; monitoring wells MW-22 and MW-23 were dry during October 2019 depth to water measurements.

Based on field observations during soil boring installation at monitoring wells MW-22 and MW-23, there was no indication that these locations would be dry; clayey sand and clay units atop the bedrock were

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described as moist to dry in the soil boring logs. However, similar descriptions of clayey units atop bedrock are found at MW-19, MW-20, and MW-21, which all have at least 10 feet of water inside the well screen. The proximity of MW-22 and MW-23 to the Praxair Pond may be contributing to the lack of a measurable shallow aquifer in the area. As presented in Section 2.3 (Hydrogeology), general settling of the ground surface and downward groundwater movement along a portion of the north-south trending long-wall coal mine at the San Juan River Generating Station may have occurred along the western portion of the Praxair Pond.

Approximately 1.5 feet of PSH was measured atop the water table at MW-20 during March 2019 and 2.3 inches of PSH was measured during October 2019.

Potentiometric surface maps depicting the groundwater elevations collected during the spring and fall 2019 groundwater sampling events are provided on Figures 9 and 10, respectively. The general direction of groundwater flow in the Historic Burn Area is to the northwest toward Steven's Arroyo. The groundwater gradient in the Historic Burn Area is approximately 0.048. The general direction of flow near the former south flare pit is to the southwest, and the overall groundwater gradient was approximately 0.018. Site characterization data collected in 2019 and historical groundwater elevation data are provided in Table 3.

Based on the soil boring logs, groundwater predominantly occurs in the unconsolidated soil and fractured and weathered shale bedrock (see Appendix B for soil boring logs).

The aquifer at the site is not known to be a source of drinking water for the City of Kirtland. The City of Kirtland is serviced through the Lower Valley Water Users Association, which obtains the bulk of its water from the Animas and San Juan Rivers. In 2018, the last year reports are available, no detections of site-related COCs were found in the City of Kirtland drinking water supply.

4.3.2 Groundwater Analytical Results

The BTEX and metals and inorganic data for all sampling events conducted in 2017, 2018, and 2019 are presented in Tables 4 and 5. Benzene, toluene, and total xylene concentrations detected at site monitoring wells in October 2019 are plotted on Figures 11 through 14. Metals and inorganics concentrations exceeding their respective NMWQCC standards in October 2019 are presented in Figures 15 through 17. Additional discussions of the results are presented in the 2017, 2018, and 2019 annual monitoring reports (CH2M 2018, Jacobs 2019a, and Jacobs 2020, respectively).

Across the five groundwater monitoring events completed since 2017, generally, concentrations of benzene exceeded the NMWQCC standard of 0.01 mg/L at monitoring wells MW-9, MW-13, MW-15, MW-16, MW-17, MW-21, and PMW-2a. Concentrations of toluene exceeded the NMWQCC standard of 0.75 mg/L at monitoring wells MW-17 and PMW-2a. Concentrations of ethylbenzene exceeded the NMWQCC standard of 0.75 mg/L at MW-13. Concentrations of total xylenes exceeded the NMWQCC standard of 0.62 mg/L at monitoring wells MW-13, MW-15, MW-16, MW-17, and PMW-2a.

Dissolved metals concentrations that exceeded NMWQCC standards include aluminum; arsenic; boron; cadmium; cobalt; iron; lead; manganese; nickel; and selenium.

Concentrations of sulfate and TDS were elevated above the NMWQCC standards of 600 mg/L and 1,000 mg/L, respectively, at each site monitoring well.

Concentrations of chloride were elevated above the NMWQCC standard of 250 mg/L at each monitoring well. Concentrations of nitrate were elevated above the NMWQCC standard of 10 mg/L at monitoring wells MW-2, MW-6, MW-16, PMW-1a.

TPH analytical results on the PSH sample collected at MW-20 in March 2019 indicate the PSH was 69 percent GRO, 30 percent DRO and 1 percent ORO (Table 6). The analytical results from the sample collected in October 2019 indicate the GRO fraction decreased by roughly 98 percent (the concentration

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decreased from 859,000 mg/kg to 20,700 mg/kg between March and October 2019) while the DRO fraction has remained stable.

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5. Conclusions

This section provides conclusions derived from the site investigation activities. The site characterization investigation was designed to address uncertainty identified from the previous investigations, and the current delineation of the nature and extent of petroleum hydrocarbons is based on the results of both the recent work and previous investigations. The following conclusions are presented relative to groundwater conditions at the SJRP site, based on the groundwater elevation and analytical data obtained during the site characterization investigation.

With the addition of the new monitoring wells in 2017 and 2019, the groundwater flow direction was calculated to be from the northeast to southwest in the areas of the gas plant and southern portion of the site and to the northwest in the northwestern portion of the SJRP facility and the Historic Burn Area. Using the new monitoring wells to evaluate groundwater elevation, flow direction, and gradients, the data suggest that Praxair monitoring well PMW-4a may be screened in a separate, deeper water bearing zone. This is based on significantly deeper groundwater elevation in that well relative to the rest of the site wells. Praxair monitoring well PMW-1a is representative of a steep groundwater gradient on the northwestern portion of the site. Alternatively, there could be influences on the depth to water caused by coal mining in this immediate area and associated subsurface settlement, faulting, and dewatering, each of which could result in significant changes to the groundwater gradient. This may be resulting in the water table draining into mine works, as indicated by the steep groundwater gradient at Praxair monitoring well PMW-1a and the lack of continuous groundwater at MW-22 and MW-23.

TPH and petroleum hydrocarbons in soil and groundwater were likely released as condensate, which seeped through the coarser-grained surface soils until contacting the finer-grained silt and clay units where vertical flow was impeded and COCs began flowing along and within the clay and shale under the prevailing groundwater gradient at that time.

The source of PSH in MW-20 is unknown but may be related to historical operation of pits and ponds to the east of MW-20. Appendix E contains a blue-line reproduction drawing of the area near MW-20 from 1978. In the drawing, there is a feature, possibly a pit or other surface impoundment, located roughly 100 feet due west of the present-day location of MW-20. The function or contents of this basin are unknown. Based on the potentiometric surface maps using the new monitoring wells and associated groundwater flow direction, there is not currently a monitoring well upgradient of MW-20. Further, the PSH in MW-20 is now considered a potential source of the BTEX compounds observed in Praxair monitoring well PMW-2a. The fluctuation in the TPH ranges between PSH sampling events is not considered significant, given the likely length of time (that is, decades) since the condensate PSH was released and variability is anticipated. Some of the highest BTEX concentrations at the site were found at monitoring well MW-17. Monitoring well MW-17 is the furthest downgradient well from the Historic Burn Area, which indicates that the downgradient extent of the BTEX from the Historic Burn Area is not fully delineated.

Metals were positively detected in all 107 soil samples collected during the investigation with no discernible pattern and are likely naturally occurring. Similarly, general chemistry and dissolved metals analytical results exceed NMWQCC standards in groundwater at each monitoring well at the SJRP and there is no discernible pattern (Figures 15, 16, and 17). Background groundwater quality at the site is generally poor due to elevated TDS, chloride, manganese, sulfate, and boron concentrations. The TDS at the site ranged from 4,760 mg/L at MW-2 to 21,600 mg/L at MW-15. The NMWQCC standard for TDS in groundwater for domestic use is 1,000 mg/L. The high TDS in the groundwater at the site is likely naturally occurring and makes the water unsuitable for domestic purposes and at TDS concentrations greater than 10,000 mg/L, the groundwater is also considered unsuitable for irrigation or livestock production.

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Tables

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Table 1. Monitoring Well Details
Site Characterization Report
San Juan River Gas Plant, Kirtland, New Mexico

Well ID	Easting (ft)	Northing (ft)	Ground Surface Elevation (ft amsl)	Top of Casing (ft amsl)	Total Depth (ft btoc)	Screen Interval (ft bgs)	Screen Interval (ft amsl) from Top to Bottom	Top of Bedrock (ft amsl)	October 2019 Groundwater Elevation (ft amsl)	Water Column Height (ft)	Screen Length (ft)	Sump Interval (ft bgs)	Well Diameter (in)
PMW-1a	2,565,544.35	2,095,610.89	5,295.65	5,298.09	103.6	--	--	--	5,232.04	--	--	--	2
PMW-2a	2,565,935.91	2,096,881.45	5,295.48	5,298.14	77.9	--	--	--	5,256.44	--	--	--	2
PMW-4a	2,565,525.12	2,097,276.56	5,285.13	5,287.86	141.8	--	--	--	5,185.89	--	--	--	2
MW-2	2,565,601.55	2,094,766.24	5,282.65	5,284.43	57.9	--	--	--	5,229.69	--	--	--	2
MW-4	2,566,075.84	2,095,018.85	5,285.40	5,286.88	55.93	--	--	--	5,233.76	--	--	--	2
MW-6	2,568,178.91	2,095,736.13	5,306.57	5,308.71	42.67	--	--	--	5,275.99	--	--	--	4
MW-8	2,565,812.79	2,097,569.43	5,260.35	5,262.72	22.17	--	--	--	5,259.36	--	--	--	4
MW-9	2,566,197.66	2,097,583.43	5,261.59	5,264.26	22.09	--	--	--	5,254.06	--	--	--	4
MW-11	2,566,073.24	2,096,943.59	5,287.87	5,290.46	57.68	15 - 55	5,272.87 - 5,232.87	5,279.46	5,264.92	32.08	40	N/A	4
MW-12	2,566,020.96	2,097,152.54	5,280.45	5,282.80	53.61	16 - 51	5,264.65 - 5,229.45	5,267.45	5,262.98	33.53	35	N/A	4
MW-13	2,566,090.70	2,097,273.50	5,277.01	5,279.31	57.4	20 - 55	5,257.01 - 5,222.01	5,248.01	5,259.99	37.98	35	N/A	4
MW-14	2,566,294.33	2,097,360.26	5,268.35	5,270.58	42.85	5 - 40	5,263.35 - 5,228.35	5,245.35	5,261.68	33.03	35	N/A	4
MW-15	2,566,009.70	2,097,443.26	5,271.07	5,273.45	42.95	5 - 40	5,266.07 - 5,231.07	5,243.07	5,246.86	15.79	35	N/A	4
MW-16	2,566,028.25	2,097,581.89	5,262.91	5,265.34	43.21	5 - 40	5,257.91 - 5,225.34	5,244.91	5,242.32	16.98	35	N/A	4
MW-17	2,565,910.66	2,097,677.03	5,260.57	5,263.95	28.42	5 - 25	5,255.52 - 5,235.57	5,250.57	5,236.25	0.68	20	N/A	4
MW-18	2,566,348.37	2,097,648.06	5,263.80	5,269.08	33.38	5 - 30	5,258.80 - 5,233.80	5,249.80	5,255.32	21.52	25	N/A	4
MW-19	2,566,310.17	2,097,248.13	5,275.49	5,278.94	35.09	9 - 34	5,266.49 - 5,241.49	5,244.49	5,264.93	23.44	25	N/A	4
MW-20	2,566,055.69	2,096,771.69	5,292.57	5,292.23	45.11	20 - 45	5,272.57 - 5,247.57	5,257.57	5,265.52[1]	17.95	25	N/A	4
MW-21	2,565,917.80	2,097,302.39	5,272.94	5,276.06	42.36	14 - 39	5,258.94 - 5,233.94	5,244.94	5,247.08	13.14	25	N/A	4
MW-22	2,565,807.56	2,097,378.21	5,266.07	5,269.13	37.29	9 - 34	5,257.07 - 5,232.07	5,247.07	Dry	0.00	25	N/A	4
MW-23	2,565,503.58	2,097,264.42	5,284.61	5,287.86	58.61	30 - 55	5,254.61 - 5,229.61	5,243.61	Dry	0.00	25	N/A	4

Notes:
Top of bedrock elevation calculated using ground surface elevation and depth of bedrock, as presented on soil boring logs.
Water column length calculated from the October 2019 groundwater elevation and the elevation of the bottom of the well screen.
-- = data not available
amsl = above mean sea level
bgs = below ground surface
btoc = below top of casing
ft = feet
in = inches
N/A = sump not installed, wells have 2-inch bottom cap

shale bedrock
sandstone bedrock

[1.] This is the apparent groundwater elevation due to the presence of phase separated hydrocarbons in the well. See Table 3 for corrected groundwater elevation.

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Table 2. Summary of Soil Analytical Results
Site Characterization Report
San Juan River Gas Plant, Kirtland, New Mexico

Analyte (mg/kg)	New Mexico Industrial/Occupational Soil Screening Criteria[1]	NMOCD Recommended Remediation Action Level[2]	SB-01	SB-02			SB-03			SB-04		
			1-2 ft bgs	1-2 ft bgs	13-14 ft bgs	18-19 ft bgs	1-2 ft bgs	10-11 ft bgs	13-14 ft bgs	1-2 ft bgs	14-15 ft bgs	19-20 ft bgs
		Sample Date	4/19/2017	4/19/2017	4/12/2017	4/12/2017	4/20/2017	4/11/2017	4/11/2017	4/17/2017	4/11/2017	4/11/2017
Volatile Organic Compounds												
Benzene	87.2	10	<0.00078	<0.000752	<0.000652	**0.00097 J**	<0.000592	**2.59**	**1.99**	<0.000695	<0.000758	**0.0048 J**
Ethylbenzene	368	NE	<0.00126	<0.00122	<0.00106	<0.000989	<0.000959	**3.2**	**2.73**	<0.00113	<0.00123	<0.00108
Toluene	61,340	NE	<0.00171	<0.00165	<0.00143	<0.00134	<0.0013	<0.0729	**15.1**	<0.00152	<0.00166	<0.00146
Xylenes, Total	4,275	NE	<0.0014	<0.00135	<0.00117	<0.0011	<0.00106	**5.36**	**38.4**	<0.00125	<0.00136	<0.0012
Total BTEX	NE	50[3]	<0.00171	<0.00165	<0.00143	**0.00097 J**	<0.0013	**11.15**	**58.22**	<0.00152	<0.00166	**0.0048 J**
Metals												
Aluminum	1,285,451	NE	**12,900**	**10,800**	**15,800**	**14,000**	**10,100**	**14,900**	**11,500**	**13,900**	**16,900**	**8,700**
Arsenic	35.88	NE	**4.06**	**3.26**	**4.16**	**3.1**	**3.59**	**14.5**	**23.6 J**	**3.95**	**3.6**	**15.1**
Barium	254,671	NE	**137**	**109**	**27.7**	**66.3**	**72.2**	**74**	**45.6**	**147**	**58.7**	**130**
Boron	259,431	NE	**3.74 J**	**4.46 J**	**1.43 J**	**0.791 J**	**1.74 J**	**1.66 J**	**1.32 J**	**2.08 J**	**1.66 J**	**2.72 J**
Cadmium	1,108	NE	**0.187 J**	**0.157 J**	**0.114 J**	**0.139 J**	**0.144 J**	**0.0862 J**	<0.0286	**0.182 J**	**0.28**	<0.0304
Calcium	32,444,444	NE	**13,900**	**21,600**	**2,340**	**2,250**	**6,510**	**3,170**	**2,310 J**	**13,800**	**10,300**	**6,280**
Chromium	504.62	NE	**6.19**	**24**	**7.39**	**6.39**	**5.75**	**6.49**	**5.56**	**7.17**	**16.1**	**4.63**
Cobalt	388	NE	**10**	**7.22**	**13.5**	**12.4**	**6.43**	**10.1**	**4.8**	**8.16**	**11.7**	**7.64**
Iron	908,444	NE	**18,300**	**13,400**	**19,700**	**19,000**	**14,000**	**24,200**	**18,300**	**16,800**	**27,800**	**20,800**
Lead	NE	NE	**29.2**	**13.2**	**13.8**	**10.3**	**9.85**	**20.8**	**14.9**	**9.99**	**14.4**	**21.8**
Magnesium	5,677,778	NE	**4,090**	**3,620**	**3,920**	**3,620**	**3,580**	**3,630**	**2,920**	**4,600**	**6,280**	**1,510**
Manganese	160,183	NE	**475**	**906**	**105**	**120**	**110**	**88.1**	**53.7**	**512**	**327**	**61.2**
Molybdenum	6,489	NE	**1.33**	**1.18**	**1.55**	**0.668**	**0.556**	**2.39**	**0.882**	**1.06**	**2.25**	**3.21**
Nickel	25,682	NE	**10.2**	**8.6**	**16.1**	**12.9**	**7.07**	**11.6**	**5.3**	**11**	**20.5**	**15**
Potassium	76,244,444	NE	**1,500**	**1,280**	**1,540**	**1,160**	**1,210**	**1,730**	**1,280**	**1,680**	**1,460**	**1,140**
Selenium	6,489	NE	**0.453 J**	**0.375 J**	<0.311	<0.289	<0.266	**0.548 J**	<0.289	**0.339 J**	<0.273	**0.873 J**
Sodium	37,311,111	NE	**7,770**	**9,090**	**4,560**	**3,830**	**13,800**	**8,460**	**6,640**	**10,400**	**3,270**	**5,650**
Mercury	111	NE	**0.0185 J**	**0.0175 J**	**0.0234**	**0.0185 J**	**0.0148 J**	**0.0415**	**0.0205 J**	**0.0113 J**	**0.0279**	**0.0589**
Total Petroleum Hydrocarbons												
Gasoline Range Organics [C6-C10]	500	100	<3.65	<3.42	<3.49	<3.31	<3.02	**24.2**	**746**	<3.26	<2.89	<3.01
Diesel Range Organics [C10-C28]	3,000	100	<3.07	<2.93	**4.1 J**	<2.85	<2.77	**0.463**	**25.8**	**4.51 J**	**3.01 J**	**3.19 J**
Oil Range Organics [C24-C40]	3,000	100	<6.14	<5.91	**13.9**	**4.41 J**	<5.53	**0.059 J**	**4.37 J**	**4.72 J**	**7.32**	**8.77**

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Table 2. Summary of Soil Analytical Results
Site Characterization Report
San Juan River Gas Plant, Kirtland, New Mexico

Analyte (mg/kg)	New Mexico Industrial/Occupational Soil Screening Criteria[1]	NMOCD Recommended Remediation Action Level[2]	SB-05				SB-06				
			1-2 ft bgs	10-11 ft bgs	15-16 ft bgs	29-30 ft bgs	1-2 ft bgs	10-11 ft bgs	13-14 ft bgs	18-19 ft bgs	25-26 ft bgs
		Sample Date	4/18/2017	4/12/2017	4/12/2017	4/12/2017	4/4/2017	4/11/2017	4/11/2017	4/11/2017	4/11/2017
Volatile Organic Compounds											
Benzene	87.2	10	<0.000754	**6.12**	**3.19**	**0.0381 J**	<0.000783	<0.000609	<0.000752	**0.472**	<0.000793
Ethylbenzene	368	NE	<0.00122	**8.23**	**7.63**	**0.00351 J**	<0.00127	<0.000986	<0.00122	**0.934**	<0.00128
Toluene	61,340	NE	<0.00165	<1.18	**17.3**	**0.0115 J**	<0.00172	<0.00133	**0.00201 J**	**0.942**	**0.00256 J**
Xylenes, Total	4,275	NE	<0.00135	**97.9**	**116**	**0.0258 J**	<0.0014	**0.00314 J**	**0.00482 J**	**11.8**	**0.00423 J**
Total BTEX	NE	50[3]	<0.00165	**112.25**	**144.12**	**0.07891 J**	<0.00172	**0.00314 J**	**0.00683 J**	**14.148**	**0.00679 J**
Metals											
Aluminum	1,285,451	NE	**14,200**	**12,700**	**11,500**	**15,000**	**13,300**	**11,900**	**15,300**	**13,100**	**13,500**
Arsenic	35.88	NE	**60.4**	**15**	**3.21**	**4.35**	**4.09**	**14.6**	**3.91**	**39.4**	**2.73**
Barium	254,671	NE	**121**	**33.3**	**60.4**	**182 J**	**112**	**86.5**	**174**	**95.5**	**77.1**
Boron	259,431	NE	**55.4**	**1.63 J**	**0.551 J**	**1.72 J**	**2.29 J**	**1.3 J**	**2.05 J**	**1.31 J**	**2.03 J**
Cadmium	1,108	NE	**28.1**	**0.353**	**0.161 J**	**0.0876 J**	**0.214 J**	**0.415**	**0.113 J**	**0.261**	**0.155 J**
Calcium	32,444,444	NE	**3,240**	**3,720**	**3,030**	**3,000 J**	**16,200**	**4,100**	**3,940**	**4,790**	**3,440**
Chromium	504.62	NE	**7.8**	**6.85**	**5.53**	**4.49**	**6.91**	**8.63**	**7.58**	**5.97**	**5.22**
Cobalt	388	NE	**63.4**	**8.65**	**12.4**	**11.5**	**7.68**	**8.37**	**9.5**	**10.8**	**8.88**
Iron	908,444	NE	**18,800**	**28,500**	**31,000**	**15,400**	**16,000**	**31,100**	**18,800**	**23,800**	**19,200**
Lead	NE	NE	**73.3**	**23.2**	**13.2**	**13.7**	**9.58**	**17**	**15.8**	**11.1**	**14.4**
Magnesium	5,677,778	NE	**4,760**	**3,300**	**3,120**	**2,940**	**4,610**	**2,870**	**3,670**	**3,210**	**3,310**
Manganese	160,183	NE	**119**	**138**	**139**	**140 J**	**767**	**132**	**122**	**136**	**150**
Molybdenum	6,489	NE	**2.6**	**3.34**	**1.3**	<0.584	**0.849**	**3.2**	**0.955**	**0.98**	**0.983**
Nickel	25,682	NE	**7.71**	**15.3**	**13.3**	**14.4**	**10.2**	**14**	**12.2**	**14.6**	**10.4**
Potassium	76,244,444	NE	**2,020**	**2,000**	**1,180**	**1,460**	**1,480**	**1,410**	**1,470**	**1,220**	**1,240**
Selenium	6,489	NE	**56.6**	<0.29	<0.298	<0.302	<0.299	<0.256	<0.325	<0.27	<0.268
Sodium	37,311,111	NE	**10,500**	**9,290**	**5,680**	**11,600**	**6,320**	**4,020**	**5,320**	**4,750**	**7,340**
Mercury	111	NE	**0.0354**	**0.035**	**0.0181 J**	**0.0299**	<0.00391	**0.0313**	**0.0281**	**0.0161 J**	**0.0199**
Total Petroleum Hydrocarbons											
Gasoline Range Organics [C6-C10]	500	100	<3.41	**1,110**	**653**	<3.36	<2.46	**217**	<3.7	**79.7**	<3.03
Diesel Range Organics [C10-C28]	3,000	100	**6.66**	**337**	**147**	<2.9	<2.87	**110**	**33**	<2.84	<2.82
Oil Range Organics [C24-C40]	3,000	100	**5.76 J**	**6.17 J**	**3.27 J**	**3.03 J**	**4.07 J**	**4.25 J**	**5.02 J**	**4.24 J**	**4.73 J**

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Table 2. Summary of Soil Analytical Results
Site Characterization Report
San Juan River Gas Plant, Kirtland, New Mexico

Analyte (mg/kg)	New Mexico Industrial/Occupational Soil Screening Criteria[1]	NMOCD Recommended Remediation Action Level[2]	SB-07			SB-08			SB-09		
			1-2 ft bgs	14-15 ft bgs	20-21 ft bgs	1-2 ft bgs	13-14 ft bgs	29-30 ft bgs	1-2 ft bgs	9-10 ft bgs	12-13 ft bgs
		Sample Date	4/20/2017	4/10/2017	4/10/2017	4/18/2017	4/11/2017	4/11/2017	3/30/2017	3/28/2017	3/28/2017
Volatile Organic Compounds											
Benzene	87.2	10	<0.000699	<0.000894	<0.00072	<0.000734	**26.8**	**4.25**	<0.000673	<0.000626	<0.000578
Ethylbenzene	368	NE	<0.00113	**0.0088**	**0.00175 J**	<0.00119	**50.1**	**1.37**	<0.00109	<0.00101	<0.000936
Toluene	61,340	NE	<0.00153	<0.00196	<0.00158	<0.00161	**0.237 J**	**1.23**	<0.00147	<0.00137	<0.00127
Xylenes, Total	4,275	NE	<0.00125	**0.0091**	<0.00129	<0.00132	**528**	**11.4**	<0.00121	<0.00112	<0.00104
Total BTEX	NE	50[3]	<0.00153	**0.0179**	**0.00175 J**	<0.00161	**605.137**	**18.25**	<0.00147	<0.00137	<0.00127
Metals											
Aluminum	1,285,451	NE	**11,400**	**15,600**	**19,000**	**14,300**	**14,600**	**16,300**	**10,300**	**12,100**	**3,780**
Arsenic	35.88	NE	**3.33**	**7.09 J**	**6.44**	**5.17**	**6.5**	**6.4**	**2.66**	**6.85**	**1.51**
Barium	254,671	NE	**187 J**	**436**	**50.8**	**80.6 J**	**47.7**	**95.1**	**78.9**	**74.3**	**240**
Boron	259,431	NE	**5.8 J**	**0.999 J**	**1.94 J**	<0.473	**2.59 J**	**2.36 J**	**1.47 J**	**2.28 J**	**0.779 J**
Cadmium	1,108	NE	**0.145 J**	**0.345**	**0.149 J**	**0.129 J**	**0.446**	**0.0781 J**	**0.899**	<0.0312	<0.0273
Calcium	32,444,444	NE	**14,900 J**	**5,660**	**2,230**	**2,770 J**	**5,990**	**4,120**	**3,910**	**3,250**	**5,770**
Chromium	504.62	NE	**14.8**	**8.01**	**8.39**	**7.47**	**13.5**	**5.39**	**4.59**	**7.95**	**3.13**
Cobalt	388	NE	**6.81**	**11.1**	**9.59**	**6.78**	**12**	**12.1**	**6.59**	**6.94**	**3.27**
Iron	908,444	NE	**14,700**	**27,400**	**23,500**	**21,900**	**28,700**	**19,200**	**14,600**	**14,900**	**7,890**
Lead	NE	NE	**13.3**	**13.6**	**17.1**	**19.5**	**17.2**	**20.8**	**10.8**	**17.1**	**3.03**
Magnesium	5,677,778	NE	**3,980**	**3,720**	**4,500**	**4,460**	**3,480**	**2,920**	**3,360**	**3,790**	**2,270**
Manganese	160,183	NE	**538 J**	**204**	**140**	**73**	**288**	**122**	**292**	**101**	**203**
Molybdenum	6,489	NE	<0.58	**2.91**	**1.92**	**0.753**	**5.4**	**2.58**	**0.468 J**	**1.41**	**0.555**
Nickel	25,682	NE	**8.05**	**29.6**	**15.2**	**9.19**	**32.5**	**17.1**	**15.9**	**8.7**	**3.11**
Potassium	76,244,444	NE	**1,530**	**1,230**	**1,780**	**1,560**	**1,720**	**1,400**	**1,420**	**1,910**	**296**
Selenium	6,489	NE	<0.3	<0.259	**0.512 J**	<0.318	**0.881 J**	<0.289	**0.305 J**	**0.87 J**	<0.276
Sodium	37,311,111	NE	**5,580**	**2,930**	**6,210**	**17,400**	**5,170**	**9,990**	**9,510**	**4,280**	**820**
Mercury	111	NE	<0.00419	**0.0327**	**0.0294**	**0.00663 J**	**0.053**	**0.0332**	**0.0157 J**	**0.0387**	<0.00412
Total Petroleum Hydrocarbons											
Gasoline Range Organics [C6-C10]	500	100	<3.31	<2.84	<3.22	<3.8	**1,750**	<3.21	<2.37	<2.17	<2.46
Diesel Range Organics [C10-C28]	3,000	100	<2.88	**3.55 J**	**19.9**	**5.27 J**	**390**	**3.64 J**	**4.84 J**	**3.37 J**	<2.81
Oil Range Organics [C24-C40]	3,000	100	<5.77	**6.05**	**9.47**	**4.59 J**	**28**	**7.14**	**4.74 J**	<3.15	<2.81

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Table 2. Summary of Soil Analytical Results
Site Characterization Report
San Juan River Gas Plant, Kirtland, New Mexico

Analyte (mg/kg)	New Mexico Industrial/Occupational Soil Screening Criteria[1]	NMOCD Recommended Remediation Action Level[2]	SB-10				SB-11				SB-12	
			1-2 ft bgs	10-11 ft bgs	21-22 ft bgs	31-32 ft bgs	1-2 ft bgs	17-18 ft bgs	27-28 ft bgs	29-30 ft bgs	1-2 ft bgs	19-20 ft bgs
		Sample Date	3/28/2017	3/27/2017	3/27/2017	3/27/2017	4/20/2017	3/31/2017	3/31/2017	3/31/2017	4/20/2017	4/10/2017
Volatile Organic Compounds												
Benzene	87.2	10	<0.000838	<0.000574	**0.763 J**	**0.00174 J**	<0.000625	**13.4**	**1.34**	**2.53**	<0.000739	**0.252 J**
Ethylbenzene	368	NE	<0.00136	<0.000929	**2.53 J**	<0.00114	<0.00101	**39.6**	**1.41**	**0.617**	<0.0012	**1.04 J**
Toluene	61,340	NE	<0.00184	<0.00126	<0.0672	<0.00154	<0.00137	<0.665	<0.0612	**0.145 J**	<0.00162	<0.0687
Xylenes, Total	4,275	NE	**0.0117 J**	<0.00103	**7.96 J**	<0.00126	<0.00112	**199**	**5.48**	**5.98**	<0.00133	**7.29 J**
Total BTEX	NE	50[3]	**0.0117 J**	<0.00126	**11.253 J**	**0.00174 J**	<0.00137	**252**	**8.23**	**9.272**	<0.00162	**8.582**
Metals												
Aluminum	1,285,451	NE	**14,000**	**11,100**	**11,500**	**13,500**	**12,500 J**	**8,280**	**12,000**	**10,000**	**13,800**	**19,900**
Arsenic	35.88	NE	**2.13**	**4.73**	**5.98**	**7.29**	**4.01**	**5.43**	**1.53**	**2.35**	**4.04**	**3.67**
Barium	254,671	NE	**83.2**	**40.3**	**56.2**	**60.8**	**101 J**	**294**	**116**	**56.7**	**81.1**	**134**
Boron	259,431	NE	**2 J**	**1.3 J**	**1.65 J**	**1.76 J**	**1.1 J**	**2.38 J**	**1.69 J**	**1.63 J**	**2.17 J**	**2.29 J**
Cadmium	1,108	NE	**0.2 J**	**0.141 J**	<0.0275	<0.0246	**0.237 J**	**0.319**	**0.367**	**0.256 J**	**0.293**	**0.0969 J**
Calcium	32,444,444	NE	**6,730**	**7,210**	**6,150**	**2,600**	**12,700 J**	**3,890**	**12,300**	**6,880**	**970**	**2,330**
Chromium	504.62	NE	**6.97**	**8.85**	**5.86**	**4.9**	**6.64**	**3.04**	**4.34**	**4.1**	**6.18**	**8.93**
Cobalt	388	NE	**18.1**	**11.9**	**11.1**	**21.2**	**16.7**	**8.68**	**10.7**	**8.93**	**7.74**	**7.36**
Iron	908,444	NE	**17,500**	**25,700**	**26,000**	**26,500**	**20,100**	**17,600**	**13,400**	**16,800**	**16,800**	**22,400**
Lead	NE	NE	**11.2**	**14.1**	**13.5**	**15**	**17.6**	**16.8**	**14.4**	**13.7**	**20.5**	**16.2**
Magnesium	5,677,778	NE	**3,830**	**4,280**	**3,130**	**3,680**	**3,280**	**1,840**	**3,470**	**3,620**	**4,170**	**4,780**
Manganese	160,183	NE	**338**	**275**	**101**	**150**	**332**	**77.1**	**341**	**144**	**298**	**139**
Molybdenum	6,489	NE	**0.537 J**	**1.77**	**1.77**	**5.04**	**0.301 J**	**3.04**	<0.149	**0.66**	<0.52	**1.01**
Nickel	25,682	NE	**20.7**	**21.5**	**10.4**	**23.8**	**11.1**	**16.3**	**13.9**	**11.2**	**11.2**	**11.3**
Potassium	76,244,444	NE	**1,530**	**1,250**	**1,300**	**1,500**	**1,260**	**1,100**	**1,280**	**1,230**	**1,480**	**1,800**
Selenium	6,489	NE	<0.323	<0.292	<0.278	**0.322 J**	**0.43 J**	**0.936 J**	<0.284	<0.283	**0.376 J**	<0.264
Sodium	37,311,111	NE	**12,100**	**3,480**	**5,210**	**9,230**	**5,410**	**2,910**	**5,750**	**7,630**	**14,900**	**7,790**
Mercury	111	NE	**0.0262**	**0.0353**	**0.027**	**0.0188**	**0.0325 J**	**0.083**	**0.0216**	**0.00521 J**	**0.0416 J**	**0.0293**
Total Petroleum Hydrocarbons												
Gasoline Range Organics [C6-C10]	500	100	<2.34	**105**	**136**	<3.14	<3	**1,890**	<2.22	<2.47	<3.52	**279**
Diesel Range Organics [C10-C28]	3,000	100	<3.02	**8.22**	**25.2**	**7.82**	<2.73	**565**	**44.3**	**36**	<2.98	**32.4**
Oil Range Organics [C24-C40]	3,000	100	**3.27 J**	**3.22 J**	**4.71 J**	**8.89**	<5.46	**9.2**	**8.94**	**9.95**	<5.95	**4.79 J**

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Table 2. Summary of Soil Analytical Results
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San Juan River Gas Plant, Kirtland, New Mexico

Analyte (mg/kg)	New Mexico Industrial/Occupational Soil Screening Criteria[1]	NMOCD Recommended Remediation Action Level[2]	SB-12	SB-13			SB-14					SB-15
			25-26 ft bgs	1-2 ft bgs	14-15 ft bgs	18-19 ft bgs	1-2 ft bgs	13-14 ft bgs	18-19 ft bgs	31-32 ft bgs	37-38 ft bgs	1-2 ft bgs
		Sample Date	4/10/2017	4/4/2017	4/5/2017	4/5/2017	4/4/2017	3/31/2017	3/31/2017	3/31/2017	3/31/2017	4/17/2017
Volatile Organic Compounds												
Benzene	87.2	10	**0.028**	<0.000683	<0.000643	<0.000602	<0.000674	**0.00109 J**	**0.358**	**2.82**	**0.0161**	<0.000691
Ethylbenzene	368	NE	**0.0121**	<0.00111	<0.00104	<0.000974	<0.00109	**0.0192**	**2.4**	**1.85**	**0.0338**	<0.00112
Toluene	61,340	NE	**0.00826**	<0.0015	<0.00141	<0.00132	<0.00148	<0.00145	<0.0685	<0.0679	**0.014**	<0.00151
Xylenes, Total	4,275	NE	**0.105**	<0.00122	<0.00115	<0.00108	<0.00121	**0.0872**	**1.68**	**15**	**0.263**	<0.00124
Total BTEX	NE	50[3]	**0.15336**	<0.0015	<0.00141	<0.00132	<0.00148	**0.10749**	**4.438**	**19.67**	**0.3269**	<0.00151
Metals												
Aluminum	1,285,451	NE	**17,200**	**16,600**	**8,980**	**6,590**	**13,400**	**14,000**	**10,500**	**11,800**	**12,800**	**13,900**
Arsenic	35.88	NE	**4.4**	**7.2**	<1.23	<2.41	**4.97**	**4.1**	**42.9**	**1.49**	**3.55**	**4.25**
Barium	254,671	NE	**126**	**27**	**85.8**	**70.6**	**67.1**	**113**	**254**	**32.1**	**70.5**	**83.4**
Boron	259,431	NE	**2.13 J**	**2.86 J**	**5.09 J**	**3.81 J**	**2.94 J**	**2.35 J**	**1.36 J**	**1.86 J**	**2.42 J**	**4.56 J**
Cadmium	1,108	NE	**0.158 J**	**0.298**	**0.434**	**0.309**	**0.229 J**	**0.176 J**	**0.557**	**0.221 J**	**0.29**	**0.21 J**
Calcium	32,444,444	NE	**5,410**	**11,800**	**3,970**	**40,800**	**25,400**	**3,400**	**4,080**	**1,970**	**3,200**	**10,300**
Chromium	504.62	NE	**7.38**	**6.98**	**3.89**	**3.2**	**7.06**	**10.4**	**7.55**	**4.3**	**4.15**	**7.54**
Cobalt	388	NE	**12**	**30.8**	**11**	**16.2**	**6.17**	**7.59**	**9.9**	**5.64**	**10.3**	**5.64**
Iron	908,444	NE	**24,300**	**32,600**	**13,800**	**6,600**	**18,300**	**24,800**	**45,700**	**16,300**	**18,500**	**15,800**
Lead	NE	NE	**12.9**	**11.4**	**14.7**	**6.3**	**14.5**	**15.5**	**20.2**	**13.1**	**14.4**	**10.4**
Magnesium	5,677,778	NE	**4,750**	**3,380**	**3,640**	**2,110**	**3,620**	**4,260**	**2,630**	**4,330**	**3,380**	**4,730**
Manganese	160,183	NE	**219**	**321**	**160**	**2,680**	**196**	**117**	**97.1**	**205**	**131**	**292**
Molybdenum	6,489	NE	**2.78**	**2.89**	**2.57**	**0.479 J**	**1.59**	**1.82**	**14.3**	**0.406 J**	**2.6**	**3.61**
Nickel	25,682	NE	**14.9**	**24.2**	**7.96**	**14.5**	**9.71**	**10.3**	**13.6**	**8.48**	**13.3**	**10.9**
Potassium	76,244,444	NE	**1,550**	**1,040**	**1,380**	**886**	**1,560**	**1,530**	**1,600**	**1,350**	**1,280**	**1,350**
Selenium	6,489	NE	<0.273	<0.281	<0.293	<0.286	<0.282	<0.277	**3.98**	<0.301	<0.288	<0.265
Sodium	37,311,111	NE	**9,150**	**4,380**	**2,300**	**752**	**7,250**	**3,130**	**3,040**	**7,080**	**9,120**	**11,700**
Mercury	111	NE	**0.0223**	**0.0164 J**	**0.00843 J**	<0.00374	**0.0297**	**0.0234**	**0.0233 J**	**0.0219**	**0.023**	**0.0108 J**
Total Petroleum Hydrocarbons												
Gasoline Range Organics [C6-C10]	500	100	<3.05	<2.22	<2.22	<2.48	<2.45	<2.43	**21.3**	<2.25	<2.32	<3.18
Diesel Range Organics [C10-C28]	3,000	100	**6.37**	<2.73	**3.9 J**	**2.76 J**	<2.82	**5.08 J**	**35.1**	**16.5**	**12.6**	<2.95
Oil Range Organics [C24-C40]	3,000	100	**10.1**	**4.78 J**	**7.15**	**5.55**	**4.51 J**	**4.9 J**	**4.3 J**	<2.84	**12.2**	**3.52 J**

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San Juan River Gas Plant, Kirtland, New Mexico

Analyte (mg/kg)	New Mexico Industrial/Occupational Soil Screening Criteria[1]	NMOCD Recommended Remediation Action Level[2]	SB-15		SB-16			SB-17				SB-18
			14-15 ft bgs	19-20 ft bgs	1-2 ft bgs	14-15 ft bgs	20-21 ft bgs	1-2 ft bgs	11-12 ft bgs	21-22 ft bgs	26-27 ft bgs	1-2 ft bgs
		Sample Date	4/10/2017	4/10/2017	4/20/2017	4/10/2017	4/10/2017	4/20/2017	4/5/2017	4/5/2017	4/5/2017	4/20/2017
Volatile Organic Compounds												
Benzene	87.2	10	<0.000551	<0.000634	<0.000909	<0.00056	<0.000537	<0.000545	<0.000715	<0.000702	<0.000537	<0.00076
Ethylbenzene	368	NE	<0.000892	<0.00103	<0.00147	<0.000906	<0.000869	<0.000882	<0.00157	<0.00114	<0.000869	<0.00123
Toluene	61,340	NE	<0.00121	<0.00139	<0.00199	<0.00123	<0.00118	<0.00119	<0.00128	<0.00154	<0.00118	<0.00166
Xylenes, Total	4,275	NE	<0.000989	<0.00114	<0.00163	<0.001	<0.000963	<0.000977	**0.482**	<0.00126	<0.000963	<0.00136
Total BTEX	NE	50[3]	<0.00121	<0.00139	<0.00199	<0.00123	<0.00118	<0.00119	**0.482**	<0.00154	<0.00118	<0.00166
Metals												
Aluminum	1,285,451	NE	**17,000**	**13,700**	**12,900**	**13,900**	**13,800**	**6,800**	**11,500**	**14,000**	**7,490**	**11,500**
Arsenic	35.88	NE	**3.65**	**3.18**	**3.56**	**3.02**	**3**	**3.24**	<1.37	<2.68	<1.14	**4**
Barium	254,671	NE	**44.2**	**173**	**85.5**	**103**	**49.4**	**332**	**76.3**	**62.1**	**211 J**	**29.6**
Boron	259,431	NE	**2.17 J**	**1.75 J**	**5.54 J**	**1.98 J**	**1.61 J**	**1.95 J**	**6.42 J**	**7.55 J**	**5.14 J**	**2.74 J**
Cadmium	1,108	NE	**0.0867 J**	**0.438**	**0.162 J**	**0.0832 J**	**0.395**	**0.136 J**	**0.417**	**0.831**	**0.43 J**	**0.131 J**
Calcium	32,444,444	NE	**2,260**	**3,860**	**78,900**	**4,850**	**5,540**	**39,700**	**2,500**	**3,480**	**5,440 J**	**31,500**
Chromium	504.62	NE	**8.49**	**7.58**	**7.18**	**9.65**	**7.12**	**4.48**	**5.44**	**7.97**	**5.62**	**7.99**
Cobalt	388	NE	**7.35**	**14.1**	**6.91**	**7.51**	**18.3**	**4.53**	**4.8**	**19.5**	**9.94 J**	**8.46**
Iron	908,444	NE	**23,600**	**21,100**	**14,400**	**20,600**	**20,800**	**10,300**	**12,900**	**19,500**	**13,300 J**	**21,200**
Lead	NE	NE	**13.6**	**14.3**	**10.9**	**10.4**	**10.9**	**6.05**	**11.9**	**10.9**	**7.34**	**8.68**
Magnesium	5,677,778	NE	**4,350**	**4,710**	**4,890**	**3,950**	**4,360**	**2,480**	**3,300**	**4,710**	**3,360**	**4,040**
Manganese	160,183	NE	**123**	**210**	**813**	**138**	**317**	**301**	**108**	**128**	**203 J**	**1,330**
Molybdenum	6,489	NE	**0.67**	**0.973**	**1.41**	**0.954**	**0.612**	**0.542**	**0.771**	**0.267 J**	**3.47**	**4**
Nickel	25,682	NE	**11**	**19.8**	**7.93**	**9.08**	**19.9**	**5.23**	**7.51**	**15.5**	**9.28 J**	**9.62**
Potassium	76,244,444	NE	**1,640**	**1,400**	**1,230**	**1,260**	**1,250**	**852**	**1,420**	**1,680**	**530 J**	**919**
Selenium	6,489	NE	<0.299	<0.264	**0.608 J**	<0.287	<0.288	<0.26	<0.326	<0.318	<0.272	**0.777 J**
Sodium	37,311,111	NE	**6,820**	**3,410**	**11,200**	**4,790**	**3,510**	**440**	**9,120**	**3,780**	**2,110 J**	**8,550**
Mercury	111	NE	**0.0257**	**0.0167 J**	**0.00529 J**	**0.00767 J**	**0.019 J**	**0.013 J**	**0.0156 J**	**0.0245**	**0.00932 J**	**0.00842 J**
Total Petroleum Hydrocarbons												
Gasoline Range Organics [C6-C10]	500	100	<2.34	<2.46	<3.31	<2.4	<2.19	<2.76	<2.37	<2.47	<2.37	<3.31
Diesel Range Organics [C10-C28]	3,000	100	<2.98	<2.97	<2.84	<3.1	<2.96	<2.64	**80.3**	<3.12	<2.71	<2.89
Oil Range Organics [C24-C40]	3,000	100	<2.98	<2.97	<5.68	**4.66 J**	<2.96	<5.28	**9.04**	**4.35 J**	**3.69 J**	<5.79

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Analyte (mg/kg)	New Mexico Industrial/Occupational Soil Screening Criteria[1]	NMOCD Recommended Remediation Action Level[2]	SB-18		SB-19			MW-11		MW-12		
			14-15 ft bgs	21-22 ft bgs	1-2 ft bgs	13-14 ft bgs	17-18 ft bgs	1-2 ft bgs	29-30 ft bgs *	1-2 ft bgs	10-11 ft bgs	16-17 ft bgs *
		Sample Date	4/10/2017	4/10/2017	3/30/2017	3/27/2017	3/27/2017	4/4/2017	3/31/2017	4/4/2017	3/30/2017	3/30/2017
Volatile Organic Compounds												
Benzene	87.2	10	**0.000824 J**	<0.000521	<0.000752	<0.000505	<0.000633	<0.000747	<0.000776	<0.000614	<0.000605	<0.00069
Ethylbenzene	368	NE	<0.000482	<0.000844	<0.00122	<0.000818	<0.00102	<0.00121	<0.00126	<0.000995	<0.000979	<0.00112
Toluene	61,340	NE	<0.000652	<0.00114	<0.00165	<0.00111	<0.00139	<0.00164	<0.0017	<0.00135	<0.00133	<0.00151
Xylenes, Total	4,275	NE	<0.000534	<0.000935	<0.00135	<0.000906	<0.00114	<0.00134	**0.004 J**	<0.0011	<0.00109	<0.00124
Total BTEX	NE	50[3]	**0.000824 J**	<0.00114	<0.00165	<0.00111	<0.00139	<0.00164	**0.004 J**	<0.00135	<0.00133	<0.00151
Metals												
Aluminum	1,285,451	NE	**16,200**	**11,100**	**11,300**	**11,400**	**11,700**	**9,880**	**7,690**	**12,100**	**10,300**	**12,400**
Arsenic	35.88	NE	**5.98 J**	**7.76**	**4.25**	**1.71**	**2.67**	**2.17**	**2.62**	**3.23**	**1.97**	**1.61**
Barium	254,671	NE	**161 J**	**67.7**	**186**	**216**	**98.8**	**68.2**	**118**	**79.5**	**27**	**51.9**
Boron	259,431	NE	**1.62 J**	**1.35 J**	**4.88 J**	**0.85 J**	**0.662 J**	**2.71 J**	**0.664 J**	**1.81 J**	**0.61 J**	**1.03 J**
Cadmium	1,108	NE	**0.186 J**	**0.175 J**	**0.201 J**	**0.0333 J**	<0.0278	**0.112 J**	**0.138 J**	**0.144 J**	<0.0267	<0.0273
Calcium	32,444,444	NE	**2,290 J**	**9,460**	**25,700**	**3,890**	**4,230**	**45,900**	**3,480**	**23,600**	**1,920**	**4,110**
Chromium	504.62	NE	**7.36 J**	**5.92**	**9.05**	**6.84**	**7.55**	**6.24**	**4.78**	**6.18**	**6.83**	**8.29**
Cobalt	388	NE	**6.98**	**6.08**	**6.28**	**6.74**	**10.9**	**6.31**	**11**	**8.93**	**5.85**	**9.67**
Iron	908,444	NE	**21,300**	**35,400**	**14,200**	**22,000**	**26,300**	**14,000**	**17,100**	**16,600**	**16,700**	**23,600**
Lead	NE	NE	**19.3**	**8.84**	**11.8**	**11**	**10.4**	**6.91**	**8.53**	**8.86**	**16.8**	**11.8**
Magnesium	5,677,778	NE	**4,390**	**2,830**	**3,410**	**3,250**	**3,240**	**2,220**	**2,560**	**3,470**	**3,570**	**4,120**
Manganese	160,183	NE	**112**	**91.8**	**324**	**105**	**100**	**1,410**	**211**	**386**	**59.7**	**154**
Molybdenum	6,489	NE	**1.4 J**	**2.13**	**1.05**	<0.634	**1.3**	**1.77**	**0.752**	**1.16**	<0.521	<0.534
Nickel	25,682	NE	**13 J**	**7.75**	**11.5**	**17.7**	**16.1**	**7.08**	**11**	**9.32**	**13.6**	**15.9**
Potassium	76,244,444	NE	**1,590**	**1,460**	**1,200**	**1,130**	**1,170**	**416**	**576**	**704**	**1,300**	**1,280**
Selenium	6,489	NE	**0.309 J**	<0.293	<0.281	<0.288	<0.281	<2.12	<0.255	<0.287	<0.27	<0.276
Sodium	37,311,111	NE	**4,690**	**3,760**	**1,240**	**2,150**	**1,320**	**2,240**	**501**	**2,920**	**4,660**	**3,050**
Mercury	111	NE	**0.0409**	**0.0259**	**0.402 J**	**0.00978 J**	**0.025**	<0.0039	**0.0053 J**	**0.251**	**0.0269**	**0.00601 J**
Total Petroleum Hydrocarbons												
Gasoline Range Organics [C6-C10]	500	100	<2.36	<2.38	<2.35	<2.99	<3.02	<2.47	<2.38	<2.24	<2.42	<2.45
Diesel Range Organics [C10-C28]	3,000	100	<2.97	**3 J**	**6.74**	<2.82	<2.76	<2.72	**6.47**	<2.84	<2.85	**10.2**
Oil Range Organics [C24-C40]	3,000	100	**4.23 J**	**5.93**	**17.1**	<2.82	**2.89 J**	**5.05 J**	**8.63**	**6.18**	<2.85	**5.71**

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Table 2. Summary of Soil Analytical Results
Site Characterization Report
San Juan River Gas Plant, Kirtland, New Mexico

Analyte (mg/kg)	New Mexico Industrial/Occupational Soil Screening Criteria[1]	NMOCD Recommended Remediation Action Level[2]	MW-13					MW-14				MW-15
			1-2 ft bgs	10-11 ft bgs	19-20 ft bgs*	29-30 ft bgs *	34-35 ft bgs *	1-2 ft bgs	15-16 ft bgs*	20-21 ft bgs*	25-26 ft bgs*	1-2 ft bgs
		Sample Date	4/4/2017	3/28/2017	3/28/2017	3/28/2017	3/28/2017	4/19/2017	4/20/2017	4/10/2017	4/10/2017	4/19/2017
Volatile Organic Compounds												
Benzene	87.2	10	<0.000704	**0.00119 J**	**0.00128 J**	**46.8**	**0.0229**	<0.00103	<0.000685	**0.265 J**	**0.024 J**	<0.000923
Ethylbenzene	368	NE	<0.00114	<0.00104	**0.00343 J**	**25.8**	**0.00556 J**	<0.00167	<0.00111	**0.95 J**	**0.00719 J**	<0.00149
Toluene	61,340	NE	<0.00154	<0.00141	<0.00128	**178**	**0.0568**	<0.00226	<0.0015	<0.0624	**0.0157 J**	<0.00202
Xylenes, Total	4,275	NE	<0.00126	<0.00115	**0.00826 J**	**360**	**0.0668**	<0.00185	<0.00123	**1.15 J**	**0.038 J**	**0.00334 J**
Total BTEX	NE	50[3]	<0.00154	**0.00119 J**	**0.01297 J**	**610.6**	**0.15206**	<0.00226	<0.0015	**2.365**	**0.08489**	**0.00334 J**
Metals												
Aluminum	1,285,451	NE	**12,000**	**3,660**	**8,160**	**12,700**	**15,400**	**12,400**	**14,900**	**16,600**	**17,600**	**14,200**
Arsenic	35.88	NE	**2.43**	**2.39 J**	**1.46**	**4.47**	**1.46**	**5.39**	**3.98**	**3.41**	**3.14**	**5.52**
Barium	254,671	NE	**158**	**293 J**	**130**	**47**	**45.8**	**132**	**62.2**	**24.3**	**44.7**	**85.4 J**
Boron	259,431	NE	**2.53 J**	<0.378	**0.753 J**	**2.07 J**	**2.28 J**	**4.45 J**	**4.05 J**	**1.18 J**	**1.88 J**	**3.09 J**
Cadmium	1,108	NE	**0.157 J**	<0.025	<0.0279	<0.0265	<0.027	**0.2 J**	**0.723**	**0.131 J**	**0.0799 J**	**0.221 J**
Calcium	32,444,444	NE	**58,000**	**7,380 J**	**21,600**	**3,960**	**2,830**	**13,000**	**19,400**	**2,390**	**3,720**	**19,500 J**
Chromium	504.62	NE	**6.75**	**2.9**	**6.14**	**5.85**	**6.37**	**8.2**	**7.86**	**7.51**	**6.23**	**6.72**
Cobalt	388	NE	**7.54**	**4.1**	**7.42**	**22**	**8.44**	**6.53**	**7.44**	**15.2**	**10.4**	**8.62**
Iron	908,444	NE	**13,400**	**8,530**	**13,400**	**17,700**	**17,000**	**18,800**	**21,000**	**19,400**	**23,900**	**19,400**
Lead	NE	NE	**8.39**	**5.76 J**	**7.91**	**15.1**	**14.1**	**13.4**	**12.8**	**17.9**	**13.5**	**20.5**
Magnesium	5,677,778	NE	**3,160**	**2,190**	**2,890**	**4,020**	**4,270**	**3,970**	**3,950**	**4,030**	**4,170**	**4,120**
Manganese	160,183	NE	**2,170**	**300**	**1,310**	**476**	**122**	**282**	**695**	**137**	**171**	**423**
Molybdenum	6,489	NE	**1.25**	**0.929**	**1.94**	**1.71**	**0.206 J**	**0.751**	**0.836**	**0.751**	**1.58**	**1.2 J**
Nickel	25,682	NE	**8.95**	**3.77**	**8.36**	**22.5**	**9.62**	**9.34**	**16.1**	**18.5**	**11.4**	**11.2**
Potassium	76,244,444	NE	**911**	**377**	**675**	**1,280**	**1,640**	**1,660**	**1,300**	**1,550**	**1,450**	**1,570 J**
Selenium	6,489	NE	<0.271	<0.253	<0.283	**0.636 J**	<0.273	**0.993 J**	<0.255	<0.295	<0.259	**0.523 J**
Sodium	37,311,111	NE	**5,060**	<330	**2,300**	**7,000**	**7,800**	**8,320**	**2,940**	**6,570**	**8,460**	**13,600**
Mercury	111	NE	**0.121**	<0.00331	**0.00519 J**	**0.0249**	<0.00363	**0.0286**	**0.0256**	**0.0389**	**0.0216**	**0.0334**
Total Petroleum Hydrocarbons												
Gasoline Range Organics [C6-C10]	500	100	<2.41	<2.42	<2.41	**48.2**	<2.45	<4.12	<2.88	**22.4**	<2.95	<3.22
Diesel Range Organics [C10-C28]	3,000	100	**3.92 J**	<2.49	<2.79	**50.3**	<2.7	**4.07 J**	**7.18**	**24.5**	**5.78**	**4.13 J**
Oil Range Organics [C24-C40]	3,000	100	**6.74**	**2.7 J**	**2.9 J**	**3.75 J**	**2.77 J**	<7.08	**3.46 J**	**4.02 J**	**5.18 J**	<7.94

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Table 2. Summary of Soil Analytical Results
Site Characterization Report
San Juan River Gas Plant, Kirtland, New Mexico

Analyte (mg/kg)	New Mexico Industrial/Occupational Soil Screening Criteria[1]	NMOCD Recommended Remediation Action Level[2]	MW-15			MW-16			MW-17		MW-18	
			9-10 ft bgs	14-15 ft bgs	26-27 ft bgs*	1-2 ft bgs	10-11 ft bgs	14-15 ft bgs	0 - 1 ft bgs	9 - 10 ft bgs	0 - 1 ft bgs	10 - 11 ft bgs
		Sample Date	4/12/2017	4/12/2017	4/12/2017	4/17/2017	4/12/2017	4/12/2017	1/28/2019	1/28/2019	1/28/2019	1/28/2019
Volatile Organic Compounds												
Benzene	87.2	10	**7.59**	**1.58 J**	**3.28**	<0.000837	**1.34**	**0.00308 J**	<0.00107	**16.1 J**	<0.00096	<0.000836
Ethylbenzene	368	NE	**10.4**	**7.95**	**0.146 J**	<0.00136	**0.311**	**0.00584 J**	<0.00173	**29 J**	<0.00155	<0.00135
Toluene	61,340	NE	<0.829	<0.691	**8.57**	<0.00183	**2.51**	<0.00123	<0.00235	**187 J**	<0.0021	<0.00183
Xylenes, Total	4,275	NE	**82**	**35.3**	**11.2**	<0.0015	**6.69**	**0.0849 J**	<0.00192	**420 J**	<0.00172	<0.0015
Total BTEX	NE	50[3]	**99.99**	**44.83**	**23.196**	<0.00183	**10.851**	**0.09382 J**	<0.00235	**652.1**	<0.0021	<0.00183
Metals												
Aluminum	1,285,451	NE	**13,400**	**11,600**	**13,100**	**14,700**	**14,900**	**7,270**	**11,600**	**6,510**	**15,700**	**13,500**
Arsenic	35.88	NE	**10.7**	**8.52**	**5.43**	**4.56**	**6.14**	**2.06**	**4.54**	**2.34**	**4.75**	**9.34**
Barium	254,671	NE	**34.7**	**39**	**68.2**	**119**	**68.6**	**260**	**155**	**83.2**	**176**	**89.3**
Boron	259,431	NE	**2.2 J**	**1.81 J**	**2.38 J**	**2.84 J**	**1.69 J**	**0.913 J**	<2.8 J	**0.864**	<2.54	<1.73
Cadmium	1,108	NE	**0.272 J**	**0.144 J**	**0.157 J**	**0.17 J**	**0.197 J**	**0.103 J**	**0.384**	**0.204**	**0.36**	**0.389**
Calcium	32,444,444	NE	**2,240**	**3,150**	**1,870**	**3,850**	**5,610**	**12,700**	--	--	--	--
Chromium	504.62	NE	**6.94**	**6.33**	**4.97**	**7.74**	**7.03**	**5.32**	**6.53**	**3.73**	**7.28**	**8.84**
Cobalt	388	NE	**10.9**	**7.82**	**10.1**	**7.26**	**9.48**	**14.3**	**10.9**	**13.2**	**9.76**	**31.9**
Iron	908,444	NE	**23,600**	**24,300**	**21,400**	**16,200**	**19,200 J**	**9,840**	**16,300**	**11,000**	**17,800**	**30,000**
Lead	NE	NE	**18.1**	**19.7**	**18.1**	**11**	**14.3**	**7.01**	**11.5**	**7.32**	**15.2**	**19.2**
Magnesium	5,677,778	NE	**3,620**	**2,690**	**3,010**	**5,130**	**3,390**	**2,410**	--	--	--	--
Manganese	160,183	NE	**84.7**	**97.6**	**98.1**	**256**	**135**	**473**	**442**	**4090 J**	**446**	**261**
Molybdenum	6,489	NE	**2.02**	**2.49**	**2.76**	**1.2**	**1.17**	**2.04**	**0.978**	**6.49**	**0.971**	**3.07**
Nickel	25,682	NE	**12.2**	**7.65**	**8.72**	**10.7**	**14.7 J**	**15.9**	**9.4**	**10.9**	**10.6**	**11.4**
Potassium	76,244,444	NE	**1,750**	**1,250**	**1,420**	**1,470**	**1,660**	**602**	--	--	--	--
Selenium	6,489	NE	<0.3	<0.286	<0.301	<0.252	**0.833 J**	<0.266	**0.293**	**2.22**	<0.296	<0.292
Sodium	37,311,111	NE	**8,900**	**5,440**	**7,400**	**8,470**	**15,600**	**5,280**	--	--	--	--
Mercury	111	NE	**0.0653**	**0.0524**	**0.0306**	**0.0164 J**	**0.024**	<0.00391	<0.00387	<0.00391	**0.0115 J**	**0.0846**
Total Petroleum Hydrocarbons												
Gasoline Range Organics [C6-C10]	500	100	**1,910**	**472**	**124**	<3.08	<3.62	<3.05	<3.22 J	**3490**	<3.15	<3.31
Diesel Range Organics [C10-C28]	3,000	100	**1,000**	**177**	**21.4**	**12.7**	**19.6**	<2.73	**76.9 J**	**100 J**	<2.93	<2.92
Oil Range Organics [C24-C40]	3,000	100	**18**	**4.93 J**	**6.39**	**12.6**	**6.64**	**3.15 J**	**81.2 J+**	**6.31**	**5.43 J**	**3.82 J**

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Table 2. Summary of Soil Analytical Results
Site Characterization Report
San Juan River Gas Plant, Kirtland, New Mexico

Analyte (mg/kg)	New Mexico Industrial/Occupational Soil Screening Criteria[1]	NMOCD Recommended Remediation Action Level[2]	MW-18	MW-19			MW-20				MW-21	
			19-20 ft bgs	0 - 1 ft bgs	10 - 11 ft bgs	18 - 19 ft bgs	0 - 1 ft bgs	10 - 11 ft bgs	19 - 20 ft bgs	29-30 ft bgs	0 - 1 ft bgs	10 - 11 ft bgs
		Sample Date	1/28/2019	1/28/2019	1/29/2019	1/29/2019	1/29/2019	2/1/2019	2/1/2019	2/1/2019	1/29/2019	1/31/2019
Volatile Organic Compounds												
Benzene	87.2	10	<0.000748	<0.000705	<0.000745	<0.00162	<0.000808	<0.000653	<0.000668	<0.000685	<0.000704	**0.00473 J**
Ethylbenzene	368	NE	<0.00121	<0.00114	<0.00121	<0.00118	<0.00131	<0.00106	<0.00108	<0.00111	<0.00114	<0.00155
Toluene	61,340	NE	<0.00164	<0.00154	<0.00163	<0.00159	<0.00177	<0.00143	<0.00146	<0.0015	<0.00154	**0.769**
Xylenes, Total	4,275	NE	<0.00134	<0.00126	<0.00134	<0.0013	<0.00145	<0.00117	<0.0012	<0.00123	<0.00126	**7.96**
Total BTEX	NE	50[3]	<0.00164	<0.00154	<0.00163	<0.00159	<0.00177	<0.00143	<0.00146	<0.0015	<0.00154	**8.73373**
Metals												
Aluminum	1,285,451	NE	**13,000**	**9,740**	**12,600**	**9,360**	**9,620**	**8,100**	**13,400**	**7,640**	**11,700**	**14,300**
Arsenic	35.88	NE	**5.5**	**2.48**	**6.44**	**5.88**	**3.02**	**4.29**	**4.14**	**7.93 J**	**4.39**	**3.17**
Barium	254,671	NE	**24.6**	**44.8**	**32.3 J+**	**55.4**	**277**	**80**	**29.8**	**30.8**	**70.6**	**72.7**
Boron	259,431	NE	<1.69	**3.27 J-**	**1.94 J-**	**1.45 J**	**3.85 J**	<1.28	<1.67	<1.48 J	**2.69 J**	**2.66 J**
Cadmium	1,108	NE	**0.31**	**0.226 J**	**0.287**	**0.597**	**0.198 J**	**0.211 J**	**0.45**	**0.301 J**	**0.36**	**0.345**
Calcium	32,444,444	NE	--	--	--	--	--	--	--	--	--	--
Chromium	504.62	NE	**8.68**	**5.86 J**	**6.93**	**5.7**	**6.15**	**4.42**	**6.46**	**5.15 J**	**6.87**	**6.21**
Cobalt	388	NE	**11.5**	**5.27 J**	**6.97**	**9.98**	**14.3**	**4.7**	**4.69**	**6.06**	**8.45**	**9.14**
Iron	908,444	NE	**22,900**	**13,300**	**18,700**	**20,700**	**14,100**	**15,100**	**19,500**	**20,500**	**19,200**	**25,000**
Lead	NE	NE	**12.4**	**9.16**	**17.9**	**11.9**	**9.85**	**8.37**	**13.4**	**8.53**	**14.6**	**21.4**
Magnesium	5,677,778	NE	--	--	--	--	--	--	--	--	--	--
Manganese	160,183	NE	**132**	**235 J+**	**75.1**	**141**	**232**	**57.1**	**169**	**82.2 J**	**249**	**121**
Molybdenum	6,489	NE	**1.28**	**2.54**	**0.411 J**	**1.17**	**0.873**	**1.42**	**0.252 J**	**1.43 J**	**1.91**	**1.35**
Nickel	25,682	NE	**16.2**	**5.59 J**	**9.33**	**11.8**	**7.74**	**5.35**	**12.8**	**4.4**	**9.37**	**6.11**
Potassium	76,244,444	NE	--	--	--	--	--	--	--	--	--	--
Selenium	6,489	NE	<0.286	<0.316	<0.292	<0.303	<0.284	<0.28	<0.278	<0.274 J	<0.311	**0.305 J**
Sodium	37,311,111	NE	--	--	--	--	--	--	--	--	--	--
Mercury	111	NE	**0.0342**	**0.00611 J**	**0.0232**	**0.0155 J**	<0.00414	<0.00392	<0.00394	<0.00882	**0.0361**	**0.0476**
Total Petroleum Hydrocarbons												
Gasoline Range Organics [C6-C10]	500	100	<3.06	<3.43	<3.15	<3.36	<3.13	<2.91	<3.05	**3.19 J**	<3.68	**134**
Diesel Range Organics [C10-C28]	3,000	100	**3.13 J**	**11.8**	<3	<2.96	**2.98 J**	<2.78	<2.81	**2.18 J**	**3.68 J**	**20.8**
Oil Range Organics [C24-C40]	3,000	100	**4.48 J**	**7.14**	**5.46 J**	**4.33 J**	**5.12 J**	**3.58 J**	**3.68 J**	**4.76 J**	**7.05**	**6.18**

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Table 2. Summary of Soil Analytical Results
Site Characterization Report
San Juan River Gas Plant, Kirtland, New Mexico

Analyte (mg/kg)	New Mexico Industrial/Occupational Soil Screening Criteria[1]	NMOCD Recommended Remediation Action Level[2]	MW-21	MW-22			MW-23				
			19 - 20 ft bgs	0 - 1 ft bgs	10 - 11 ft bgs	18 - 19 ft bgs	0 - 1 ft bgs	10 - 11 ft bgs	19 - 20 ft bgs	29 - 30 ft bgs	39 - 40 ft bgs
		Sample Date	1/31/2019	1/29/2019	2/2/2019	2/2/2019	1/29/2019	2/2/2019	2/2/2019	2/2/2019	2/2/2019
Volatile Organic Compounds											
Benzene	87.2	10	**3.43**	<0.000699	**1.76**	**13.4 J**	<0.000706	<0.000804	<0.001	<0.000591	<0.000704
Ethylbenzene	368	NE	**0.222 J**	<0.00113	**0.189 J**	**19.8 J**	<0.00114	<0.0013	<0.00163	<0.000957	<0.00114
Toluene	61,340	NE	**141**	<0.00153	**13.4**	**29.6 J**	<0.00155	<0.00176	<0.0022	<0.00129	<0.00154
Xylenes, Total	4,275	NE	**1,460**	<0.00125	**53.8**	**251 J**	<0.00127	<0.00144	<0.0018	<0.00106	<0.00126
Total BTEX	NE	50[3]	**1,604.4**	<0.00153	**69.189**	**313.8**	<0.00155	<0.00176	<0.0022	<0.00129	<0.00154
Metals											
Aluminum	1,285,451	NE	**6,320**	**10,100**	**10,800**	**9,370**	**10,600**	**10,200**	**20,500**	**6,090**	**14,500**
Arsenic	35.88	NE	**0.974 J**	**3.79**	**2.3**	**1.48**	**3.63**	**4.15**	**5.19**	**2.91**	**4.2**
Barium	254,671	NE	**43.9**	**155**	**49.4**	**77.4**	**188**	**120 J+**	**58.8**	**165**	**103**
Boron	259,431	NE	**1.88 J**	<1.51	**1.72 J**	**2.41 J**	**2.16 J**	**5.92 J-**	2.88 J	**<1.48**	**2.18 J**
Cadmium	1,108	NE	**0.203 J**	**0.284 J**	**0.525**	**0.303**	**0.287**	<0.0801	**0.425**	**0.181 J**	**0.303**
Calcium	32,444,444	NE	--	--	--	--	--	--	--	--	--
Chromium	504.62	NE	**1.97**	**5.68**	**5.74**	**3.87**	**5.50**	**5.49**	**6.35**	**3.01**	**3.60**
Cobalt	388	NE	**3.13**	**9.16**	**6.98**	**7.34 J**	**12.1**	**6.25**	**35.30**	**7.49**	**9.54**
Iron	908,444	NE	**11,900**	**16,400**	**33,100**	**17,000**	**17,200**	**18,800**	**24,500**	**12,200**	**16,300**
Lead	NE	NE	**14.5**	**10.6**	**7.34**	**9.3**	**12.1**	**11.1**	**27.6**	**7.95**	**17.3**
Magnesium	5,677,778	NE	--	--	--	--	--	--	--	--	--
Manganese	160,183	NE	**74.8**	**2,260**	**97.1**	**98.3**	**908**	**54.1**	**247**	**150**	**140**
Molybdenum	6,489	NE	<0.532	**0.829**	**0.592 J**	**0.932**	**0.915**	**0.924**	**0.947**	**1.55**	**0.629**
Nickel	25,682	NE	**2.01**	**9.73**	**4.99**	**6.41**	**10.4**	**5.69**	**12.8**	**6.05**	**13.4**
Potassium	76,244,444	NE	--	--	--	--	--	--	--	--	--
Selenium	6,489	NE	<0.31	<0.3	<0.289	<0.286	<0.286	<0.305	<0.4	<0.254	<3.01
Sodium	37,311,111	NE	--	--	--	--	--	--	--	--	--
Mercury	111	NE	**0.0328**	<0.00424	**0.0218**	<0.00387	<0.00383	**0.026**	**0.0251 J**	<0.00359	**0.0452**
Total Petroleum Hydrocarbons											
Gasoline Range Organics [C6-C10]	500	100	**3,280**	<3.32	**804**	**2,560**	<2.93	<3.2 J	<5.22	**2.82 J**	**3.75 J**
Diesel Range Organics [C10-C28]	3,000	100	**1,560**	<3	**89.6**	**430 J**	<2.81	<3.06	<4.11	<2.54	<2.97
Oil Range Organics [C24-C40]	3,000	100	**7.8**	**4.8 J**	**3.21 J**	**4.03 J**	**5.19 J**	**3.31 J**	**6.11 J**	**3.78 J**	**4.79 J**

Notes:

* = Soil sample depth is below the water table.

[1] = New Mexico Environment Department, (NMED) Risk Assessment Guidance for Site Investigations and Remediation, Volume I, Soil Screening Guidance for Human Health Risk Assessments. Table A-1 NMED Soil Screening Levels, March 2019, Rev2 June 2019.

[2] = Calculated following Section IV.A.2.b. of the NMOCD Guidelines for Remediation of Leaks, Spills and Releases. August 13, 1993. The Depth to Ground Water at the site is less than 50 feet, which generates a Total Ranking Score of 20 that indicates the listed Remediation Action Level is required.

[3] = Calculated following Section IV.A.2.b. of the NMOCD Guidelines for Remediation of Leaks, Spills and Releases. August 13, 1993. The recommended Remediation Action Level is for a summation of all benzene, toluene, ethylbenzene and xylene (BTEX) compounds.

Shaded text indicates detected concentration exceeding the screening criteria or recommended action level

Bold text indicates detected concentration

< = Analyte was not detected above the method detection limit

-- = Sample not analyzed for specific analyte

ft bgs = feet below ground surface

J = Analyte detected at concentration above instrument detection limit but below method detection limit

J+ = Analyte detected at concentration above instrument detection limit but below method detection limit. Concentration may be biased high.

mg/kg = milligram(s) per kilogram

NE = not established

NMOCD = New Mexico Oil Conservation Division

USEPA = United States Environmental Protection Agency

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Table 3. Groundwater Elevation Data

Site Characterization Report

San Juan River Gas Plant, Kirtland, New Mexico

Monitoring Well	TOC Elevation (ft amsl)	Measurement Date	Depth to Water (ft btoc)	Depth to PSH, if present (ft btoc)	PSH Thickness (ft)	PSH Elevation (ft amsl)	Apparent Groundwater Elevation (ft amsl)	Corrected Groundwater Elevation[1] (ft amsl)
MW-2	**5,284.43**	9/25/2001	NA	NP	NA	NA	NA	NA
		8/15/2002	57.55	NP	NA	NA	5,226.88	NA
		8/26/2003	57.53	NP	NA	NA	5,226.90	NA
		8/27/2004	57.76	NP	NA	NA	5,226.67	NA
		8/24/2005	58.50	NP	NA	NA	5,225.93	NA
		8/10/2006	58.72	NP	NA	NA	5,225.71	NA
		8/23/2007	52.73	NP	NA	NA	5,231.70	NA
		8/27/2008	55.53	NP	NA	NA	5,228.90	NA
		8/28/2009	55.24	NP	NA	NA	5,229.19	NA
		8/26/2010	52.80	NP	NA	NA	5,231.63	NA
		8/31/2011	53.69	NP	NA	NA	5,230.74	NA
		12/19/2013	55.31	NP	NA	NA	5,229.12	NA
		12/16/2014	54.98	NP	NA	NA	5,229.45	NA
		12/15/2015	54.31	NP	NA	NA	5,230.12	NA
		12/13/2016	53.91	NP	NA	NA	5,230.52	NA
		7/05/2017	55.00	NP	NA	NA	5,229.43	NA
		11/16/2017	53.97	NP	NA	NA	5,230.46	NA
		1/28/2018	55.02	NP	NA	NA	5,229.41	NA
		11/12/2018	55.65	NP	NA	NA	5,228.78	NA
		3/11/2019	57.21	NP	NA	NA	5,227.22	NA
		4/15/2019	57.49	NP	NA	NA	5,226.94	NA
		10/14/2019	54.74	NP	NA	NA	5,229.69	NA
MW-4	**5,286.88**	9/25/2001	NA	NP	NA	NA	NA	NA
		8/15/2002	52.93	NP	NA	NA	5,233.95	NA
		8/26/2003	53.53	NP	NA	NA	5,233.35	NA
		8/27/2004	54.44	NP	NA	NA	5,232.44	NA
		8/24/2005	55.29	NP	NA	NA	5,231.59	NA
		8/10/2006	55.57	NP	NA	NA	5,231.31	NA
		8/23/2007	51.87	NP	NA	NA	5,235.01	NA
		8/27/2008	52.24	NP	NA	NA	5,234.64	NA
		8/28/2009	58.70	NP	NA	NA	5,228.18	NA
		8/26/2010	52.32	NP	NA	NA	5,234.56	NA
		8/31/2011	51.63	NP	NA	NA	5,235.25	NA
		12/19/2013	52.00	NP	NA	NA	5,234.88	NA
		12/16/2014	52.08	NP	NA	NA	5,234.80	NA
		12/15/2015	51.62	NP	NA	NA	5,235.26	NA
		12/13/2016	51.38	NP	NA	NA	5,235.50	NA
		7/05/2017	52.26	NP	NA	NA	5,234.62	NA
		11/16/2017	51.53	NP	NA	NA	5,235.35	NA
		1/28/2018	52.03	NP	NA	NA	5,234.85	NA
		11/12/2018	52.77	NP	NA	NA	5,234.11	NA
		3/11/2019	53.70	NP	NA	NA	5,233.18	NA
		4/15/2019	53.18	NP	NA	NA	5,233.70	NA
		10/14/2019	53.12	NP	NA	NA	5,233.76	NA
MW-6	**5,308.71**	9/25/2001	NA	NP	NA	NA	NA	NA
		8/15/2002	31.50	NP	NA	NA	5,277.21	NA
		8/26/2003	31.76	NP	NA	NA	5,276.95	NA
		8/27/2004	31.85	NP	NA	NA	5,276.86	NA
		8/24/2005	29.93	NP	NA	NA	5,278.78	NA
		8/10/2006	30.37	NP	NA	NA	5,278.34	NA
		8/23/2007	30.70	NP	NA	NA	5,278.01	NA
		8/27/2008	31.27	NP	NA	NA	5,277.44	NA
		8/28/2009	31.44	NP	NA	NA	5,277.27	NA
		8/26/2010	31.55	NP	NA	NA	5,277.16	NA
		8/31/2011	31.47	NP	NA	NA	5,277.24	NA
		12/19/2013	30.98	NP	NA	NA	5,277.73	NA
		12/16/2014	31.55	NP	NA	NA	5,277.16	NA
		12/15/2015	31.55	NP	NA	NA	5,277.16	NA
		12/13/2016	32.00	NP	NA	NA	5,276.71	NA
		7/05/2017	32.34	NP	NA	NA	5,276.37	NA
		11/16/2017	32.21	NP	NA	NA	5,276.50	NA
		1/28/2018	32.32	NP	NA	NA	5,276.39	NA
		11/12/2018	32.69	NP	NA	NA	5,276.02	NA
		3/11/2019	32.51	NP	NA	NA	5,276.20	NA
		4/15/2019	32.52	NP	NA	NA	5,276.19	NA
		10/14/2019	32.72	NP	NA	NA	5,275.99	NA

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Table 3. Groundwater Elevation Data

Site Characterization Report

San Juan River Gas Plant, Kirtland, New Mexico

Monitoring Well	TOC Elevation (ft amsl)	Measurement Date	Depth to Water (ft btoc)	Depth to PSH, if present (ft btoc)	PSH Thickness (ft)	PSH Elevation (ft amsl)	Apparent Groundwater Elevation (ft amsl)	Corrected Groundwater Elevation[1] (ft amsl)
MW-8	**5,262.72**	2/10/1998	10.39	NP	NA	NA	5,252.33	NA
		5/12/1998	10.02	NP	NA	NA	5,252.70	NA
		8/7/1998	10.13	NP	NA	NA	5,252.59	NA
		11/4/1998	10.75	NP	NA	NA	5,251.97	NA
		2/10/1999	11.31	NP	NA	NA	5,251.41	NA
		5/17/1999	10.93	NP	NA	NA	5,251.79	NA
		8/18/1999	10.44	NP	NA	NA	5,252.28	NA
		11/30/1999	11.10	NP	NA	NA	5,251.62	NA
		4/10/2000	11.70	NP	NA	NA	5,251.02	NA
		6/29/2000	11.16	NP	NA	NA	5,251.56	NA
		9/29/2000	NA	NP	NA	NA	NA	NA
		12/21/2000	11.96	NP	NA	NA	5,250.76	NA
		3/27/2001	12.32	NP	NA	NA	5,250.40	NA
		6/27/2001	11.49	NP	NA	NA	5,251.23	NA
		9/25/2001	11.06	NP	NA	NA	5,251.66	NA
		10/29/2001	11.31	NP	NA	NA	5,251.41	NA
		1/25/2002	12.35	NP	NA	NA	5,250.37	NA
		5/23/2002	12.60	NP	NA	NA	5,250.12	NA
		8/15/2002	12.90	NP	NA	NA	5,249.82	NA
		3/6/2003	12.79	NP	NA	NA	5,249.93	NA
		5/15/2003	12.25	NP	NA	NA	5,250.47	NA
		8/26/2003	11.16	NP	NA	NA	5,251.56	NA
		11/25/2003	12.79	NP	NA	NA	5,249.93	NA
		5/18/2004	12.02	NP	NA	NA	5,250.70	NA
		8/27/2004	6.26	NP	NA	NA	5,256.46	NA
		11/17/2004	6.46	NP	NA	NA	5,256.26	NA
		2/17/2005	7.43	NP	NA	NA	5,255.29	NA
		5/19/2005	3.56	NP	NA	NA	5,259.16	NA
		8/24/2005	6.02	NP	NA	NA	5,256.70	NA
		11/9/2005	8.38	NP	NA	NA	5,254.34	NA
		2/20/2006	8.55	NP	NA	NA	5,254.17	NA
		5/24/2006	6.31	NP	NA	NA	5,256.41	NA
		8/10/2006	6.80	NP	NA	NA	5,255.92	NA
		12/27/2006	4.94	NP	NA	NA	5,257.78	NA
		2/27/2007	5.40	NP	NA	NA	5,257.32	NA
		5/25/2007	6.28	NP	NA	NA	5,256.44	NA
		8/23/2007	9.25	NP	NA	NA	5,253.47	NA
		11/28/2007	12.16	NP	NA	NA	5,250.56	NA
		2/13/2008	10.41	NP	NA	NA	5,252.31	NA
		5/8/2008	10.40	NP	NA	NA	5,252.32	NA
		8/27/2008	11.15	NP	NA	NA	5,251.57	NA
		11/18/2008	11.90	NP	NA	NA	5,250.82	NA
		2/18/2009	13.60	NP	NA	NA	5,249.12	NA
		5/5/2009	13.07	NP	NA	NA	5,249.65	NA
		8/28/2009	13.75	NP	NA	NA	5,248.97	NA
		11/4/2009	18.58	NP	NA	NA	5,244.14	NA
		2/18/2010	21.19	NP	NA	NA	5,241.53	NA
		5/26/2010	13.72	NP	NA	NA	5,249.00	NA
		8/26/2010	20.64	NP	NA	NA	5,242.08	NA
		9/11/2010	21.60	NP	NA	NA	5,241.12	NA
		12/19/2013	15.11	NP	NA	NA	5,247.61	NA
		12/16/2014	15.90	NP	NA	NA	5,246.82	NA
		12/15/2015	15.05	NP	NA	NA	5,247.67	NA
		12/13/2016	14.92	NP	NA	NA	5,247.80	NA
		07/05/2017	16.24	NP	NA	NA	5,246.48	NA
		11/16/2017	17.09	NP	NA	NA	5,245.63	NA
		01/28/2018	17.55	NP	NA	NA	5,245.17	NA
		11/12/2018	17.9	NP	NA	NA	5,244.82	NA
		3/11/2019	18.35	NP	NA	NA	5,244.37	NA
		4/15/2019	18.59	NP	NA	NA	5,244.13	NA
		10/14/2019	18.76	NP	NA	NA	5,243.96	NA
MW-9	**5,264.26**	2/10/1998	4.90	NP	NA	NA	5,259.36	NA
		5/12/1998	4.22	NP	NA	NA	5,260.04	NA
		8/7/1998	5.12	NP	NA	NA	5,259.14	NA
		11/4/1998	4.60	NP	NA	NA	5,259.66	NA
		2/10/1999	4.67	NP	NA	NA	5,259.59	NA
		5/17/1999	4.48	NP	NA	NA	5,259.78	NA
		8/18/1999	4.85	NP	NA	NA	5,259.41	NA
		11/30/1999	5.38	NP	NA	NA	5,258.88	NA
		4/10/2000	4.74	NP	NA	NA	5,259.52	NA
		6/29/2000	5.47	NP	NA	NA	5,258.79	NA
		9/29/2000	NA	NP	NA	NA	NA	NA
		12/21/2000	5.82	NP	NA	NA	5,258.44	NA
		3/27/2001	5.34	NP	NA	NA	5,258.92	NA
		6/27/2001	5.68	NP	NA	NA	5,258.58	NA
		9/25/2001	6.77	NP	NA	NA	5,257.49	NA
		10/29/2001	6.91	NP	NA	NA	5,257.35	NA
		12/26/2001	5.68	NP	NA	NA	5,258.58	NA
		1/25/2002	7.27	NP	NA	NA	5,256.99	NA

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Table 3. Groundwater Elevation Data

Site Characterization Report

San Juan River Gas Plant, Kirtland, New Mexico

Monitoring Well	TOC Elevation (ft amsl)	Measurement Date	Depth to Water (ft btoc)	Depth to PSH, if present (ft btoc)	PSH Thickness (ft)	PSH Elevation (ft amsl)	Apparent Groundwater Elevation (ft amsl)	Corrected Groundwater Elevation[1] (ft amsl)
MW-9	**5,264.26**	2/21/2002	NA	NP	NA	NA	NA	NA
		5/23/2002	5.45	NP	NA	NA	5,258.81	NA
		8/15/2002	6.93	NP	NA	NA	5,257.33	NA
		3/6/2003	6.82	NP	NA	NA	5,257.44	NA
		5/15/2003	5.45	NP	NA	NA	5,258.81	NA
		8/26/2003	6.69	NP	NA	NA	5,257.57	NA
		11/25/2003	6.42	NP	NA	NA	5,257.84	NA
		5/18/2004	5.97	NP	NA	NA	5,258.29	NA
		8/27/2004	6.49	NP	NA	NA	5,257.77	NA
		11/17/2004	6.02	NP	NA	NA	5,258.24	NA
		2/17/2005	5.69	NP	NA	NA	5,258.57	NA
		5/19/2005	4.78	NP	NA	NA	5,259.48	NA
		8/24/2005	5.19	NP	NA	NA	5,259.07	NA
		11/9/2005	4.93	NP	NA	NA	5,259.33	NA
		2/20/2006	4.83	NP	NA	NA	5,259.43	NA
		5/24/2006	4.47	NP	NA	NA	5,259.79	NA
		8/10/2006	5.19	NP	NA	NA	5,259.07	NA
		12/27/2006	4.13	NP	NA	NA	5,260.13	NA
		2/27/2007	4.24	NP	NA	NA	5,260.02	NA
		5/25/2007	3.81	NP	NA	NA	5,260.45	NA
		8/23/2007	4.85	NP	NA	NA	5,259.41	NA
		11/28/2007	5.13	NP	NA	NA	5,259.13	NA
		2/13/2008	5.28	NP	NA	NA	5,258.98	NA
		5/8/2008	4.71	NP	NA	NA	5,259.55	NA
		8/27/2008	6.06	NP	NA	NA	5,258.20	NA
		11/18/2008	6.53	NP	NA	NA	5,257.73	NA
		2/18/2009	6.69	NP	NA	NA	5,257.57	NA
		5/5/2009	12.18	NP	NA	NA	5,252.08	NA
		8/28/2009	16.54	NP	NA	NA	5,247.72	NA
		11/4/2009	16.63	NP	NA	NA	5,247.63	NA
		2/18/2010	16.18	NP	NA	NA	5,248.08	NA
		5/26/2010	16.36	NP	NA	NA	5,247.90	NA
		8/26/2010	16.93	NP	NA	NA	5,247.33	NA
		11/9/2010	15.28	NP	NA	NA	5,248.98	NA
		2/7/2011	15.17	NP	NA	NA	5,249.09	NA
		5/16/2011	14.75	NP	NA	NA	5,249.51	NA
		8/31/2011	14.46	NP	NA	NA	5,249.80	NA
		11/8/2011	14.45	NP	NA	NA	5,249.81	NA
		2/22/2012	14.09	NP	NA	NA	5,250.17	NA
		12/19/2013	12.97	NP	NA	NA	5,251.29	NA
		12/16/2014	12.86	NP	NA	NA	5,251.40	NA
		12/15/2015	11.83	NP	NA	NA	5,252.43	NA
		12/13/2016	11.16	NP	NA	NA	5,253.10	NA
		7/05/2017	11.34	NP	NA	NA	5,252.92	NA
		11/16/2017	10.37	NP	NA	NA	5,253.89	NA
		1/28/2018	10.54	NP	NA	NA	5,253.72	NA
		11/12/2018	10.34	NP	NA	NA	5,253.92	NA
		3/11/2019	10.14	NP	NA	NA	5,254.12	NA
		4/15/2019	9.70	NP	NA	NA	5,254.56	NA
		10/14/2019	10.20	NP	NA	NA	5,254.06	NA
MW-11	**5,290.46**	7/05/2017	28.08	NP	NA	NA	5,262.38	NA
		11/16/2017	25.88	NP	NA	NA	5,264.58	NA
		1/28/2018	25.9	NP	NA	NA	5,264.56	NA
		11/12/2018	26.06	NP	NA	NA	5,264.40	NA
		3/11/2019	25.38	NP	NA	NA	5,265.08	NA
		4/15/2019	25.11	NP	NA	NA	5,265.35	NA
		10/14/2019	25.54	NP	NA	NA	5,264.92	NA
MW-12	**5,282.80**	7/05/2017	20.62	NP	NA	NA	5,262.18	NA
		11/16/2017	19.53	NP	NA	NA	5,263.27	NA
		1/28/2018	19.21	NP	NA	NA	5,263.59	NA
		11/12/2018	18.92	NP	NA	NA	5,263.88	NA
		3/11/2019	19.10	NP	NA	NA	5,263.70	NA
		4/15/2019	18.78	NP	NA	NA	5,264.02	NA
		10/14/2019	19.82	NP	NA	NA	5,262.98	NA
MW-13	**5,279.31**	7/05/2017	23.35	NP	NA	NA	5,255.96	NA
		11/16/2017	21.17	NP	NA	NA	5,258.14	NA
		1/28/2018	20.63	NP	NA	NA	5,258.68	NA
		11/12/2018	19.95	NP	NA	NA	5,259.36	NA
		3/11/2019	19.19	NP	NA	NA	5,260.12	NA
		4/15/2019	19.23	NP	NA	NA	5,260.08	NA
		10/14/2019	19.32	NP	NA	NA	5,259.99	NA
MW-14	**5,270.58**	7/05/2017	10.65	NP	NA	NA	5,259.93	NA
		11/16/2017	8.96	NP	NA	NA	5,261.62	NA
		1/28/2018	9.01	NP	NA	NA	5,261.57	NA
		11/12/2018	9.95	NP	NA	NA	5,260.63	NA
		3/11/2019	8.43	NP	NA	NA	5,262.15	NA
		4/15/2019	8.18	NP	NA	NA	5,262.40	NA
		10/14/2019	8.9	NP	NA	NA	5,261.68	NA

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Table 3. Groundwater Elevation Data

Site Characterization Report

San Juan River Gas Plant, Kirtland, New Mexico

Monitoring Well	TOC Elevation (ft amsl)	Measurement Date	Depth to Water (ft btoc)	Depth to PSH, if present (ft btoc)	PSH Thickness (ft)	PSH Elevation (ft amsl)	Apparent Groundwater Elevation (ft amsl)	Corrected Groundwater Elevation[1] (ft amsl)
MW-15	5,273.45	7/05/2017	28.01	NP	NA	NA	5,245.44	NA
		11/16/2017	27.65	NP	NA	NA	5,245.80	NA
		1/28/2018	27.29	NP	NA	NA	5,246.16	NA
		11/12/2018	26.84	NP	NA	NA	5,246.61	NA
		3/11/2019	26.21	NP	NA	NA	5,247.24	NA
		4/15/2019	26.11	NP	NA	NA	5,247.34	NA
		10/14/2019	26.59	NP	NA	NA	5,246.86	NA
MW-16	5,265.34	7/05/2017	23.63	NP	NA	NA	5,241.71	NA
		11/16/2017	23.16	NP	NA	NA	5,242.18	NA
		1/28/2018	23.05	NP	NA	NA	5,242.29	NA
		11/12/2018	22.95	NP	NA	NA	5,242.39	NA
		3/11/2019	22.73	NP	NA	NA	5,242.61	NA
		4/15/2019	22.74	NP	NA	NA	5,242.60	NA
		10/14/2019	23.02	NP	NA	NA	5,242.32	NA
MW-17	5,263.95	3/11/2019	27.56	NP	NA	NA	5,236.39	NA
		4/15/2019	27.60	NP	NA	NA	5,236.35	NA
		10/14/2019	27.70	NP	NA	NA	5,236.25	NA
MW-18	5,269.08	3/11/2019	13.55	NP	NA	NA	5,255.53	NA
		4/15/2019	13.39	NP	NA	NA	5,255.69	NA
		10/14/2019	13.76	NP	NA	NA	5,255.32	NA
MW-19	5,278.94	3/11/2019	13.54	NP	NA	NA	5,265.40	NA
		4/15/2019	13.22	NP	NA	NA	5,265.72	NA
		10/14/2019	14.01	NP	NA	NA	5,264.93	NA
MW-20	5,292.23	3/11/2019	40.02	38.7	1.32	5,253.53	5,252.21	5,253.20
		4/15/2019	35.47	34.3	1.17	5,257.93	5,256.76	5,257.64
		10/14/2019	26.71	26.51	0.2	5,265.72	5,265.52	5,265.67
MW-21	5,276.06	3/11/2019	36.50	NP	NA	NA	5,239.56	NA
		4/15/2019	33.53	NP	NA	NA	5,242.53	NA
		10/14/2019	28.98	NP	NA	NA	5,247.08	NA
MW-22	5,269.13	3/11/2019	Dry	NP	NA	NA	NA	NA
		4/15/2019	37.24	NP	NA	NA	5,231.89	NA
		10/14/2019	Dry	NP	NA	NA	NA	NA
MW-23	5,287.76	3/11/2019	57.91	NP	NA	NA	5,229.85	NA
		4/15/2019	58.05	NP	NA	NA	5,229.71	NA
		10/14/2019	Dry	NP	NA	NA	NA	NA
PMW-1a	5,298.09	7/05/2017	70.91	NP	NA	NA	5,227.18	NA
		11/16/2017	70.43	NP	NA	NA	5,227.66	NA
		1/28/2018	70.03	NP	NA	NA	5,228.06	NA
		11/12/2018	67.98	NP	NA	NA	5,230.11	NA
		3/11/2019	65.83	NP	NA	NA	5,232.26	NA
		4/15/2019	66.61	NP	NA	NA	5,231.48	NA
		10/14/2019	66.05	NP	NA	NA	5,232.04	NA
PMW-2a	5,298.14	7/05/2017	44.69	NP	NA	NA	5,253.45	NA
		11/16/2017	44.01	NP	NA	NA	5,254.13	NA
		1/28/2018	43.53	NP	NA	NA	5,254.61	NA
		11/12/2018	44.29	NP	NA	NA	5,253.85	NA
		3/11/2019	41.97	NP	NA	NA	5,256.17	NA
		4/15/2019	41.83	NP	NA	NA	5,256.31	NA
		10/14/2019	41.7	NP	NA	NA	5,256.44	NA
PMW-4a	5,287.86	7/05/2017	109.00	NP	NA	NA	5,178.86	NA
		11/16/2017	>100	NP	NA	NA	NA	NA
		1/28/2018	104.84	NP	NA	NA	5,183.02	NA
		11/12/2018	117.03	NP	NA	NA	5,170.83	NA
		3/11/2019	101.17	NP	NA	NA	5,186.69	NA
		4/15/2019	101.90	NP	NA	NA	5,185.96	NA
		10/14/2019	101.97	NP	NA	NA	5,185.89	NA

Notes:

[1]Phase-Separated Hydrocarbons (PSH) elevation corrected by multiplying PSH thickness by 0.75 and adding it to the apparent groundwater elevation.

ft amsl = feet above mean sea level

ft btoc = feet below top of casing

NA = Not applicable or historical measurement is not available

NP = Not present

TOC = top of casing

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Table 4. Summary of BTEX and TPH Groundwater Analytical Results

Site Characterization Report

San Juan River Gas Plant, Kirtland, New Mexico

Monitoring Well	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	TPH DRO (mg/L)	TPH ORO (mg/L)	TPH GRO (mg/L)
NMWQCC Standard		**0.01**	**0.75**	**0.75**	**0.62**	**NE**	**NE**	**NE**
PMW-1a	7/07/2017	<0.000176	<0.000198	<0.000212	<0.000366	**0.376**	**0.194**	<0.05
	11/17/2017	<0.000176	<0.000198	<0.000212	<0.000366	<0.0784	<0.0784	<0.05
	11/13/2018	<0.000176	<0.000198	<0.000212	**0.00628 J**	--	--	--
	4/16/2019	<0.000176	<0.000198	<0.000212	<0.000366	--	--	--
	10/15/2019	<0.000176	<0.000198	<0.000212	<0.000366	--	--	--
PMW-2a	7/07/2017	**2.15**	**2.81**	**0.0318**	**1.64**	**1.24**	**0.19**	**17.6**
	11/17/2017	**9.61**	**9.47**	**0.262**	**4.01**	**1.19**	<0.0784	**54.3 J**
	11/13/2018	**2.42**	**5.97**	**0.029 J**	**6.84**	--	--	--
	3/12/2019	**6.92**	**0.0579**	**0.117**	**1.05**	--	--	--
	10/15/2019	**7.82**	**8.36**	**0.149**	**2.93**	--	--	--
PMW-4a	7/07/2017	<0.000176	<0.000198	<0.000212	<0.000366	0.391	0.283	<0.05
	11/16/2017	<0.000176	<0.000198	<0.000212	<0.000366	<0.0875	<0.0875	<0.05
	11/13/2018	<0.000176	<0.000198	<0.000212	<0.000366	--	--	--
	4/16/2019	<0.000176	<0.000198	<0.000212	<0.000366	--	--	--
	10/15/2019	<0.000176	<0.000198	<0.000212	<0.000366	--	--	--
MW-2	9/25/2001	<0.002	<0.002	<0.002	<0.002	--	--	--
	8/15/2002	**0.0014**	**0.0004**	**0.0008**	**0.001**	--	--	--
	8/26/2003	<0.001	<0.001	<0.001	<0.003	--	--	--
	8/27/2004	<0.001	<0.001	<0.001	<0.003	--	--	--
	8/24/2005	<0.001	<0.001	<0.001	<0.002	--	--	--
	8/10/2006	<0.001	<0.001	<0.001	<0.002	--	--	--
	8/23/2007	<0.001	<0.001	<0.001	<0.002	--	--	--
	8/27/2008	<0.001	<0.001	<0.001	<0.003	--	--	--
	8/28/2009	<0.001	<0.001	<0.001	<0.002	--	--	--
	8/26/2010	<0.002	<0.002	<0.002	<0.006	--	--	--
	8/31/2011	<0.001	<0.001	<0.001	<0.003.0	--	--	--
	12/19/2013	<0.00008	<0.00015	<0.00011	<0.00026	--	--	--
	12/18/2014	<0.00008	<0.00015	<0.00011	<0.00026	--	--	--
	12/15/2015	<0.000176	<0.000198	<0.000212	<0.000366	--	--	--
	12/13/2016	<0.000176	<0.000198	<0.000212	<0.000366	--	--	--
	7/06/2017	<0.000176	<0.000198	<0.000212	<0.000366	--	--	--
	11/16/2017	<0.000202	<0.000198	<0.000212	<0.000366	--	--	--
	11/13/2018	<0.000176	<0.000198	<0.000212	<0.000366	--	--	--
	3/11/2019	<0.000176	<0.000198	<0.000212	<0.000366	--	--	--
	10/15/2019	<0.000176	<0.000198	<0.000212	<0.000366	--	--	--
MW-4	9/25/2001	<0.002	**0.0082**	**0.0043**	**0.017**	--	--	--
	8/15/2002	**0.0008**	**0.0005**	**0.0011**	**0.0009**	--	--	--
	8/26/2003	<0.001	<0.001	<0.001	<0.003	--	--	--
	8/27/2004	<0.001	<0.001	<0.001	<0.003.0	--	--	--
	8/24/2005	<0.001	<0.001	<0.001	<0.002	--	--	--
	8/10/2006	<0.001	<0.001	<0.001	<0.002	--	--	--
	8/23/2007	**0.00037 J**	<0.001	<0.001	<0.002	--	--	--
	8/27/2008	<0.001	<0.001	<0.001	<0.003.0	--	--	--
	8/28/2009	<0.001	<0.001	<0.001	<0.002	--	--	--
	8/26/2010	<0.002	<0.002	<0.002	<0.006	--	--	--
	8/31/2011	<0.001	<0.001	<0.001	<0.003.0	--	--	--
	12/19/2013	**0.000208 J**	<0.00015	<0.00011	<0.00026	--	--	--
	12/18/2014	**0.000235**	<0.00015	<0.00011	<0.00026	--	--	--
	12/15/2015	**0.00021 J**	<0.000198	<0.000212	<0.000366	--	--	--
	12/13/2016	**0.000176 J**	<0.000198 J	<0.000212 J	<0.000366 J	--	--	--
	7/06/2017	<0.000176	<0.000198	<0.000212	<0.000366	--	--	--
	11/16/2017	<0.000265	<0.000198	<0.000212	<0.000366	--	--	--
	11/13/2018	<0.000176	<0.000198	<0.000212	<0.000366	--	--	--
	3/11/2019	<0.000176	<0.000198	<0.000212	<0.000366	--	--	--
	10/15/2019	<0.000176	<0.000198	**0.00248 J**	**0.000426 J**	--	--	--
MW-6	9/25/2001	**0.0021**	**0.005**	<0.002	<0.002	--	--	--

Table 4. Summary of BTEX and TPH Groundwater Analytical Results

Site Characterization Report

San Juan River Gas Plant, Kirtland, New Mexico

Monitoring Well	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	TPH DRO (mg/L)	TPH ORO (mg/L)	TPH GRO (mg/L)
NMWQCC Standard		**0.01**	**0.75**	**0.75**	**0.62**	**NE**	**NE**	**NE**
	8/15/2002	**0.0003**	<0.0005	<0.0005	**0.0009**	--	--	--
	8/26/2003	<0.001	<0.001	<0.001	<0.003	--	--	--
	8/27/2004	<0.001	<0.001	<0.001	<0.003	--	--	--

Table 4. Summary of BTEX and TPH Groundwater Analytical Results

Site Characterization Report

San Juan River Gas Plant, Kirtland, New Mexico

Monitoring Well	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	TPH DRO (mg/L)	TPH ORO (mg/L)	TPH GRO (mg/L)
NMWQCC Standard		**0.01**	**0.75**	**0.75**	**0.62**	**NE**	**NE**	**NE**
MW-6	8/24/2005	<0.001	<0.001	<0.001	<0.002	--	--	--
	8/10/2006	<0.001	<0.001	<0.001	<0.002	--	--	--
	8/23/2007	<0.001	<0.001	<0.001	<0.002	--	--	--
	8/27/2008	<0.001	<0.001	<0.001	<0.003	--	--	--
	8/28/2009	<0.001	<0.001	<0.001	<0.002	--	--	--
	8/26/2010	<0.002	<0.002	<0.002	<0.006	--	--	--
	8/31/2011	<0.001	<0.001	<0.001	<0.003	--	--	--
	12/19/2013	<0.00008	<0.00015	<0.00011	<0.00026	--	--	--
	12/18/2014	**0.0000812**	<0.00015	<0.00011	<0.00026	--	--	--
	12/15/2015	<0.000176	<0.000198	<0.000212	<0.000366	--	--	--
	12/13/2016	<0.000176	<0.000198	<0.000212	<0.000366	--	--	--
	7/06/2017	<0.000176	<0.000198	<0.000212	**0.000585 J**	**0.179**	<0.0989	<0.05
	11/16/2017	<0.000176	<0.000198	<0.000212	<0.000366	**0.0869 J**	<0.0858	<0.05
	11/12/2018	<0.000176	<0.000198	<0.000212	<0.000366	**--**	--	--
	3/11/2019	<0.000176	<0.000198	<0.000212	<0.000366	**--**	--	--
	10/15/2019	<0.000176	<0.000198	<0.000212	<0.000366	**--**	--	--
MW-8	2/10/1998	**0.316**	<0.001	**0.0094**	**0.0284**	--	--	--
	5/12/1998	**0.449**	<0.001	**0.0139**	**0.0629**	--	--	--
	8/7/1998	**0.509**	<0.001	**0.0071**	**0.0429**	--	--	--
	11/4/1998	**0.408**	<0.001	<0.001	**0.0145**	--	--	--
	2/10/1999	**0.261**	<0.001	<0.001	**0.0061**	--	--	--
	5/17/1999	**0.205**	**0.00102**	<0.001	**0.00725**	--	--	--
	8/18/1999	**0.265**	**0.00209**	**0.00106**	**0.0096**	--	--	--
	11/30/1999	**0.26**	<0.002	**0.0021**	**0.0160**	--	--	--
	4/10/2000	**0.2**	**0.0044**	<0.002	**0.0095**	--	--	--
	6/29/2000	**0.024**	<0.002	<0.002	<0.002	--	--	--
	9/29/2000	**0.284**	<0.002	**6.600**	<0.002	--	--	--
	12/21/2000	<0.002	<0.002	<0.002	**0.0067**	--	--	--
	3/27/2001	**0.015**	<0.002	<0.002	<0.002	--	--	--
	6/27/2001	**0.085**	<0.002	<0.002	<0.002	--	--	--
	9/25/2001	**0.03**	**0.0037**	<0.002	<0.002	--	--	--
	10/29/2001	**0.053**	<0.0005	**0.0047**	<0.0005	--	--	--
	1/25/2002	**0.11**	<0.0005	**0.0023**	**0.0098**	--	--	--
	5/23/2002	**0.2**	<0.0025	**0.0079**	**0.017**	--	--	--
	8/15/2002	**0.8**	<0.0005	**0.0044**	**0.0073**	--	--	--
	3/6/2003	**0.3**	**0.0004**	**0.002**	**0.0027**	--	--	--
	5/15/2003	<0.001	<0.001	<0.001	<0.003	--	--	--
	8/26/2003	**0.891**	<0.001	**0.0266**	**0.0131**	--	--	--
	11/25/2003	**0.0819**	<0.001	**0.0023**	**0.0052**	--	--	--
	5/18/2004	<0.001	<0.001	<0.001	<0.003	--	--	--
	8/27/2004	<0.001	<0.001	<0.001	<0.003	--	--	--
	11/17/2004	**0.157**	<0.001	**0.0136**	**0.027**	--	--	--
	2/17/2005	**0.159**	<0.001	**0.0059**	**0.0138**	--	--	--
	5/19/2005	<0.001	**0.0017**	**0.0034**	**0.001 J**	--	--	--
	8/24/2005	<0.001	<0.001	**0.0026**	<0.002	--	--	--
	11/9/2005	**0.164**	**0.00036 J**	**0.011**	**0.03**	--	--	--
	2/20/2006	**0.0852**	<0.001	**0.0083**	**0.0176**	--	--	--
	5/24/2006	**36.300**	<0.001	**0.005**	**0.0097**	--	--	--
	8/10/2006	**0.00057 J**	<0.001	**0.0034**	**0.0064**	--	--	--
	12/27/2006	**0.0256**	<0.001	**0.0046**	**0.009**	--	--	--
	2/27/2007	**0.0281**	<0.001	**0.0055**	**0.0114**	--	--	--
	5/25/2007	**0.0196**	<0.001	**0.005**	**0.0098**	--	--	--

Table 4. Summary of BTEX and TPH Groundwater Analytical Results

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NMWQCC Standard		**0.01**	**0.75**	**0.75**	**0.62**	**NE**	**NE**	**NE**
MW-8	8/23/2007	<0.005	<0.005	<0.005	<0.010	--	--	--
	11/28/2007	<0.002	<0.002	<0.002	**0.00045 J**	--	--	--
	2/13/2008	**0.006**	<0.002	**0.00071 J**	<0.006	--	--	--
	5/8/2008	<0.001	<0.001	<0.001	<0.002	--	--	--
	8/27/2008	<0.001	<0.001	<0.001	<0.003	--	--	--
	11/18/2008	<0.002	<0.002	<0.002	<0.006	--	--	--
	2/18/2009	**0.00065 J**	<0.001	<0.001	<0.002	--	--	--
	5/5/2009	**0.00024 J**	<0.001	<0.001	<0.002	--	--	--
	8/28/2009	<0.001	<0.001	<0.001	<0.002	--	--	--
	11/4/2009	<0.001	<0.001	<0.001	<0.002	--	--	--
	2/18/2010	<0.001	<0.001	<0.001	<0.002	--	--	--
	5/26/2010	**0.00081 J**	<0.002	<0.002	<0.006	--	--	--
	8/26/2010	<0.002	<0.002	<0.002	<0.006	--	--	--
	11/9/2010	<0.002	<0.002	<0.002	<0.006	--	--	--
	19/12/2013	0.003	<0.00015	<0.00011	<0.00026	--	--	--
	12/18/2014	<0.00008	<0.00015	<0.00011	<0.00026	--	--	--
	12/15/2015	**0.000802 J**	<0.000198	<0.000212	<0.000366	--	--	--
	12/13/2016	**0.00184**	<0.000198	<0.000212	<0.000366	--	--	--
	7/06/2017	**0.000814 J**	<0.000198	<0.000212	<0.000366	<0.0989	<0.0989	<0.05
	11/16/2017	<0.000538	<0.000198	<0.000212	<0.000366	**0.125**	<0.0875	<0.05
	11/12/2018	**0.00141**	<0.000198	<0.000212	<0.000366	**--**	--	--
	3/12/2019	**0.000957 J**	<0.000198	<0.000212	<0.000366	**--**	--	**--**
	10/14/2019	**0.000781 J**	<0.000198	**0.000266 J**	<0.000366	**--**	--	**--**
MW-9	2/10/1998	**0.0731**	<0.001	**0.0071**	**0.0075**	--	--	--
	5/12/1998	**0.0895**	<0.001	**0.00851**	**0.00561**	--	--	--
	8/7/1998	**0.077**	<0.001	**0.00708**	**0.005**	--	--	--
	11/4/1998	**0.0898**	<0.001	**0.00942**	**0.0109**	--	--	--
	2/10/1999	**0.077**	<0.001	**0.0081**	**0.006**	--	--	--
	5/17/1999	**0.0783**	<0.001	**0.00754**	**0.00363**	--	--	--
	8/18/1999	**0.0764**	<0.001	**0.00721**	**0.00497**	--	--	--
	11/30/1999	**0.082**	<0.002	**0.0075**	**0.0053**	--	--	--
	4/10/2000	**0.048**	**0.0021**	**0.0047**	**0.0059**	--	--	--
	6/29/2000	**0.1**	<0.002	**0.0092**	<0.002	--	--	--
	9/29/2000	**0.095**	<0.002	**0.011**	**0.009**	--	--	--
	12/21/2000	**0.086**	<0.002	**0.0071**	**0.012**	--	--	--
	3/27/2001	**0.061**	<0.002	**0.0057**	<0.002	--	--	--
	6/27/2001	**0.087**	<0.002	**0.0077**	<0.002	--	--	--
	9/25/2001	**0.023**	**0.002**	**0.0022**	<0.002	--	--	--
	10/29/2001	**0.12**	<0.0005	**0.0024**	**0.0051**	--	--	--
	12/26/2001	**0.034**	**0.0011**	**0.0099**	**0.017**	--	--	--
	1/25/2002	**0.022**	<0.0005	**0.0044**	**0.003**	--	--	--
	2/21/2002	**0.048**	<0.0005	**0.0074**	**0.0045**	--	--	--
	5/23/2002	**0.0014**	<0.0005	<0.0005	<0.001	--	--	--
	8/15/2002	**0.0117**	<0.0005	**0.0021**	**0.0009**	--	--	--
	3/6/2003	**0.0002**	**0.0002**	<0.001	**0.0008**	--	--	--
	5/15/2003	<0.001	<0.001	<0.001	<0.003	--	--	--
	8/26/2003	**0.0293**	<0.001	<0.001	<0.003	--	--	--
	11/25/2003	**0.0086**	<0.001	**0.0011**	<0.003	--	--	--
	5/18/2004	**0.0152**	<0.001	**0.0025**	<0.003	--	--	--
	8/27/2004	**0.0295**	<0.001	**0.004**	**0.0018**	--	--	--
	11/17/2004	**0.0359**	<0.001	**0.0052**	**0.0022**	--	--	--

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San Juan River Gas Plant, Kirtland, New Mexico

Monitoring Well	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	TPH DRO (mg/L)	TPH ORO (mg/L)	TPH GRO (mg/L)
NMWQCC Standard		**0.01**	**0.75**	**0.75**	**0.62**	**NE**	**NE**	**NE**
MW-9	2/17/2005	**0.0517**	<0.001	**0.0083**	**0.0037**	--	--	--
	5/19/2005	**0.133**	<0.001	**0.0289**	**0.0135**	--	--	--
	8/24/2005	**0.0565**	<0.001	**0.0126**	**0.0049**	--	--	--
	11/9/2005	**0.076**	<0.001	**0.0188**	**0.0069**	--	--	--
	2/20/2006	**0.0779**	<0.001	**0.0191**	**0.0071**	--	--	--
	5/24/2006	**0.0734**	<0.001	**0.0177**	**0.0066**	--	--	--
	8/10/2006	**0.0887**	<0.001	**0.0225**	**0.0093**	--	--	--
	12/27/2006	**0.0769**	<0.001	**0.019**	**0.0063**	--	--	--
	2/27/2007	**0.0448**	<0.001	**0.0092**	**0.0028**	--	--	--
	5/25/2007	**0.082**	<0.001	**0.0196**	**0.0065**	--	--	--
	8/23/2007	**0.0881**	<0.001	**0.0212**	**0.0138**	--	--	--
	11/28/2007	**0.0909**	<0.002	**0.0204**	**0.007**	--	--	--
	2/13/2008	**0.0844**	<0.002	**0.0221**	**0.0092**	--	--	--
	5/8/2008	**0.0718**	<0.001	**0.0202**	**0.008**	--	--	--
	8/27/2008	**0.0879**	<0.001	**0.0234**	**0.0107**	--	--	--
	11/18/2008	**0.0953**	<0.002	**0.0228**	**0.0095**	--	--	--
	2/18/2009	**0.0913**	<0.001	**0.0257**	**0.0095**	--	--	--
	5/5/2009	**0.0554**	**0.00042 J**	**0.0137**	**0.0068**	--	--	--
	8/28/2009	**0.0631**	<0.001	**0.009**	**0.0046**	--	--	--
	11/4/2009	**0.0694**	<0.001	**0.0092**	**0.0042**	--	--	--
	2/18/2010	**0.0707**	<0.001	**0.0097**	**0.0052**	--	--	--
	5/26/2010	**0.0918**	<0.002	**0.0188**	**0.0109**	--	--	--
	8/26/2010	**0.0723**	<0.002	**0.0128**	**0.0045 J**	--	--	--
	11/9/2010	**0.0866**	**0.00066 J**	**0.0187**	**0.0099**	--	--	--
	2/7/2011	**0.0901**	<0.002	**0.0225**	**0.0102**	--	--	--
	5/16/2011	**0.0995**	<0.001	**0.0307**	**0.0179**	--	--	--
	8/31/2011	**0.112**	<0.001	**0.0356**	**0.0172**	--	--	--
	11/8/2011	**0.113**	<0.001	**0.0376**	**0.0189**	--	--	--
	2/22/2012	**0.136**	<0.001	**0.0462**	**0.022**	--	--	--
	12/19/2013	**0.186**	0.000246 J	**0.0575**	**0.015**	--	--	--
	12/18/2014	**0.0461**	<0.00015	**0.0183**	**0.0155**	--	--	--
	12/15/2015	**0.104**	**0.00023 J**	**0.0415**	**0.0142**	--	--	--
	12/13/2016	**0.097**	<0.000198	**0.0374**	**0.0103**	--	--	--
	7/06/2017	**0.103**	<0.000198	**0.0429**	**0.0215**	**0.349**	<0.0948	**0.638**
	11/16/2017	**0.127**	<0.000198	**0.0397**	**0.0108**	**0.183**	<0.085	**0.613**
	11/12/2018	**0.124**	<0.000198	**0.05240**	**0.0051**	**--**	--	**--**
	3/12/2019	<0.000176	<0.000198	<0.000212	<0.000366	**--**	--	**--**
	10/14/2019	**0.130**	<0.000198	**0.0590**	**0.0120**	**--**	--	**--**
MW-11	7/06/2017	<0.000176	**0.000309 J**	<0.000212	**0.000913 J**	**0.129**	**0.229**	<0.05
	11/16/2017	<0.000176	<0.000198	<0.000212	<0.000366	<0.0858	<0.0858	<0.05
	11/13/2018	<0.000176	<0.000198	<0.000212	<0.000366	--	--	--
	3/11/2019	<0.000176	<0.000198	<0.000212	<0.000366	--	--	--
	10/15/2019	<0.000176	<0.000198	<0.000212	<0.000366	--	--	--
MW-12	7/06/2017	**0.000647 J**	**0.000426 J**	**0.000602 J**	**0.00268**	**0.267**	<0.0989	**0.748**
	11/16/2017	**0.00153**	<0.000198	**0.000617 J**	**0.00729**	**0.271**	<0.0798	**0.292**
	11/13/2018	**0.00323**	<0.000198	<0.000212	<0.000366	**--**	--	**--**
	3/12/2019	**0.000576 J**	<0.000198	<0.000212	<0.000366	**--**	--	**--**
	10/15/2019	**0.000258 J**	<0.000198	<0.000212	<0.000366	**--**	--	**--**
MW-13	7/06/2017	**4.09**	**0.137**	**0.664**	**6.19**	**0.511**	<0.0989	**35.6**
	11/16/2017	**2.22**	<0.00396	**0.369**	**2.03**	**0.876**	<0.0813	**9.22 J**
	11/13/2018	**3.72**	<0.00396	**0.746**	**4.73**	**--**	--	**--**
	3/12/2019	**3.27**	<0.00396	**0.882**	**1.06**	**--**	--	**--**
	10/14/2019	**0.25**	<0.000198	**0.108**	**0.00441**	**--**	--	**--**
MW-14	7/06/2017	<0.000176	<0.000198	<0.000212	**0.000529 J**	**0.212**	**0.212**	<0.05
	11/16/2017	<0.000176	<0.000198	<0.000212	<0.000366	<0.0827	<0.0827	<0.05

Table 4. Summary of BTEX and TPH Groundwater Analytical Results

Site Characterization Report

San Juan River Gas Plant, Kirtland, New Mexico

Monitoring Well	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	TPH DRO (mg/L)	TPH ORO (mg/L)	TPH GRO (mg/L)
NMWQCC Standard		**0.01**	**0.75**	**0.75**	**0.62**	**NE**	**NE**	**NE**
MW-14	11/12/2018	<0.000176	<0.000198	<0.000212	<0.000366	**--**	--	**--**
	3/12/2019	<0.000176	<0.000198	<0.000212	<0.000366	**--**	--	**--**
	10/14/2019	<0.000176	<0.000198	<0.000212	<0.000366	**--**	--	**--**
MW-15	7/07/2017	**4.37**	**0.00162**	**0.159**	**2.17**	**0.419**	<0.0989	**19.1 J**
	11/16/2017	**6.90**	<0.0099	**0.122**	**1.87**	**0.669**	<0.0827	**24.6**
	11/12/2018	**3.50**	<0.00396	**0.0646**	**0.0284 J**	**--**	--	**--**
	3/12/2019	**2.94**	<0.00396	**0.00691 J**	<0.00732	**--**	--	**--**
	10/14/2019	**2.64**	<0.000198	**0.0183**	**0.0351**	**--**	--	**--**
MW-16	7/06/2017	**2.07**	**0.000943 J**	**0.442**	**3.96**	**1.02**	<0.0989	**21.7**
	11/16/2017	**1.9**	<0.0099	**0.456**	**2.65**	**3.02**	<0.0875	**19.4**
	11/12/2018	**1.18**	<0.00396	**0.43**	**0.90**	**--**	--	**--**
	3/12/2019	**1.15**	<0.00396	**0.576**	**1.42**	**--**	--	**--**
	10/14/2019	**0.912**	<0.00396	**0.632**	**1.46**	**--**	--	**--**
MW-17	4/15/2019	**3.83**	**0.329**	<0.0053	**3.65**	**--**	--	**--**
	10/15/2019	**9.83**	**1.86**	**0.118**	**7.00**	**--**	--	**--**
MW-18	4/15/2019	<0.000176	<0.000198	<0.000212	<0.000366	**--**	--	**--**
	10/15/2019	**0.000396 J**	<0.000198	<0.000212	<0.000366	**--**	--	**--**
MW-19	3/12/2019	<0.000176	<0.000198	<0.000212	<0.000366	**--**	--	**--**
	10/14/2019	<0.000176	<0.000198	<0.000212	<0.000366	**--**	--	**--**
MW-20	3/12/2019	**PSH in well, no sample collected**						
		PSH in well, no sample collected						
MW-21	3/12/2019	**0.307**	**0.186**	**0.0854**	**0.427**	**--**	--	**--**
	10/14/2019	**1.04**	**0.00811**	**0.126**	**0.397**	**--**	--	**--**
MW-22	3/12/2019	**No water in well, no sample collected**						
		No water in well, no sample collected						
MW-23	4/15/2019	<0.00088	<0.00099	<0.00106	<0.00183	**--**	--	**--**
		No water in well, no sample collected						

Notes:

Bold text indicates detected concentration

Highlighted and bold cells indicate concentration exceeding New Mexico Water Quality Control Commission (NMWQCC) standard

< = not detected above listed method detection limit

-- = sample not collected for listed analyte

BTEX = benzene, toluene, ethylbenzene and xylene

DRO = diesel range organics

GRO = gasoline range organics

J = chemical detected at concentration above instrument detection limit but below method detection limit

mg/L = milligrams per liter

NE = not established

ORO = oil range organics

TPH = total petroleum hydrocarbons

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Table 5. Summary of Metals and Inorganics
Groundwater Analytical Results
Site Characterization Report
San Juan River Gas Plant, Kirtland, New Mexico

Analyte	NMWQCC Standard (mg/L)	PMW-1a					PMW-2a					PMW-4a		
		7/07/2017	11/17/2017	11/13/2018	4/16/2019	10/15/2019	7/07/2017	11/17/2017	11/13/2018	3/12/2019	10/15/2019	7/07/2017	11/16/2017	11/13/2018
Dissolved Metals														
Aluminum	5	<0.0926	<0.0926	<0.0926	**0.37 J**	<0.0926	<0.0926	<0.0926	<0.0926	<0.0926	**0.326 J**	**0.26 J**	<0.0926	<0.0926
Arsenic	0.01	**0.0063 J**	<0.00285	<0.00285	<0.00285	<0.00285	<0.057	<0.00285	<0.00285	<0.00285	<0.00285	<0.00285	<0.00285	<0.00285
Barium	1	**0.017 J**	**0.007 J**	**0.012 J**	**0.0131 J**	**0.0303**	**0.118**	**0.243**	**0.0712**	**0.227**	**0.178**	**0.0167 J**	**0.0113 J**	**0.0178 J**
Boron	0.75	**0.475**	**0.441**	**0.457**	**0.467**	**0.434**	**0.892**	**0.976**	**0.894**	**0.965**	**0.97**	**0.622**	**0.417**	**0.458**
Cadmium	0.01	<0.00028	<0.00028	**0.0003 J**	**0.0004 J**	**<0.00028**	<0.0005	<0.00028	**0.0003 J**	<0.00028	<0.00028	<0.00028	**0.0004 J**	**0.0006 J**
Calcium	NE	**156**	**158**	**164**	**--**	**--**	**62.1**	**38.4**	**88.7**	**--**	**--**	**253**	**236**	**269**
Chromium	0.05	<0.00159	<0.00159	<0.00159	--	<0.00159	<0.00159	<0.00159	<0.00159	<0.00159	<0.00159	<0.00159	**0.0016 J**	<0.00159
Cobalt	0.05	<0.0006	**0.0004 J**	<0.00031	**0.0013 J**	<0.00031	<0.0012	<0.00031	**0.0006 J**	**0.0004 J**	<0.00031	**0.0052 J**	**0.0031 J**	**0.0047 J**
Copper	1	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	1	<0.0655	<0.027	**0.102 J**	**0.313 J**	<0.027	<0.0795	<0.027	**2.05**	**0.0359 J**	**0.368 J**	<0.027	**0.0643 J**	<0.027
Lead	0.015	<0.00219	<0.00219	<0.00219	<0.00219	<0.00219	<0.00219	<0.00219	<0.00219	<0.00219	<0.00219	<0.00219	<0.00219	<0.00219
Magnesium	NE	**15.4**	**14.1**	**15.1**	**--**	**--**	**8.7**	**5.72**	**11.1**	**--**	**--**	**23.9**	**21.3**	**24.6**
Manganese	0.2	**0.139**	**0.114**	**0.129**	**0.285**	**0.0487**	**0.337**	**0.0711**	**0.387**	**0.128**	**0.111**	**0.698**	**0.722**	**1.02**
Mercury	0.002	<0.000082	<0.000082	<0.000103	<0.000103	<0.000103	<0.000082	<0.000082	<0.000103	<0.000103	<0.000103	<0.000082	<0.000082	<0.000103
Molybdenum	1	<0.0073	**0.004 J**	**0.0043 J**	**0.0044 J**	**0.0044 J**	<0.00054	<0.00054	**0.005 J**	<0.00054	<0.00054	<0.005	**0.0012 J**	**0.0039 J**
Nickel	0.2	**0.0017 J**	**0.001 J**	**0.0009 J**	**0.0016 J**	**0.0012 J**	**0.0013 J**	<0.0008	<0.0008	<0.0008	<0.0008	**0.0076 J**	**0.0041 J**	**0.0074 J**
Potassium	NE	**7.43**	**7.48**	**6.59**	**--**	**--**	**6.06**	**4.71**	**7.14**	**--**	**--**	**9.34**	**9.7**	**9.2**
Selenium	0.05	**0.0047 J**	<0.0031	<0.00287	<0.00287	<0.00287	<0.00287	<0.0049	<0.00287	<0.0038	<0.00287	<0.00287	<0.00287	<0.00287
Silver	0.05	--	--	--	--	--	--	--	--	**--**	**--**	--	--	--
Sodium	NE	**3070**	**3080**	**1950**	**--**	**--**	**2210**	**1820**	**1630**	**--**	**--**	**3980**	**3650**	**2740**
Zinc	10	--	--	--	--	--	--	--	--	**--**	**--**	--	--	--
Inorganics														
Alkalinity	NE	**167**	**155**	**192**	**195**	**149**	**1860**	**2360**	**1800**	**2350**	**2190**	**712**	**190**	**295**
Chloride	250	**964**	**919**	**884**	**1200**	**791**	**1100**	**1240**	**3900 J-**	**1840**	**601**	**2690**	**2880**	**4370**
Nitrate	10	**3.1 J**	**0.285**	**1.53 J**	**0.0281 J**	**13.8 J**	<0.251	**0.017**	<0.0251	<0.0251	**1.1**	**2.96 J**	**0.996 J**	**1.3 J**
Sulfate	600	**5770**	**6400**	**5900**	**5050**	**315**	**1300**	**247**	**7350 J-**	**977**	**265**	**5200**	**7040**	**10300**
Total Dissolved Solids	1000	**9960**	**9590**	**9990**	**9800**	**9080**	**6540**	**4690**	**6840**	**5330**	**4890**	**12200**	**12700**	**11800**

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Table 5. Summary of Metals and Inorganics
Groundwater Analytical Results
Site Characterization Report
San Juan River Gas Plant, Kirtland, New Mexico

Analyte	NMWQCC Standard (mg/L)	PMW-4a		MW-2										
		4/16/2019	10/15/2019	9/25/2001	8/15/2002	8/26/2003	8/27/2004	8/24/2005	10/08/2006	8/23/2007	8/27/2008	8/28/2009	8/26/2010	8/31/2011
Dissolved Metals														
Aluminum	5	**0.558**	**0.118 J**	**4.2**	**1.13**	**2.07**	--	**1.24**	**1.54**	**12.8**	--	**21.0**	**5.18**	**6.08**
Arsenic	0.01	<0.00285	<0.00285	<0.005	**0.0049**	**0.0055**	**0.005**	<0.005	<0.005	<0.005	--	<0.005	<0.005	<0.005
Barium	1	**0.0183 J**	**0.0177 J**	**0.029**	**0.0327**	<0.2	**0.2**	<0.02	<0.2	<0.2	--	<0.2	<0.2	<0.2
Boron	0.75	**0.439**	**0.418**	--	--	--	--	--	--	--	--	--	--	--
Cadmium	0.01	**0.0005 J**	<0.00028	<0.004	**0.0008**	**0.004**	**0.004**	<0.004	<0.004	<0.004	--	<0.004	<0.004	<0.004
Calcium	NE	**--**	**--**	**400**	**402**	**349**	--	**454**	**399**	404	--	**356**	**319**	**330**
Chromium	0.05	--	<0.00159	<0.01	**0.0056**	<0.01	**0.01**	<0.01	<0.01	<0.01	--	**0.0127**	<0.01	<0.01
Cobalt	0.05	**0.0037 J**		<0.05	**0.0035**	<0.05	--	<0.05	<0.05	<0.05	--	<0.05	<0.05	<0.05
Copper	1	--	--	**0.015**	**0.116**	**0.0428**	--	<0.025	<0.025	**0.0329**	--	**0.0272**	<0.025	<0.025
Iron	1	**0.419**	**0.116 J**	**4.6**	**1.76**	**1.48**	--	**1.58**	**1.02**	**10.3**	--	**16.5**	**4.3**	**4.75**
Lead	0.015	<0.00219	<0.00219	**0.08**	**0.0031**	<0.003	**0.003**	**0.009**	**0.0102**	**0.014**	--	**0.0089**	**0.0051**	**0.0141**
Magnesium	NE	**--**	**--**	**120**	**108**	**106**	--	**126**	**111**	**133**	--	**110**	**103**	**97.3**
Manganese	0.2	**0.734**	**0.791**	**0.23**	**0.216**	**0.0439**	--	**0.163**	**0.256**	**0.223**	--	**0.268**	**0.0871**	**0.178**
Mercury	0.002	<0.000103	<0.000103	--	**0.00012**	<0.0002	**0.0002**	<0.0002	<0.0002	<0.0002	--	--	<0.0002	<0.0002
Molybdenum	1	<0.0021	**0.0009 J**	<0.01	**0.0028**	<0.01	--	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01
Nickel	0.2	**0.0036 J**	**0.0036 J**	<0.04	**0.0075**	<0.04	--	<0.04	<0.04	<0.04	--	<0.04	<0.04	<0.04
Potassium	NE	**--**	**--**	**4.7**	**13.40**	<5	--	**5.84**	**5.63**	**8.88**	--	**10.2**	**5.29**	<5.0
Selenium	0.05	**--**	<0.00287	**0.12**	**0.108**	**0.0896**	**0.115**	**0.124**	**0.136**	**0.143**	--	**0.132**	**0.111**	**0.122**
Silver	0.05	**--**	**--**	<0.01	**0.0028**	<0.01	**0.01**	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01
Sodium	NE	**--**	**--**	**1200**	**1350**	**1030**	--	**1400**	**1150**	**1120**	--	**1130**	**1160**	**1200**
Zinc	10	**--**	**--**	<0.02	**0.0733**	**0.0581**	--	**0.459**	**0.148**	**0.169**	--	**0.0981**	**0.0344**	**0.0552**
Inorganics														
Alkalinity	NE	**220**	**196**	--	**170**	**196**	**180**	**138**	**163**	**165**	**178**	**174**	**198**	**176**
Chloride	250	**3010**	**855**	**300**	**296**	**309**	**431**	**265**	**162**	**338**	**308**	**795**	**290**	**318**
Nitrate	10	<0.0251	<2.51	**25**	--	**21.8**	**25.2**	**17**	**18**	**18**	**17.2**	**17.7**	**19.5**	**16.7**
Sulfate	600	**4540**	**1730**	**3600**	**3380**	**3630**	**3160**	**3170**	**3420**	**3410**	**3320**	**3000**	**3200**	**1530**
Total Dissolved Solids	1000	**12400**	**11300**	**5800**	**5690**	**5880**	**6170**	**5730**	**4920**	**5710**	**4920**	**5870**	**5970**	**5860**

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Table 5. Summary of Metals and Inorganics
Groundwater Analytical Results
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San Juan River Gas Plant, Kirtland, New Mexico

Analyte	NMWQCC Standard (mg/L)	MW-2									MW-4			
		12/19/2013	12/18/2014	12/15/2015	12/13/2016	7/06/2017	11/16/2017	11/13/2018	3/11/2019	10/15/2019	9/25/2001	8/15/2002	8/26/2003	8/26/2004
Dissolved Metals														
Aluminum	5	**5.82**	<0.0216	<0.0926	<0.0926	<0.0926	<0.0926	<0.0926	<0.0926	<0.0926	**9.3**	**1.37**	**5.29**	--
Arsenic	0.01	**0.00480 J**	<0.00328	<0.00285	<0.00285	<0.00285	<0.00285	<0.00285	**0.003 J**	<0.00285	**0.22**	**0.0207**	**0.0818**	**0.018**
Barium	1	**0.0346**	**0.0131**	**0.0112 J**	**0.0078 J**	**0.0107 J**	**0.0072 J**	**0.0101 J**	**0.011 J**	**0.0111 J**	**0.11**	**0.0271**	**0.2**	0.20
Boron	0.75	--	--	**0.584**	**--**	**0.580**	**0.538**	**0.578**	**0.554**	**0.558**	--	--	**--**	--
Cadmium	0.01	**0.000900 J**	<0.00035	**0.0004 J**	**0.0006 J**	<0.00028	**0.0005 J**	**0.0006 J**	**0.0008 J**	**0.0005 J**	**0.017**	**0.0012**	**0.01**	0.004
Calcium	NE	**384**	**298**	--	**284**	**267**	**277**	**281**	**--**	**--**	**210**	**210**	**212**	--
Chromium	0.05	**0.00810 J**	**0.0036**	**0.003 J**	<0.00159	**0.002 J**	**0.0029 J**	**0.0031 J**	**0.002 J**	**0.0028 J**	ND	**0.0102**	**0.01**	0.01
Cobalt	0.05	**0.00790 J**	**0.0008**	**0.0068 J**	<0.00031	**0.000487 J**	**0.0004 J**	**0.0005 J**	**0.0017 J**	<0.00031	**0.28**	**0.191**	**0.156**	--
Copper	1	**0.0309**	**0.0120**	--	**0.0092 J**	--	--	--	--	--	**0.82**	**0.158**	**0.789**	--
Iron	1	**8.29**	<0.0866	**0.752**	<0.027	<0.027	<0.027	<0.027	**0.00478 J**	<0.027	**31.0**	**6.5**	**12.4**	--
Lead	0.015	**0.0106**	<0.0029	<0.00219	<0.00219	<0.00219	<0.00219	<0.00219	<0.00219	<0.00219	**0.17**	**0.0113**	**0.0401**	0.003
Magnesium	NE	**103**	**86.6**	--	**84.5**	**82.2**	**82.4**	**85.9**	**--**	**--**	**81**	**80.1**	**88.1**	--
Manganese	0.2	**0.487**	**0.005**	**1.03**	<0.00036	**0.00118 J**	**0.0031 J**	**0.0029 J**	**0.0195**	**0.0011 J**	**6.1**	**6.08**	**6.88**	--
Mercury	0.002	<0.000082	--	<0.082	<0.000082	<0.000082	<0.000082	<0.000103	<0.000103	<0.000103	--	**0.00061**	**0.0035**	0.003
Molybdenum	1	<0.00273	**0.00273**	**0.003 J**	<0.0029	<0.00487	**0.0032 J**	**0.0026 J**	<0.0044	**0.0029 J**	ND	**0.0027**	**0.01**	--
Nickel	0.2	**0.00900 J**	<0.0022	**0.0279**	<0.0008	<0.000966	**0.0017 J**	**0.009 J**	**0.0052 J**	**0.0013 J**	**0.33**	**0.261**	**0.251**	--
Potassium	NE	**4.02**	**3.35**	--	**3.17**	**3.09**	**3.19**	**2.89**	**--**	**--**	**7.3**	**8.99**	**9.39**	--
Selenium	0.05	**0.0978**	**0.0908**	**0.0762**	**0.0778**	**0.1120**	**0.0803**	**0.0954**	**0.0824**	**0.0652**	<0.005	**0.0034**	**0.005**	0.005
Silver	0.05	**0.00130 J**	<0.00125	--	<0.00129	--	--	--	--	--	<0.01	**0.0017**	**0.01**	0.01
Sodium	NE	**1260**	**1030**	--	**1170**	**1080**	**1120**	**909**	--	--	**920**	**1040**	**802**	--
Zinc	10	**0.156**	**0.011**	--	**0.0141 J**	--	--	--	--	--	**4.2**	**0.241**	**1.55**	--
Inorganics														
Alkalinity	NE	**203**	**215**	**197**	**169 J**	**181**	**178**	**193**	**203**	**196**	--	**874**	**446**	**888**
Chloride	250	**275**	**234**	**245**	**206**	**238**	**362**	**428**	**200**	**191**	**330**	**234**	**303**	**453**
Nitrate	10	**19.7**	**20.9**	**33.4**	**9.59**	**10.7**	**12**	**10.7**	**18.5**	**23.6 J**	--	--	**4**	**10**
Sulfate	600	**3330**	**3170**	**3280**	**3290**	**2960**	**4080**	**4330**	**3150**	**2790**	**2000**	**1790**	**2090**	**2000**
Total Dissolved Solids	1000	**5460**	**5390**	**5000**	**4860**	**4760**	**5240**	**4420**	**4160**	**4940**	**3920**	**4060**	**4540**	**4410**

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Table 5. Summary of Metals and Inorganics
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Site Characterization Report
San Juan River Gas Plant, Kirtland, New Mexico

Analyte	NMWQCC Standard (mg/L)	MW-4												
		8/24/2005	8/10/2006	8/23/2007	8/27/2008	8/28/2009	8/26/2010	8/31/2011	12/19/2013	12/18/2014	12/15/2015	12/13/2016	7/06/2017	11/16/2017
Dissolved Metals														
Aluminum	5	<0.2	**0.416**	**9.29**	**9.81**	**1.0**	**3.31**	**1.38**	**0.702**	<0.0216	**0.403 J**	<0.0926	<0.0926	<0.0926
Arsenic	0.01	**0.0262**	**0.0636**	**0.0211**	**0.0342**	**0.0125**	**0.0175**	**0.0082**	**0.101**	**0.008**	<0.00285	<0.00285	<0.00287	**0.0035 J**
Barium	1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	**0.0327**	**0.0335**	**0.01 J**	**0.0074 J**	**0.00916 J**	**0.0084 J**
Boron	0.75	--	--	--	--	--	--	--	**--**	--	**0.778**	--	**0.870**	**0.751**
Cadmium	0.01	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	**0.00150 J**	<0.00035	**0.0009 J**	**0.0008 J**	<0.00028	<0.00028
Calcium	NE	**286**	**245**	**249**	**267**	**234**	**228**	**263**	**323**	**276**	--	**280**	**274**	**273**
Chromium	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	**0.00310 J**	**0.00240**	**0.0024 J**	<0.00159	<0.00159	**0.0034 J**
Cobalt	0.05	**0.144**	**0.103**	**0.0883**	**0.094**	**0.0752**	**0.0576**	**0.0536**	**0.201**	**0.0452**	**0.0426**	**0.0334**	**0.0448**	**0.026**
Copper	1	**0.0629**	**0.0567**	**0.0683**	**0.15**	**0.0334**	**0.0589**	**0.0268**	**0.0913**	**0.0072**	--	**0.003 J**	--	--
Iron	1	**10.2**	**31.8**	**21.7**	**17.7**	**8.16**	**9.93**	**5.38**	**24.90**	**5.86**	**3.65**	**5.09**	**3.84**	**5.05**
Lead	0.015	**0.165**	**0.051**	**0.014**	**0.0512**	**0.014**	**0.0195**	**0.0128**	**0.016**	<0.0029	<0.00219	<0.00219	<0.00219	<0.00219
Magnesium	NE	**111**	**95.3**	**108**	**113**	**101**	**100**	**105**	**123**	**113**	--	**116**	**118**	**115**
Manganese	0.2	**8.78**	**5.8**	**6.59**	**7.19**	**6.4**	**5.97**	**5.03**	**8.77**	**5.95**	**5.81**	**6.31**	**5.28**	**6.52**
Mercury	0.002	**0.00026**	**0.00021**	**0.00042**	<0.0002	--	**0.00068**	**0.00031**	<0.000082	--	<0.082	<0.000082	<0.000082	<0.000082
Molybdenum	1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	**0.179**	<0.00273	**0.001 J**	<0.00054	<0.00362	**0.0014 J**
Nickel	0.2	**0.26**	**0.182**	**0.268**	**0.229**	**0.199**	**0.203**	**238**	**0.358**	**0.183**	**0.186**	**0.192**	**0.19**	**0.145**
Potassium	NE	**9.62**	**8.77**	**10.1**	**13.1**	**8.13**	**7.86**	**6.75**	**8.09**	**6.1**	--	**6.25**	**5.99**	**6.26**
Selenium	0.05	**0.0058**	<0.005	<0.005	<0.005	<0.005	**0.0076**	<0.005	**0.00860 J**	<0.00417	**0.0255 J**	<0.00287	<0.00287	**0.0071 J**
Silver	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00125	**0.0016**	--	<0.00129	--	--
Sodium	NE	**1190**	**1050**	**910**	**1020**	**1020**	**1050**	**1130**	**1310**	**1060**	--	**1250**	**1170**	**1220**
Zinc	10	**0.159**	**0.2**	**0.11**	**0.05**	<0.02	**0.0287**	<0.02	**0.157**	**0.0091**	--	**0.0044 J**	--	--
Inorganics														
Alkalinity	NE	**650**	**870**	**820**	**916**	**428**	**856**	**34**	**765**	**908**	**831**	**798**	--	**716**
Chloride	250	**321**	**385**	**303**	**16.9**	**373**	**345**	**1240**	**377**	**380**	**390**	**284**	**379**	**456**
Nitrate	10	**0.5**	**0.2**	**2.1**	**0.39**	**0.64**	**0.54**	**0.14**	**0.695**	**0.0986**	**0.0985**	<0.0017	**1.23 J**	**0.041 J**
Sulfate	600	**2010**	**2250**	**2000**	**2150**	**2230**	**2150**	**2140**	**2640**	**2670**	**2720**	**2560**	**2520**	**2830**
Total Dissolved Solids	1000	**4330**	**3840**	**4460**	**4120**	**4820**	**4810**	**4210**	**5330**	**5450**	**5190**	**4900**	**5110**	**5400**

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Table 5. Summary of Metals and Inorganics
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San Juan River Gas Plant, Kirtland, New Mexico

Analyte	NMWQCC Standard (mg/L)	MW-4			MW-6									
		11/13/2018	3/11/2019	10/15/2019	9/25/2001	8/15/2002	8/26/2003	8/27/2004	8/24/2005	8/10/2006	8/23/2007	8/27/2008	8/28/2009	8/26/2010
Dissolved Metals														
Aluminum	5	<0.0926	<0.0926	<0.0926	**22.0**	**13.6**	**24.5**	--	**14.5**	**6.45**	**12.6**	--	**16.8**	**19.2**
Arsenic	0.01	**0.0047 J**	**0.0188**	<0.00285	<0.005	**0.0078**	**0.005**	**0.005**	<0.005	<0.005	<0.005	--	<0.005	<0.005
Barium	1	**0.0091 J**	**0.0096 J**	**0.0105 J**	**0.015**	**0.0139**	**0.2**	**0.2**	<0.2	<0.2	<0.2	--	<0.2	<0.2
Boron	0.75	**0.788**	**0.744**	**0.742**	--	--	--	--	--	--	--	--	--	--
Cadmium	0.01	**0.0007 J**	**0.0096**	**0.0006 J**	**0.012**	**0.0109**	**0.0133**	**0.0102**	**0.0114**	**0.0068**	**0.0081**	--	**0.0095**	**0.0114**
Calcium	NE	**289**	**--**	**--**	**400**	**388**	**343**	--	**447**	**389**	**325**	--	**359**	**331**
Chromium	0.05	<0.00159	**0.0032 J**	**<0.00159**	<0.01	**0.0303**	**0.01**	**0.01**	<0.01	<0.01	<0.01	--	<0.01	<0.01
Cobalt	0.05	**0.029**	**0.0896**	**0.0507**	**0.26**	**0.202**	**0.236**	--	**0.219**	**0.123**	**0.161**	--	**0.176**	**0.199**
Copper	1	--	--	--	**0.046**	**0.0434**	**0.0807**	--	**0.0378**	<0.025	**0.0387**	--	**0.0383**	**0.042**
Iron	1	**5.58**	**1.72**	**2.22**	**2.9**	**0.986**	**5.51**	--	**0.427**	**0.296**	**3.78**	--	**3.44**	**4.6**
Lead	0.015	<0.00219	<0.0149	<0.00219	**0.25**	**0.005**	**0.0039**	**0.003**	**0.0103**	**0.0076**	**0.011**	--	**0.0044**	**0.0151**
Magnesium	NE	**127**	**--**	**--**	**420**	**316**	**360**	--	**376**	**273**	**356**	--	**315**	**326**
Manganese	0.2	**6.81**	**4.98**	**3.94**	**9.6**	**6.55**	**8.63**	--	**8.25**	**4.82**	**5.88**	--	**6.83**	**7.2**
Mercury	0.002	<0.000103	<0.000103	<0.000103	--	**0.0001**	**0.0002**	**0.0002**	<0.0002	<0.0002	<0.0002	--	--	<0.0002
Molybdenum	1	**0.0008 J**	**0.0218**	**0.1620**	<0.01	**0.005**	**0.0100**	--	<0.01	<0.01	<0.01	--	<0.01	<0.01
Nickel	0.2	**0.136**	**0.198**	**0.162**	**0.32**	**0.272**	**0.3100**	--	**0.275**	**0.155**	**0.187**	--	**0.228**	**0.305**
Potassium	NE	**6.00**	**--**	**--**	**22.0**	**29.1**	**29.4**	--	**37.6**	**34.2**	**39.4**	--	**34.8**	**27.6**
Selenium	0.05	<0.00287	**0.0191 J**	<0.00287	**0.3**	**0.304**	**0.247**	**0.331**	**0.618**	**0.995**	**0.893**	--	**0.381**	**0.335**
Silver	0.05	--	--	--	<0.01	**0.004**	**0.01**	**0.01**	<0.01	<0.01	<0.01	--	<0.01	<0.01
Sodium	NE	**988**	**--**	**--**	**4000**	**4080**	**3830**	--	**4370**	**3400**	**3370**	--	**3470**	**3620**
Zinc	10	--	--	--	**0.79**	**0.612**	**0.729**	--	**0.764**	**0.527**	**0.594**	--	**0.592**	**0.692**
Inorganics														
Alkalinity	NE	**810**	**817**	**698**	--	**145**	**12**	**11**	**25**	**54**	**30**	**17**	**6**	<5.0
Chloride	250	**725**	**331**	**163**	**1300**	**1040**	**1410**	**1340**	**1150**	**1320**	**1830**	**1150**	**1290**	**1180**
Nitrate	10	**0.169 J**	<0.0251	**0.0251 J-**	ND	**--**	**70.3**	**88.3**	**176**	**314**	**258**	**140**	**97.8**	**57**
Sulfate	600	**4120**	**2830**	**967**	**10000**	**8300**	**10300**	**9320**	**8490**	**8400**	**8930**	**3780**	**4140**	**9180**
Total Dissolved Solids	1000	**4780**	**5220**	**5020**	**16500**	**14900**	**17100**	**16600**	**17700**	**11600**	**15500**	**16300**	**16000**	**14900**

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Analyte	NMWQCC Standard (mg/L)	MW-6										MW-8		
		8/31/2011	12/19/2013	12/18/2014	12/15/2015	12/13/2016	7/06/2017	11/16/2017	11/12/2018	3/11/2019	10/15/2019	11/30/1999	4/10/2000	6/29/2000
Dissolved Metals														
Aluminum	5	**16.3**	**14.8**	**6.99**	**12.3**	**15.1**	**14.6**	**14.2**	**17.1**	**17.5**	**16.5**	--	**--**	**--**
Arsenic	0.01	<0.005	<0.00328	<0.00328	<0.00285	<0.00285	<0.00285	<0.00285	**0.0114**	<0.00285	<0.00285	--	--	**--**
Barium	1	<0.2	**0.0108 J**	**0.0100**	**0.0103 J**	**0.0055 J**	**0.00722 J**	**0.0055 J**	**0.0078 J**	**0.0087 J**	**0.0111 J**	--	**--**	**--**
Boron	0.75	--	--	--	**0.737**	**--**	**0.851**	**0.748**	**0.872**	**0.775**	**0.761**	--	--	--
Cadmium	0.01	**0.0131**	**0.0116**	**0.00730**	**0.0103**	**0.0123**	**0.00887**	**0.0116**	**0.0194**	**0.0125**	**0.0112**	--	--	**--**
Calcium	NE	**350**	**389**	**393**	--	**386**	**336**	**364**	**387**	--	--	--	**--**	**--**
Chromium	0.05	<0.01	<0.00155	**0.00180**	**0.0018 J**	<0.00159	<0.00159	**0.0025 J**	<0.00159	<0.00159	<0.00159	--	**--**	**--**
Cobalt	0.05	**0.227**	**0.238**	**0.128**	**0.196**	**0.228**	**0.192**	**0.203**	**0.278**	**0.259**	**0.236**	--	**--**	**--**
Copper	1	**0.0479**	**0.045**	**0.0541**	--	**0.0657**	--	--	--	--	--	--	**--**	**--**
Iron	1	**1.04**	**0.418**	<0.0866	**0.148 J**	**0.0696 J**	<0.027	**0.139 J**	**0.518**	**0.414**	**0.386 J**	**0.16**	**1.8**	**0.32**
Lead	0.015	**0.0187**	<0.00290	<0.0029	<0.00219	<0.00219	<0.00219	**0.0032 J**	**0.0056 J**	<0.00219	<0.00219	--	**--**	**--**
Magnesium	NE	**326**	**318**	**285**	--	**320**	**299**	**292**	**349**	**--**	**--**	--	**--**	**--**
Manganese	0.2	**8.06**	**6.92**	**4.40**	**5.95**	**6.7**	**6.54**	**5.94**	**8.19**	**7.51**	**6.84**	**4.3**	**2.4**	**3.6**
Mercury	0.002	<0.0002	<0.000082	--	<0.082	<0.000082	<0.000082	<0.000082	<0.000103	<0.000103	<0.000103	--	**--**	**--**
Molybdenum	1	<0.01	<0.00273	<0.00273	<0.00054	<0.00054	<0.00141	<0.00054	**0.0144**	<0.00054	<0.00054	--	--	**--**
Nickel	0.2	**0.333**	**0.299**	**0.163**	**0.238**	**0.277**	**0.228**	**0.245**	**0.339**	**0.311**	**0.292**	--	**--**	**--**
Potassium	NE	**21.1**	**19.7**	**18.50**	--	**21.6**	**17.7**	**21.1**	**19.3**	**--**	**--**	--	**--**	**--**
Selenium	0.05	**0.351**	**0.332**	**0.358**	**0.356**	**0.35**	**0.279**	**0.334**	**0.27 J+**	**0.274 J+**	**0.246**	--	--	**--**
Silver	0.05	<0.01	**0.0023 J**	<0.00125	--	<0.00129	--	--	--	--	--	--	--	**--**
Sodium	NE	**3860**	**3950**	**3510**	--	**4070**	**3780**	**3900**	**2980**	**--**	**--**	--	**--**	**--**
Zinc	10	**0.772**	**0.836**	**0.36700**	--	**0.665**	--	--	--	--	--	--	**--**	**--**
Inorganics														
Alkalinity	NE	**12**	<10	**<5**	**5**	<5	<20	<20	<20	<20	<20	--	--	--
Chloride	250	**1190**	**1310**	**874**	**875**	**738**	**938**	**2670**	**1460 J-**	**648**	**340 J-**	--	--	--
Nitrate	10	**92.2**	**137**	**147**	**156**	**45.2**	**63.6**	**27.2**	**63.7 J-**	**53.8**	**35 J-**	**10**	**5**	**5**
Sulfate	600	**8970**	**9600**	**10200**	**11300**	**9670**	**9980**	**11500**	**10200**	**9590**	**2230 J+**	**5200**	**5000**	**7500**
Total Dissolved Solids	1000	**15600**	**16300**	**21100**	**15300**	**15300**	**16400**	**16800**	**15300**	**15100**	**14000**	--	--	--

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Table 5. Summary of Metals and Inorganics
Groundwater Analytical Results
Site Characterization Report
San Juan River Gas Plant, Kirtland, New Mexico

Analyte	NMWQCC Standard (mg/L)	MW-8												
		9/29/2000	12/21/2000	3/27/2001	6/27/2001	9/25/2001	10/29/2001	8/15/2002	8/26/2003	8/27/2004	8/24/2005	8/10/2006	8/23/2007	8/27/2008
Dissolved Metals														
Aluminum	5	--	--	--	--	0.24	--	0.508	1.62	--	0.634	0.219	1.3	3.26
Arsenic	0.01	--	--	--	--	<0.005	--	0.0238	0.008	0.0207	0.0062	0.0074	<0.005	0.0055
Barium	1	--	--	--	--	0.019	--	0.029	0.2	0.2	<0.2	<0.2	<0.2	<0.2
Boron	0.75	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	0.01	--	--	--	--	<0.004	--	0.002	0.004	0.004	<0.004	<0.004	<0.004	<0.004
Calcium	NE	--	--	--	--	370	310	67.2	354	--	155	91.6	69.5	101
Chromium	0.05	--	--	--	--	<0.01	--	1.08	0.01	0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	0.05	--	--	--	--	<0.05	--	0.007	0.05	--	<0.05	<0.05	<0.05	<0.05
Copper	1	--	--	--	--	<0.025	--	0.014	0.0414	--	<0.025	<0.025	<0.025	<0.025
Iron	1	0.32	0.16	1.1	1.1	2.5	0.87	6.89	2.39	--	0.831	<0.1	0.855	1.97
Lead	0.015	--	--	--	--	0.25	--	0.005	0.003	0.0074	0.0069	0.0051	0.0048	0.0043
Magnesium	NE	--	--	--	--	370	280	465	370	--	274	216	288	264
Manganese	0.2	1.6	0.011	1.0	2.9	0.52	7.5	0.162	1.46	--	1.23	1.04	0.59	0.557
Mercury	0.002	--	--	--	--	--	--	0.0001	0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	1	--	--	--	--	<0.01	--	0.0568	0.01	--	0.0293	0.016	0.0165	<10
Nickel	0.2	--	--	--	--	<0.04	--	0.251	0.04	--	<0.04	<0.04	<0.04	<0.04
Potassium	NE	--	--	--	--	20.0	36.0	62.9	45.4	--	75.6	73.0	87.4	89.0
Selenium	0.05	--	--	--	--	<0.005	--	0.0022	0.005	0.0062	<0.005	<0.005	<0.005	<0.005
Silver	0.05	--	--	--	--	<0.01	--	0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.01
Sodium	NE	--	--	--	--	6200	4500	4720	4390	--	2610	2210	2220	2790
Zinc	10	--	--	--	--	<0.02	--	0.0145	0.0748	--	0.0421	0.0526	0.132	0.0207
Inorganics														
Alkalinity	NE	--	--	--	4200	--	24	4420	5030	4920	1880	2150	2580	3380
Chloride	250	--	--	--	440	610	780	318	726	806	261	147	165	4
Nitrate	10	2	1	5	10	ND	0.2	--	20	20	0.7	0.7	0.6	0.36
Sulfate	600	8500	12000	6300	6200	9600	10	5450	8260	7760	4920	4160	3980	3590
Total Dissolved Solids	1000	--	--	--	13800	18000	17000	13200	17900	17000	11000	7820	8200	9420

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Table 5. Summary of Metals and Inorganics
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San Juan River Gas Plant, Kirtland, New Mexico

Analyte	NMWQCC Standard (mg/L)	MW-8											MW-9	
		8/28/2009	8/26/2010	12/19/2013	12/18/2014	12/15/2015	12/13/2016	7/6/2017	11/16/2017	11/12/2018	3/12/2019	10/14/2019	11/30/1999	4/10/2000
Dissolved Metals														
Aluminum	5	**5.34**	**5.21**	**0.651**	<0.0216	<0.0926	**0.348 J**	**0.381 J**	**6.96**	<0.0926	**0.198 J**	**4.85**	--	--
Arsenic	0.01	**0.0122**	**0.03**	<0.00328	**0.0051**	**0.0037 J**	<0.00285	<0.00285	<0.00285	<0.00285	<0.00285	0.0038 J	--	--
Barium	1	<0.2	<0.2	**0.0414**	**0.0322**	**0.0666**	**0.0555**	**0.0508**	**0.0549**	**0.0254**	**0.0263**	**0.0377**	--	--
Boron	0.75	--	--	--	--	**0.236**	**--**	**0.21**	**0.201**	**0.28**	**0.286**	**0.298**	--	--
Cadmium	0.01	<0.004	<0.004	<0.00035	<0.00035	**0.0003 J**	**0.0005 J**	<0.00028	**0.0003 J**	**0.0021 J**	**0.0005 J**	**0.0009 J**	--	--
Calcium	NE	**34.3**	**36.2**	**57.3**	**63.1**	--	**73.5**	**87.7**	**74.9**	**70.5**	**--**	**--**	--	--
Chromium	0.05	**0.013**	**0.018**	<0.00155	**0.0017**	<0.00159	<0.00159	<0.00159	**0.004 J**	<0.00159	<0.00159	**0.0023 J**	--	--
Cobalt	0.05	<0.05	<0.05	**0.0017 J**	<0.00063	**0.0025 J**	**0.0012 J**	**0.00126 J**	**0.0018 J**	**0.0028 J**	**0.0008 J**	**0.0041 J**	--	--
Copper	1	<0.025	<0.025	**0.0102**	**0.0137**	--	**0.0017 J**	--	--	--	--	**--**	--	--
Iron	1	**3.07**	**3.83**	**0.65**	<0.0866	**5.02**	**2.35 J**	**6.81**	**8.83**	**2.01**	**2.06**	**4.89**	**2.2**	**2.7**
Lead	0.015	**0.0039**	**0.0087**	<0.0029	<0.0029	<0.00219	<0.00219	<0.00219	**0.0113**	<0.00219	<0.00219	<0.00219	--	--
Magnesium	NE	**373**	**36.8**	**166**	**114**	--	**79.4**	**71.5**	**82.8**	**106**	**--**	**--**	--	--
Manganese	0.2	**0.869**	**0.367**	**0.351**	**0.0165**	**2.06**	**0.966**	**0.924**	**0.496**	**0.217**	**0.194**	**0.497**	**8.8**	**9.2**
Mercury	0.002	--	<0.0002	<0.000082	--	<0.082	<0.000082	<0.000082	<0.000082	<0.000103	<0.000103	<0.000212	--	--
Molybdenum	1	**0.0321**	**0.0333**	**0.0087 J**	**0.02**	**0.0039 J**	**0.0085 JB**	**0.02**	**0.0176**	**0.0205**	**0.0208**	**0.0234**	--	--
Nickel	0.2	<0.04	<0.2	**0.0033 J**	**0.0033**	<0.0008	<0.0008	<0.00233	**0.0038 J**	**0.0034 J**	**0.0019 J**	**0.0043 J**	--	--
Potassium	NE	**85.6**	**226.0**	**35.4**	**39.6**	--	**26.4**	**20.9**	**30.2**	**30.8**	**--**	**--**	--	--
Selenium	0.05	<0.005	**0.0075**	<0.00417	<0.00417	**0.0171 J**	<0.00287	<0.00287	<0.00287	<0.00287	<0.0031	<0.00287	--	--
Silver	0.05	<0.01	<0.01	<0.00125	**0.0017**	--	<0.00129	--	--	--	**--**	**--**	--	--
Sodium	NE	**2850**	**2800**	**2280**	**2180**	--	2600 B	2480	**2840**	**1720**	**--**	**--**	--	--
Zinc	10	**0.0234**	<0.1	**0.399**	**0.0064**	--	0.0589 B	--	--	--	**--**	**--**	--	--
Inorganics														
Alkalinity	NE	**3860**	**9250**	**3150**	<5	**3800**	**2090**	**2650**	**2710**	**3050**	**3090**	**3020**	--	--
Chloride	250	<1.0	<1.0	**271**	**206**	**284**	**283**	**277**	**496**	**427**	**451**	**346 J+**	--	--
Nitrate	10	**1.2**	**3**	**0.366**	**0.34**	**0.017**	<0.017	<0.251	<0.085	<0.251	<0.251	<0.502	**10**	**5**
Sulfate	600	**4050**	**2150**	**2310**	**2520**	**3120**	**3840**	**3060**	**3880**	**4250**	**3740**	**1840**	**14000**	**12000**
Total Dissolved Solids	1000	**10700**	**12000**	**6540**	**6880**	**7290**	**6600**	**8130**	**9450**	**9450**	**9870**	**9580**	--	--

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Analyte	NMWQCC Standard (mg/L)	MW-9												
		6/29/2000	9/29/2000	12/21/2000	3/27/2001	6/27/2001	9/25/2001	10/29/2001	8/15/2002	8/26/2003	8/27/2004	8/24/2005	8/10/2006	8/23/2007
Dissolved Metals														
Aluminum	5	--	--	--	--	--	**7.0**	--	**8.9**	**43.9**	--	**13.6**	**9.77**	**16.3**
Arsenic	0.01	--	--	--	--	--	<0.005	--	**0.0088**	**0.0061**	**0.005**	<0.005	<0.005	<0.005
Barium	1	--	--	--	--	--	**0.0088**	--	**0.0119**	**0.2**	**0.2**	<0.2	<0.2	<0.2
Boron	0.75	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	0.01	--	--	--	--	--	<0.004	--	**0.0084**	**0.0094**	**0.0081**	**0.0089**	**0.0082**	<0.004
Calcium	NE	--	--	--	--	--	**340**	**310**	**358**	**319**	--	**385**	**346**	**108**
Chromium	0.05	--	--	--	--	--	<0.01	--	**0.0078**	**0.0169**	**0.0104**	<0.01	<0.01	<0.01
Cobalt	0.05	--	--	--	--	--	**0.18**	--	**0.183**	**0.2**	--	**0.212**	**0.193**	**0.205**
Copper	1	--	--	--	--	--	**0.031**	--	**0.0512**	**0.162**	--	**0.059**	**0.0458**	**0.121**
Iron	1	**0.85**	**1.2**	--	**1.4**	**3.7**	**3.3**	**0.13**	**0.849**	**29.0**	--	**4.39**	**1.48**	**6.33**
Lead	0.015	--	--	--	--	--	**0.2**	--	**0.005**	**0.0135**	**0.007**	**0.0111**	**0.0087**	**0.0084**
Magnesium	NE	--	--	--	--	--	**310**	**270**	**258**	**270**	--	**282**	**244**	**289**
Manganese	0.2	**8.5**	**8.4**	**0.1**	**9.0**	**9.3**	**8.3**	**0.54**	**6.47**	**7.33**	--	**7.87**	**7.36**	**6.42**
Mercury	0.002	--	--	--	--	--	--	--	**0.00013**	**0.0002**	**0.0002**	<0.0002	<0.0002	<0.0002
Molybdenum	1	--	--	--	--	--	<0.01	--	**0.005**	**0.01**	--	<0.01	<0.01	<0.01
Nickel	0.2	--	--	--	--	--	**0.3**	--	**0.295**	**0.335**	--	**0.335**	**0.307**	**0.318**
Potassium	NE	--	--	--	--	--	**12.0**	**43.0**	**25.6**	**23.0**	--	**25.9**	**23.8**	**23.7**
Selenium	0.05	--	--	--	--	--	<0.005	--	**0.0067**	**0.005**	**0.0065**	**0.0068**	<0.005	<0.005
Silver	0.05	--	--	--	--	--	<0.01	--	**0.0029**	**0.01**	**0.0100**	<0.01	<0.01	<0.01
Sodium	NE	--	--	--	--	--	**3900**	**4800**	**4490**	**3980**	--	**4650**	**3720**	**3590**
Zinc	10	--	--	--	--	--	**0.53**	--	**0.0145**	**0.597**	--	**0.693**	**0.624**	**0.732**
Inorganics														
Alkalinity	NE	--	--	--	--	ND	--	**4000**	<4	**13**	**24.5**	**19**	**22**	**25**
Chloride	250	--	--	--	--	**770**	**2200**	**530**	**673**	**752**	**969**	**782**	**674**	**775**
Nitrate	10	**5**	**2**	**1**	**5**	**10**	ND	**0.23**	--	**20**	**20**	<0.050	<0.050	**0.4**
Sulfate	600	**11000**	**11000**	**3800**	**11000**	**13000**	**12000**	**2200**	**11600**	**11800**	**12000**	**10200**	**10700**	**10900**
Total Dissolved Solids	1000	--	--	--	--	**16600**	**17000**	**16000**	**17200**	**16800**	**17400**	**18400**	**11000**	**16500**

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Analyte	NMWQCC Standard (mg/L)	MW-9												
		8/27/2008	8/28/2009	8/26/2010	8/31/2011	12/19/2013	12/18/2014	12/15/2015	12/13/2016	7/06/2017	11/16/2017	11/12/2018	3/12/2019	10/14/2019
Dissolved Metals														
Aluminum	5	**14.5**	**14.7**	**11.1**	**14.0**	**11.6**	**9.64**	**9.03**	**15.5**	**11.3**	**11.3**	**11.9**	**10.4**	**9.8**
Arsenic	0.01	<0.005	<0.005	<0.005	<0.005	<0.00328	<0.00328	<0.00285	<0.00285	<0.00285	<0.00285	<0.00285	<0.00285	<0.00285
Barium	1	<0.2	<0.2	<0.2	<0.2	**0.0098 J**	**0.0191**	**0.021**	**0.0134 J**	**0.00973 J**	**0.0077 J**	**0.0099 J**	**0.0094 J**	**0.0097 J**
Boron	0.75	--	--	--	--	--	--	**0.679**	**--**	**0.811**	**0.719**	**0.758**	**0.726**	**0.714**
Cadmium	0.01	**0.0085**	**0.0063**	**0.0061**	**0.0082**	**0.009**	**0.00940**	**0.0069**	**0.0084**	**0.00577**	**0.0075**	**0.0096**	**0.0092**	**0.0072**
Calcium	NE	**361**	**314**	**300**	**318**	**375**	**352**	--	**379**	**316**	**339**	**373**	**--**	**--**
Chromium	0.05	<0.01	<0.01	<0.01	<0.01	**0.0017 J**	**0.00450**	**0.0029 J**	**0.0023 J**	<0.00159	**0.0034 J**	<0.00159	<0.00159	**0.0016 J**
Cobalt	0.05	**0.197**	**0.228**	**0.235**	**0.187**	**0.216**	**0.228**	**0.185**	**0.224**	**0.232**	**0.266**	**0.245**	**0.271**	**0.242**
Copper	1	**0.0629**	**0.043**	**0.0335**	**0.0682**	**0.0895**	**0.1600**	--	**0.0803**	--	--	--	--	--
Iron	1	**3.66**	**8.93**	**7.4**	**7.83**	**7.75**	**18.50**	**19.6**	**31.4**	**31.6**	**27.9**	**10.6**	**1.32**	**34.3**
Lead	0.015	**0.0051**	**0.0065**	**0.014**	**0.0239**	<0.00290	**0.004**	<0.00219	<0.00219	<0.00219	<0.00219	<0.00219	<0.00219	<0.00219
Magnesium	NE	**276**	**245**	**244**	**217**	**225**	**234**	--	**239**	**212**	**216**	**238**	**--**	**--**
Manganese	0.2	**7.77**	**8.3**	**7.9**	**6.79**	**6.59**	**7.31**	**6.2**	**7.1**	**6.62**	**6.73**	**7.01**	**7.58**	**7.08**
Mercury	0.002	<0.0002	--	<0.0002	<0.0002	<0.000082	--	**0.0867 J**	<0.000082	<0.000082	<0.000082	<0.000103	<0.000103	<0.000161
Molybdenum	1	<0.01	<0.01	<0.01	<0.01	<0.00273	<0.00273	**0.0006 J**	<0.00054	<0.00054	<0.00054	**0.0006 J**	<0.00054	<0.00054
Nickel	0.2	**0.316**	**0.336**	**0.391**	**0.328**	**0.339**	**0.348**	**0.297**	**0.357**	**0.344**	**0.39**	**0.32**	**0.337**	**0.359**
Potassium	NE	**28.0**	**24.6**	**19.1**	**13.1**	**12.3**	**12.00**	--	**15.3**	**11.9**	**14.4**	**12.5**	**--**	**--**
Selenium	0.05	<0.005	<0.005	0.00970	<0.005	<0.00417	<0.00417	<0.00287	<0.00287	<0.00287	**0.0054 J**	<0.00287	**0.0036 J**	<0.00287
Silver	0.05	<0.01	<0.01	<0.01	<0.01	**0.0016 J**	**0.0015**	--	<0.00129	--	--	--	**--**	**--**
Sodium	NE	**3760**	**3930**	**4080**	**4080**	**4390**	**4270**	--	**4500**	**4240**	**4590**	**1900**	**--**	**--**
Zinc	10	**0.65**	**0.604**	**0.608**	**0.751**	**1.02**	**0.881**	--	**1.1**	--	--	--	**--**	**--**
Inorganics														
Alkalinity	NE	**18**	**30**	**34**	**28**	**46.5**	<5	**5**	<5	<20	<20	<20	<20	<20
Chloride	250	**606**	**1440**	**580**	**576**	**398**	**508**	**441**	**419**	**574**	**539**	**360**	**371 J**	**270**
Nitrate	10	<0.10	<0.10	<0.10	<0.10	**0.147**	**0.0981**	**0.017**	**1.39**	<0.502	<0.085	<0.251	<0.251	<0.502
Sulfate	600	**4630**	**4030**	**10300**	**8440**	**11200**	**11000**	**13000**	**12100**	**11400**	**13600**	**12700**	**9580**	**11500**
Total Dissolved Solids	1000	**16200**	**17700**	**15800**	**15800**	**15300**	**148000**	**15900**	**16400**	**16600**	**18500**	**16100**	**16000**	**16200**

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Analyte	NMWQCC Standard (mg/L)	MW-11					MW-12					MW-13		
		7/06/2017	11/16/2017	11/13/2018	3/11/2019	10/15/2019	7/06/2017	11/16/2017	11/13/2018	3/12/2019	10/15/2019	7/06/2017	11/16/2017	11/13/2018
Dissolved Metals														
Aluminum	5	<0.0926	<0.0926	<0.0926	**0.14 J**	<0.0926	<0.0926	<0.0926	<0.0926	<0.0926	<0.0926	<0.0926	<0.0926	<0.0926
Arsenic	0.01	<0.00285	<0.00285	<0.00285	**0.0035 J**	<0.00285	**0.00285**	<0.00285	<0.002825	<0.00285	<0.00285	**0.0405**	**0.0231**	<0.00285
Barium	1	**0.0183 J**	**0.014 J**	**0.0182 J**	**0.0201**	**0.0178 J**	**0.0194**	**0.0105 J**	**0.0187 J**	**0.014 J**	**0.0161 J**	**0.0443**	**0.0247**	**0.0242**
Boron	0.75	**0.375**	**0.335**	**0.379**	**0.357**	**0.348**	**0.4**	**0.332**	**0.385**	**0.339**	**0.341**	**0.747**	**0.429**	**0.33**
Cadmium	0.01	<0.00028	**0.0005 J**	**0.0008 J**	**0.0011 J**	**0.0008 J**	<0.00028	**0.0004 J**	**0.0009 J**	**0.0007 J**	**0.0007 J**	<0.00028	**0.0008 J**	**0.001 J**
Calcium	NE	**452**	**447**	**509**	--	--	**461**	**488**	**424**	--	--	**227**	**332**	**331**
Chromium	0.05	<0.00159	**0.0019 J**	<0.00159	<0.00159	<0.00159	<0.00159	**0.0028 J**	<0.00159	<0.00159	<0.00159	**0.00239 J**	**0.0046 J**	**0.0016 J**
Cobalt	0.05	**0.00393 J**	**0.0012 J**	**0.0008 J**	**0.0008 J**	<0.00031	**0.0301**	**0.0203**	**0.0122**	**0.0217**	**0.0108**	**0.00428 J**	**0.003 J**	**0.0005 J**
Copper	1	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	1	<0.027	<0.027	**0.0631 J**	**0.152 J**	**0.0852 J**	**3.15**	**0.881**	**26.60**	**1.06**	**2.19**	**7.34**	**8.72**	**14.7**
Lead	0.015	<0.00219	<0.00219	<0.00219	<0.0036	<0.00219	<0.00219	<0.00219	<0.00219	<0.00219	<0.00219	<0.00219	<0.00219	<0.00219
Magnesium	NE	**136**	**124**	**140**	--	--	**107**	**108**	**99**	--	--	**75**	**115**	**125**
Manganese	0.2	**1.23**	**0.951**	**0.125**	**1.49**	**0.63**	**5.94**	**5.91**	**5.79**	**6.53**	**6.04**	**2.39**	**3.56**	**3.95**
Mercury	0.002	<0.000082	<0.000082	<0.000103	<0.000103	<0.000103	<0.000082	<0.000082	<0.000103	<0.000103	<0.000103	<0.000082	<0.000082	<0.000103
Molybdenum	1	<0.00154	**0.0008 J**	<0.00054	<0.0017	<0.00054	<0.00118	**0.0017 J**	<0.00054	<0.00054	**0.0006 J**	<0.00054	<0.0023	<0.00054
Nickel	0.2	**0.012**	**0.0125**	**0.0117**	**0.0170**	**0.0128**	**0.0243**	**0.0197**	**0.007 J**	**0.019**	**0.010**	**0.00509 J**	**0.0091 J**	**<0.0008**
Potassium	NE	**10.4**	**10.8**	**10.4**	--	--	**12.7**	**13.2**	**12.1**	--	--	**12.3**	**17.1**	**14.3**
Selenium	0.05	<0.00287	<0.00287	<0.00287	<0.00287	<0.00287	<0.00287	**0.003 J**	<0.00287	<0.00287	<0.00287	<0.00287	<0.00287	<0.00287
Silver	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--
Sodium	NE	**1540**	**1430**	**1120**	--	--	**1260**	**1480**	**1170**	--	--	**3850**	**3690**	**2650**
Zinc	10	--	--	--	--	--	--	--	--	--	--	--	--	--
Inorganics														
Alkalinity	NE	**591**	**569**	**667**	**600**	**577**	**687**	**664**	**816**	**725**	**689**	**2030**	**1990**	**2460**
Chloride	250	**197**	**256**	**378**	**179**	**151**	**406**	**707**	**585**	**703**	**222**	**1300**	**1200**	**1770**
Nitrate	10	**4.65**	**0.831**	**0.22**	<0.0251	<2.51	<0.251	**0.077**	<0.0251	<0.0251	<2.51 J	<0.502	<0.085	<0.251
Sulfate	600	**4390**	**7170**	**4120**	**3880 J-**	**2490**	**3230**	**9130**	**6160**	<0.0957	**2330**	**4970**	**11000**	**17500**
Total Dissolved Solids	1000	**7130**	**7410**	**6430**	**5590**	**5850**	**6210**	**7120**	**6460**	**6680**	**6040**	**12500**	**12500**	**11400**

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Table 5. Summary of Metals and Inorganics
Groundwater Analytical Results
Site Characterization Report
San Juan River Gas Plant, Kirtland, New Mexico

Analyte	NMWQCC Standard (mg/L)	MW-13		MW-14					MW-15				
		3/12/2019	10/14/2019	7/06/2017	11/16/2017	11/12/2018	3/12/2019	10/14/2019	7/07/2017	11/16/2017	11/12/2018	3/12/2019	10/14/2019
Dissolved Metals													
Aluminum	5	<0.0926	<0.0926	<0.0926	**0.349 J**	<0.00926	<0.00926	<0.00926	<0.0926	<0.0926	<0.00285	<0.0926	<0.0926
Arsenic	0.01	<0.00285	<0.00285	<0.00285	<0.00285	<0.00285	**0.0157**	<0.00285	**0.003 J**	<0.00285	<0.00285	<0.00285	<0.00285
Barium	1	**0.0231**	**0.0169 J**	**0.0114 J**	**0.0076 J**	**0.0086 J**	**0.0089 J**	<0.0084	**0.0288**	**0.011 J**	**0.0095 J**	**0.0088 J**	**0.0094 J**
Boron	0.75	**0.248**	**0.148 J**	**0.689**	**0.682**	**0.703**	**0.611**	**0.699**	**0.702**	**0.733**	**0.8**	**0.768**	**0.76**
Cadmium	0.01	**0.0009 J**	**0.0007 J**	<0.00193	**0.0024 J**	**0.0017 J**	**0.0137**	0.002 J	<0.0012	**0.0006 J**	**0.0009 J**	**0.0004 J**	**0.001 J**
Calcium	NE	**--**	**--**	**392**	**391**	**429**	**--**	**--**	**468**	**448**	**458**	**--**	**--**
Chromium	0.05	**0.0019 J**	<0.00159	<0.00159	**0.003 J**	<0.00159	**0.0027 J**	**0.0016 J**	**0.0025 J**	**0.0031 J**	<0.00159	**0.00159 J**	<0.00159
Cobalt	0.05	**0.002 J**	<0.00031	**0.00813 J**	**0.0034 J**	**0.0018 J**	**0.0243**	**0.0015 J**	**0.0108**	**0.0053 J**	**0.0022 J**	**0.0017 J**	**0.001 J**
Copper	1	--	--	--	--	**--**	**--**	**--**	--	--	--	--	--
Iron	1	**23.8**	**9.5**	<0.027	**0.212 J**	**0.00602 J**	**0.145 J**	**0.289 J**	**4.88**	**8.99**	**7.12**	**6.33**	**6.75**
Lead	0.015	<0.00219	**0.0029 J**	<0.00219	<0.00219	<0.00219	**0.0155**	<0.00219	<0.00219	<0.00219	<0.00219	<0.00219	<0.00219
Magnesium	NE	**--**	**--**	**244**	**245**	**285**	**--**	**--**	**99.9**	**99.4**	**100**	**--**	**--**
Manganese	0.2	**5.15**	**6.18**	**8.82**	**7.41**	**7.94**	**8.26**	**8.48**	**3.16**	**3.92**	**3.23**	**3.51**	**3.52**
Mercury	0.002	<0.000103	<0.000265	<0.000082	<0.000082	<0.000103	<0.000103	<0.000117	<0.000082	<0.000082	<0.000103	<0.000103	<0.000253
Molybdenum	1	<0.00054	<0.00054	<0.00218	**0.0014 J**	**0.001 J**	<0.00054	**0.0024**	<0.01	<0.00054	**0.0008 J**	**0.0029 J**	<0.00054
Nickel	0.2	**0.027 J**	**0.0024 J**	**0.0558**	**0.0468**	**0.0376**	**0.0573**	**0.0363**	**0.01**	**0.004 J**	<0.0008	**0.0024 J**	**0.0017 J**
Potassium	NE	**--**	**--**	**15.7**	**19.8**	**19.5**	**--**	**--**	**17.8**	**20**	**166.6**	**--**	**--**
Selenium	0.05	<0.0037	<0.00287	**0.0115 J**	**0.0128 J**	**0.0052 J**	**0.0349 J**	**0.0058 J**	<0.00287	<0.0071	<0.00287	<0.00287	<0.00287
Silver	0.05	**--**	**--**	--	--	**--**	**--**	**--**	--	--	--	**--**	**--**
Sodium	NE	**--**	**--**	**3090**	**3170**	**1920**	**--**	**--**	**6540**	**6850**	**5980**	**--**	**--**
Zinc	10	**--**	**--**	--	--	**--**	**--**	**--**	--	--	--	**--**	**--**
Inorganics													
Alkalinity	NE	**2330**	**1820**	**532**	**494**	**626**	**516**	**531**	**1000**	**1230**	**1510**	**1430**	**1460**
Chloride	250	**1440 J-**	**608**	**321**	**581**	**367**	**342**	**110**	**2760**	**2990**	**2910**	**2400**	**1570**
Nitrate	10	<6.28 UJ	<0.502	**5.68**	**2.73**	**1.04 J**	<0.251	**4.99 J**	<0.502	<0.085	<0.251	**0.236**	<0.502
Sulfate	600	**5480**	**1980 J**	**9080**	**10000**	**10100**	**8030**	**6560**	**11600**	**13400**	**12200**	**11400**	**12600**
Total Dissolved Solids	1000	**11100**	**10800**	**13400**	**14200**	**14200**	**12500**	**13600**	**22200**	**23200**	**20500**	**21300**	**22200**

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Table 5. Summary of Metals and Inorganics
Groundwater Analytical Results
Site Characterization Report
San Juan River Gas Plant, Kirtland, New Mexico

Analyte	NMWQCC Standard (mg/L)	MW-16					MW-17	MW-18		MW-19		MW-21	
		7/06/2017	11/16/2017	11/12/2018	3/12/2019	10/14/2019	10/15/2019	4/15/2019	10/15/2019	3/12/2019	10/14/2019	3/12/2019	10/14/2019
Dissolved Metals													
Aluminum	5	**0.107 J**	<0.0926	<0.0926	<0.0926	<0.0926	--	**0.221 J**	**0.741**	<0.0926	<0.0926	<0.0926	<0.0926
Arsenic	0.01	**0.0273**	**0.0171**	<0.00285	<0.00285	<0.00285	--	<0.00285	<0.00285	<0.00285	<0.00285	<0.00285	<0.00285
Barium	1	**0.0466**	**0.0179 J**	**0.0214**	**0.243**	**0.0203**	--	**0.0254**	**0.0179 J**	**0.0088 J**	<0.0089	**0.0302**	**0.0163 J**
Boron	0.75	**1.03**	**1.01**	**1.15**	**1**	**0.939**	--	**0.882**	**0.887**	**0.798**	**0.78**	**0.594**	**0.853**
Cadmium	0.01	<0.00028	**0.0004 J**	**0.0006 J**	**0.0006 J**	**0.0011 J**	--	**0.013 J+**	**0.0031 J**	**0.0126**	**0.0113**	**0.0005 J**	**0.0009 J**
Calcium	NE	**244**	**222**	**93.3**	**--**	**--**	--	--	--	--	--	--	--
Chromium	0.05	<0.00159	**0.002 J**	<0.00159	<0.00159	<0.00159	--	**0.0023 J**	**0.0017 J**	<0.00159	**0.0019 J**	<0.00159	<0.00159
Cobalt	0.05	**0.000775 J**	<0.00031	<0.00031	**0.0004 J**	<0.00031	--	**0.128**	**0.133**	**0.0703**	**0.066**	**0.0052 J**	<0.00031
Copper	1	--	--	--	--	--	--	--	--	--	--	--	--
Iron	1	**0.483**	**0.0723 J**	<0.027	**0.0428 J**	**0.0856 J**	--	**0.0822 J**	**5.47**	<0.027	**0.0789 J**	**1.50**	**11**
Lead	0.015	<0.00219	<0.00219	<0.00219	<0.00219	<0.00219	--	<0.00219	**0.0023 J**	<0.00219	<0.00219	<0.00219	<0.00219
Magnesium	NE	**40.6**	**39.2**	**24.3**	**--**	**--**	--	--	--	--	--	--	--
Manganese	0.2	**0.646**	**0.248**	**0.0056 J**	**0.21**	**0.0163**	--	**11.3**	**12.1**	**11.1**	**10.8 J**	**0.950**	**4.45**
Mercury	0.002	<0.000082	<0.000082	<0.000103	<0.000103	<0.000125	--	<0.000103	<0.000103	<0.000103	<0.000169	<0.000103	<0.000277
Molybdenum	1	<0.00184	<0.00054	0.0007 J	<0.00054	<0.00054	--	**0.0007 J**	<0.00054	<0.00054	<0.00054	**0.0036 J**	<0.00054
Nickel	0.2	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	--	**0.255**	**0.285**	**0.205**	**0.199**	<0.0063	<0.0008
Potassium	NE	**10.5**	**11.9**	**8.28**	**--**	**--**	--	--	--	--	--	--	--
Selenium	0.05	<0.00287	<0.00287	<0.00287	<0.00287	<0.00287	--	<0.00287	**0.0031 J**	**0.0287 J+**	**0.0239 J**	<0.00287	<0.00287
Silver	0.05	--	--	--	**--**	**--**	--	--	--	--	--	--	--
Sodium	NE	**4910**	**5090**	**1770**	**--**	**--**	--	--	--	--	--	--	--
Zinc	10	--	--	--	**--**	**--**	--	--	--	--	--	--	--
Inorganics													
Alkalinity	NE	**1630**	**2510**	**3440**	**2720**	**2420**	**2100**	**247**	**102**	**179**	**168**	**711**	**819**
Chloride	250	**1840**	**2100**	**1950**	**2210**	**692**	**136**	**1140**	**94**	**290**	**134**	**2090**	**682 J-**
Nitrate	10	<0.502	<0.085	<0.251	**18**	<0.502	**1.06 J-**	<0.251	<0.0251	<0.251	**6.57 J**	<0.251	<0.502 J
Sulfate	600	**7890**	**8800**	**4770**	**9060**	**6030**	**299**	**13200**	**1300**	**10300**	**6690 J+**	**7640**	**5240 J**
Total Dissolved Solids	1000	**15800**	**16400**	**12900**	**17100**	**19800**	**3580**	**19800**	**22300**	**14000**	**14800**	**14400**	**19200**

Notes:
Historical data for wells abandoned prior to 2017 has been removed from the Table.
-- = not analyzed for the listed analyte
Bold text indicates detected concentration
Highlighted and bold cells indicate concentration exceeding New Mexico Water Quality Control Commission (NMWQCC) standard
J = chemical detected at concentration above instrument detection limit but below method detection limit
J- = analyte recovery was low in associated MS/MSD
J+ = analyte recovery was high in associated MS/MSD
mg/L = milligram(s) per liter
< or ND = not detected above method detection limit
NE = Not Established

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Table 6. Summary of PSH Analytical Results

Site Characterization Report

San Juan River Gas Plant, Kirtland, New Mexico

Monitoring Well	Sample Date	GRO C6-C10 (mg/kg)	DRO C10-C28 (mg/kg)	ORO C24-C40 (mg/kg)
MW-20	3/12/2019	859,000	376,000	1,160
	10/14/2019	20,700	379,000	<35,700

Notes:

DRO = diesel range organics

GRO = gasoline range organics

mg/kg = milligrams per kilogram

ORO = oil range organics

PSH = phase-separated hydrocarbons

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Figures

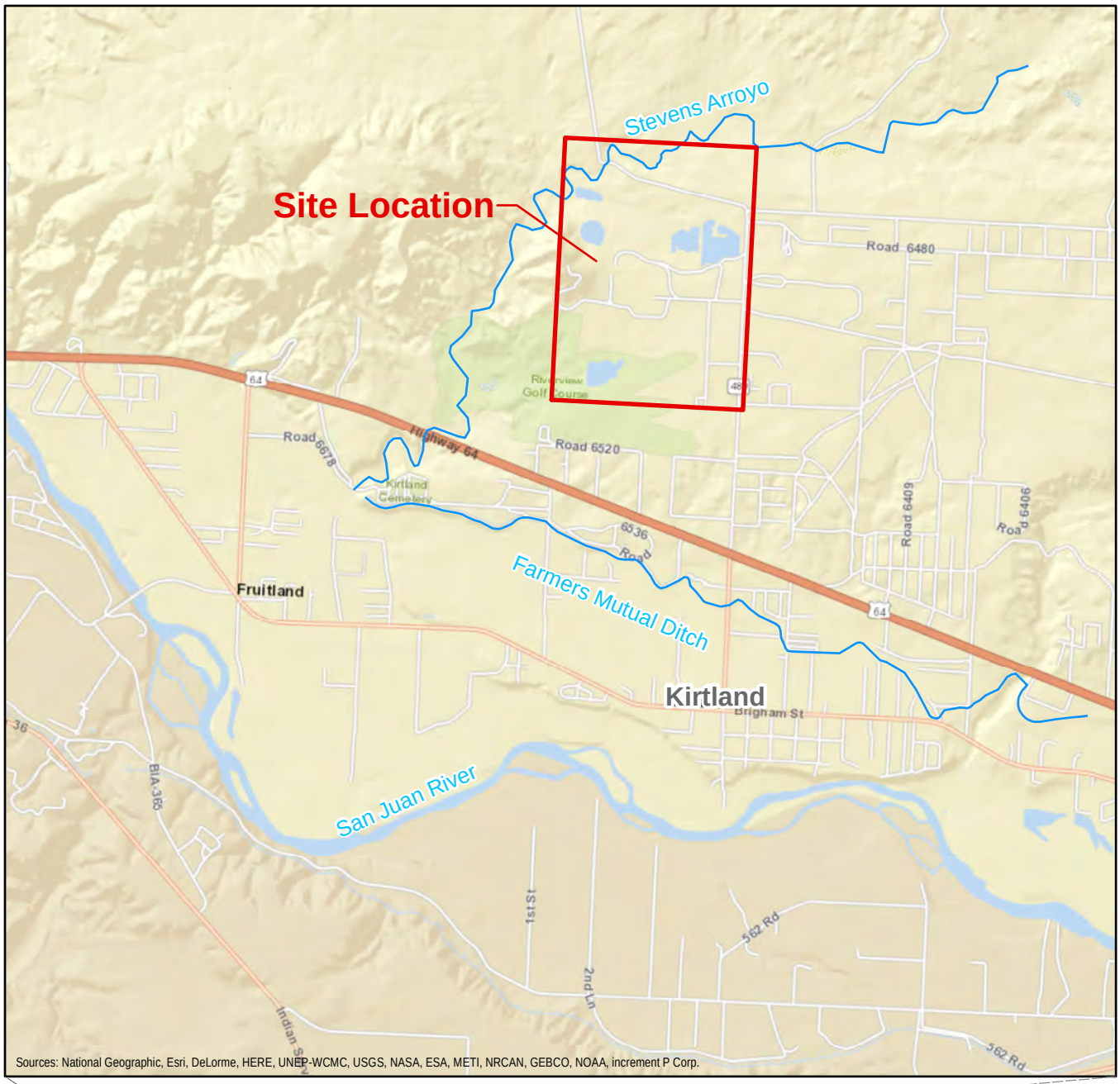




Figure 1. Site Location Map
Site Characterization Report
San Juan River Gas Plant
Kirtland, New Mexico

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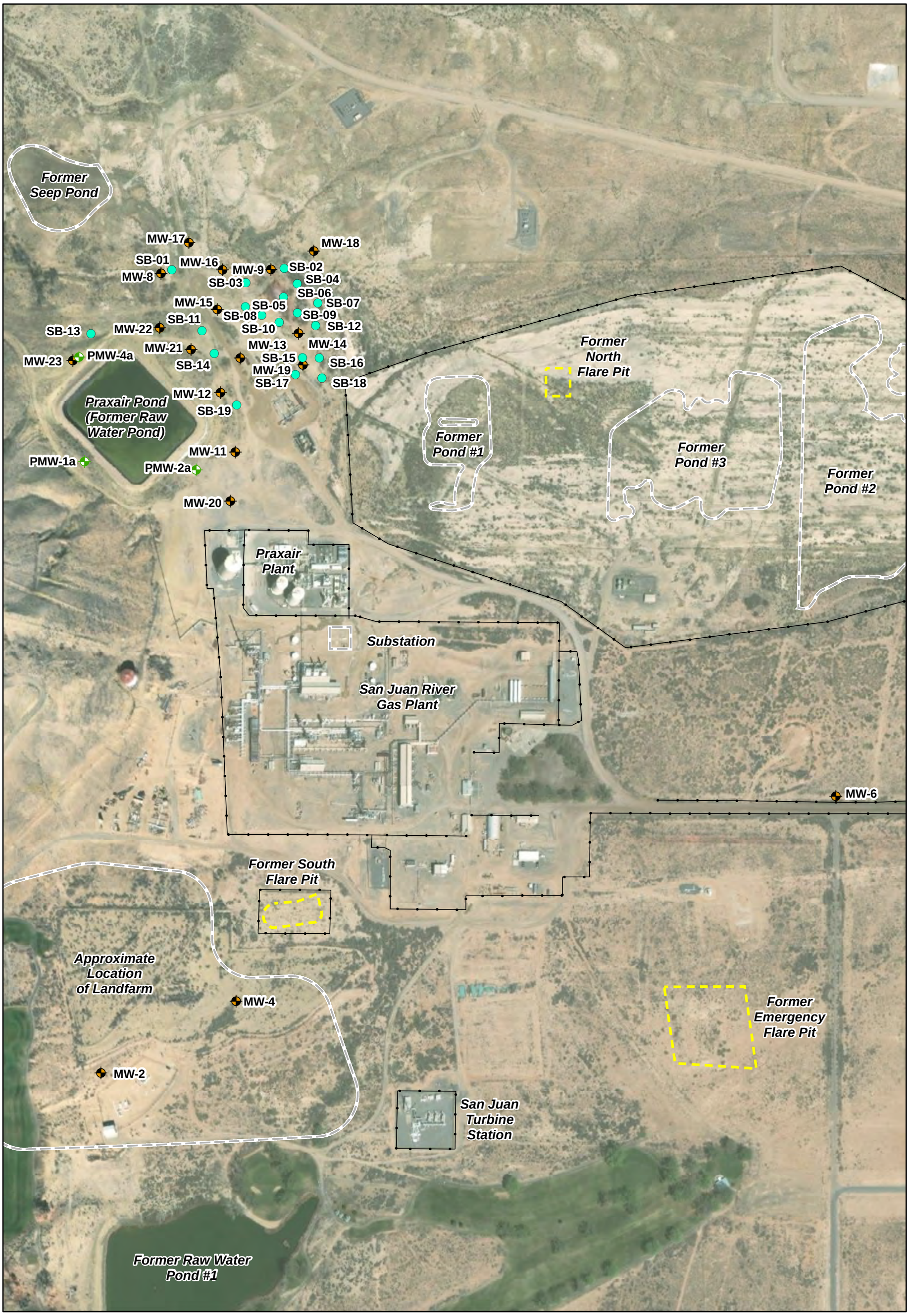
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LEGEND

- Monitoring Wells
- Praxair Plant Monitoring Wells
- Soil Borings
- Site Feature
- Fence
- Flare Pit

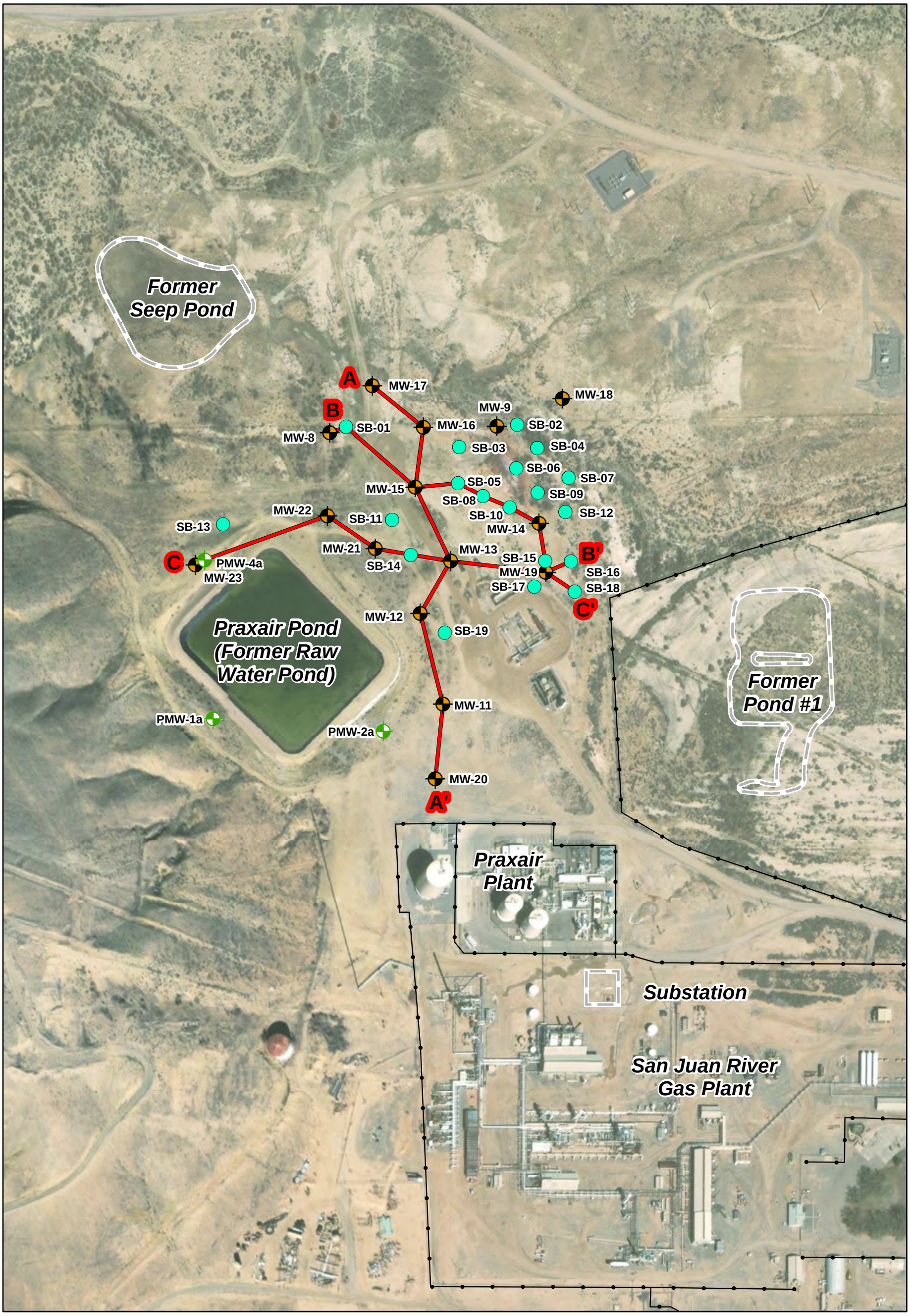
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Figure 2. Site Plan
Site Characterization Report
San Juan River Gas Plant
Kirtland, New Mexico

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LEGEND

- Monitoring Wells
- Praxair Plant Monitoring Wells
- Soil Borings
- Cross-section Line
- Site Feature
- Fence
- Flare Pit

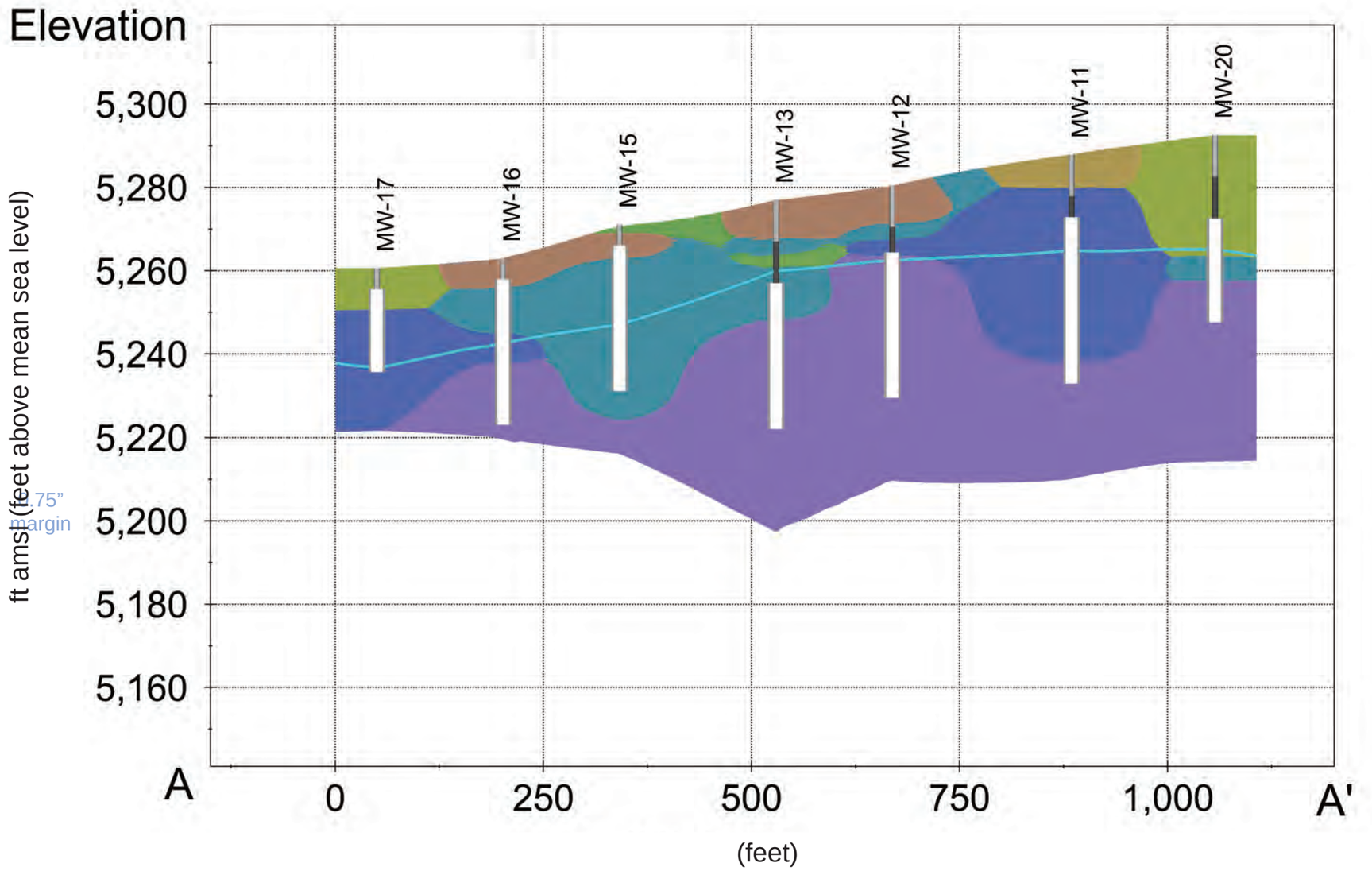
Figure 3. Cross-Section Lines
Site Characterization Report
San Juan River Gas Plant
Kirtland, New Mexico

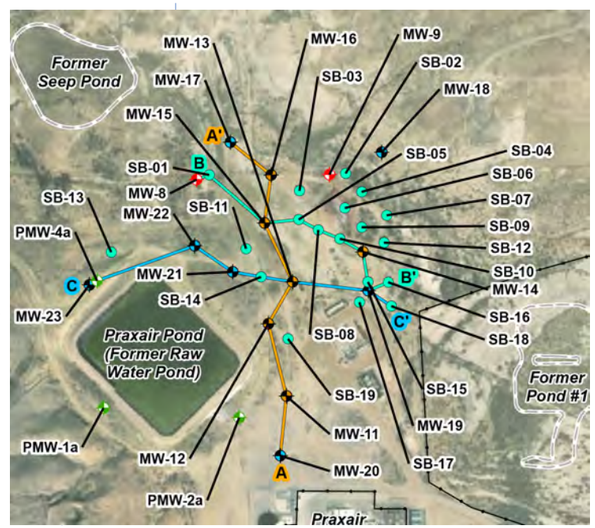
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Footer, or Slugline:
Arial [illegible], 6pt
Always include JETT number and Filename.

Figure Number and Title - Arial Narrow, bold, 10/12
Figure Caption - Arial Narrow, 10/12
Figure Caption (if necessary) - Arial Narrow, 10/12

Logo: 1.5-in wide
space = h space of logo
(Module 3.1.3, page 88 of Jacobs Style Guide)

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Z-fold at 4.25” from right edge

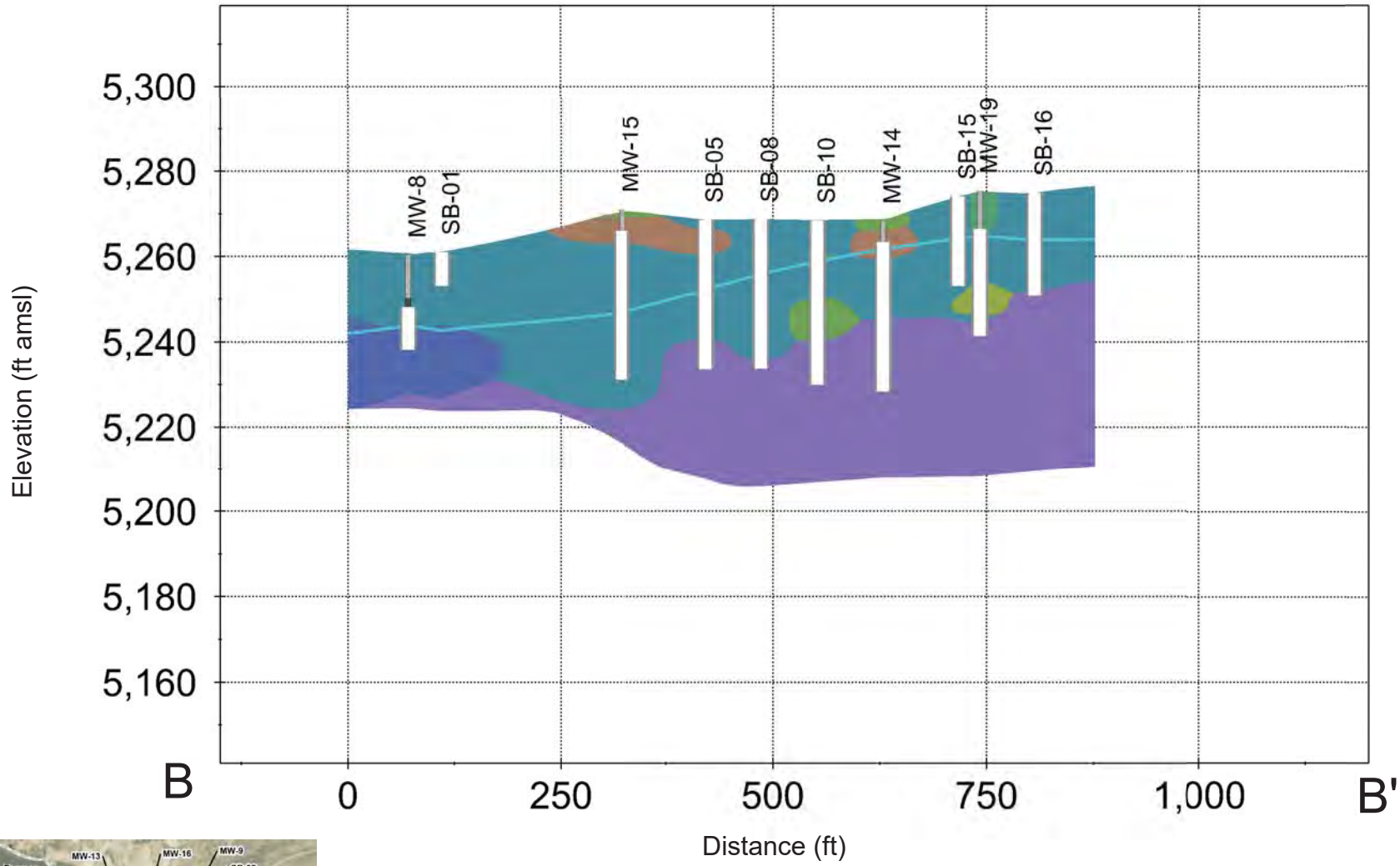
Figure 4. Lithologic Cross-Section A-A'
Site Characterization Report
San Juan River Gas Plant
Kirtland, New Mexico

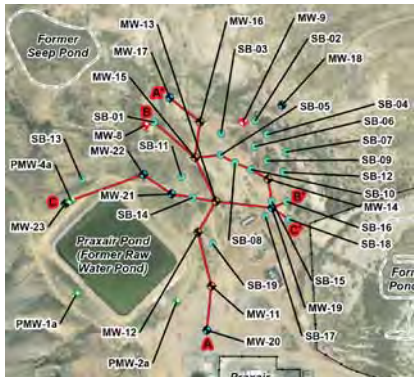
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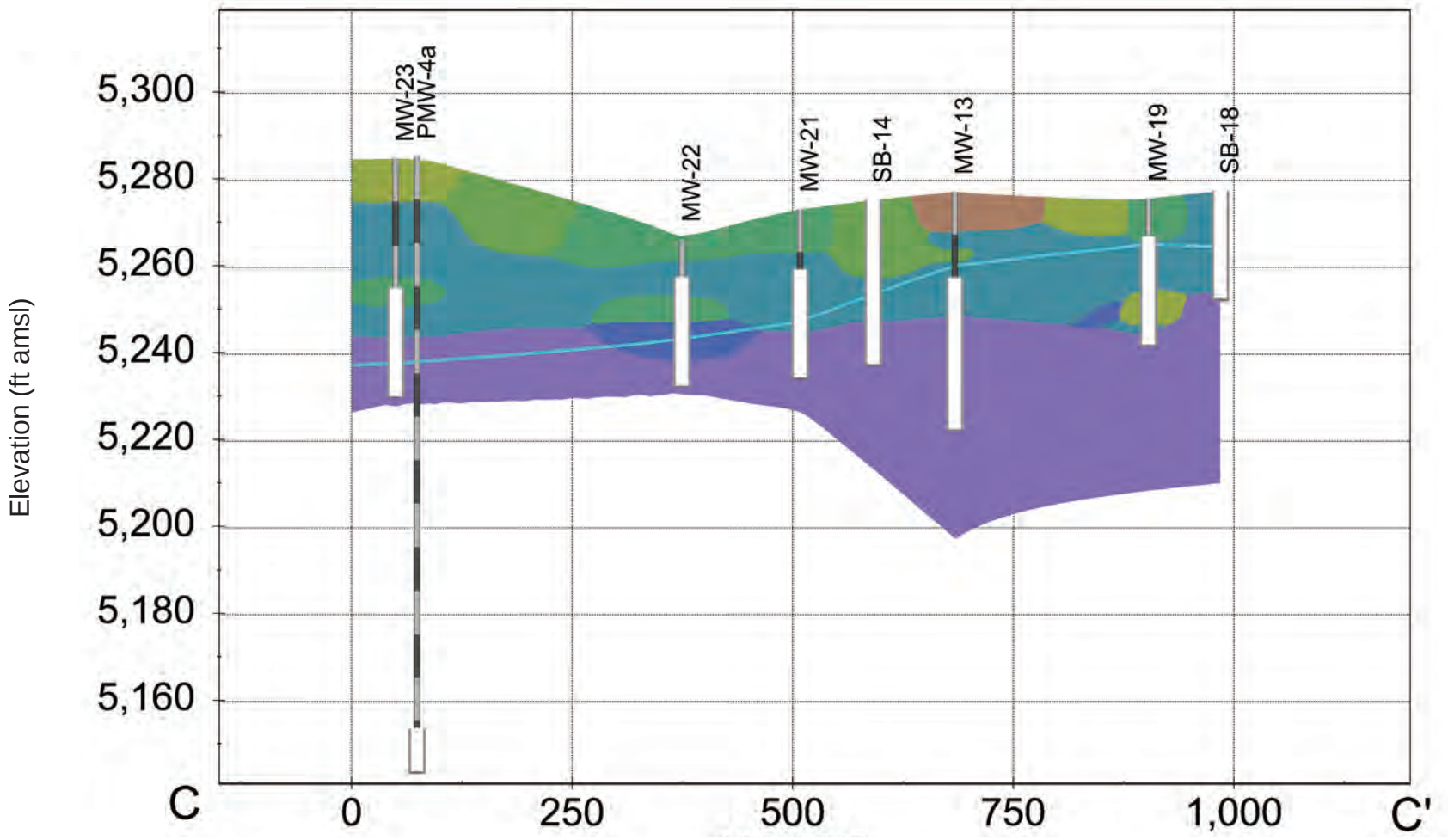
LITHOLOGY LEGEND

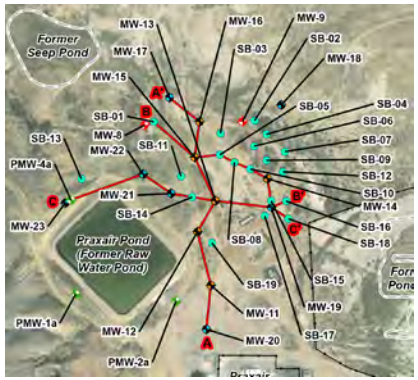
- GW = well graded gravel
- SW = well graded sand
- SP = poorly graded sand
- ML = silt
- SC = clayey sand
- CL = lean clay
- SS = sandstone bedrock
- SH = shale bedrock
- Groundwater Elevation (10/14/2019)

Note: ft amsl = feet above mean sea level
ft = feet

Figure 5. Lithologic Cross-Section B-B'
Site Characterization Report
San Juan River Gas Plant
Kirtland, New Mexico

JACOBS





Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

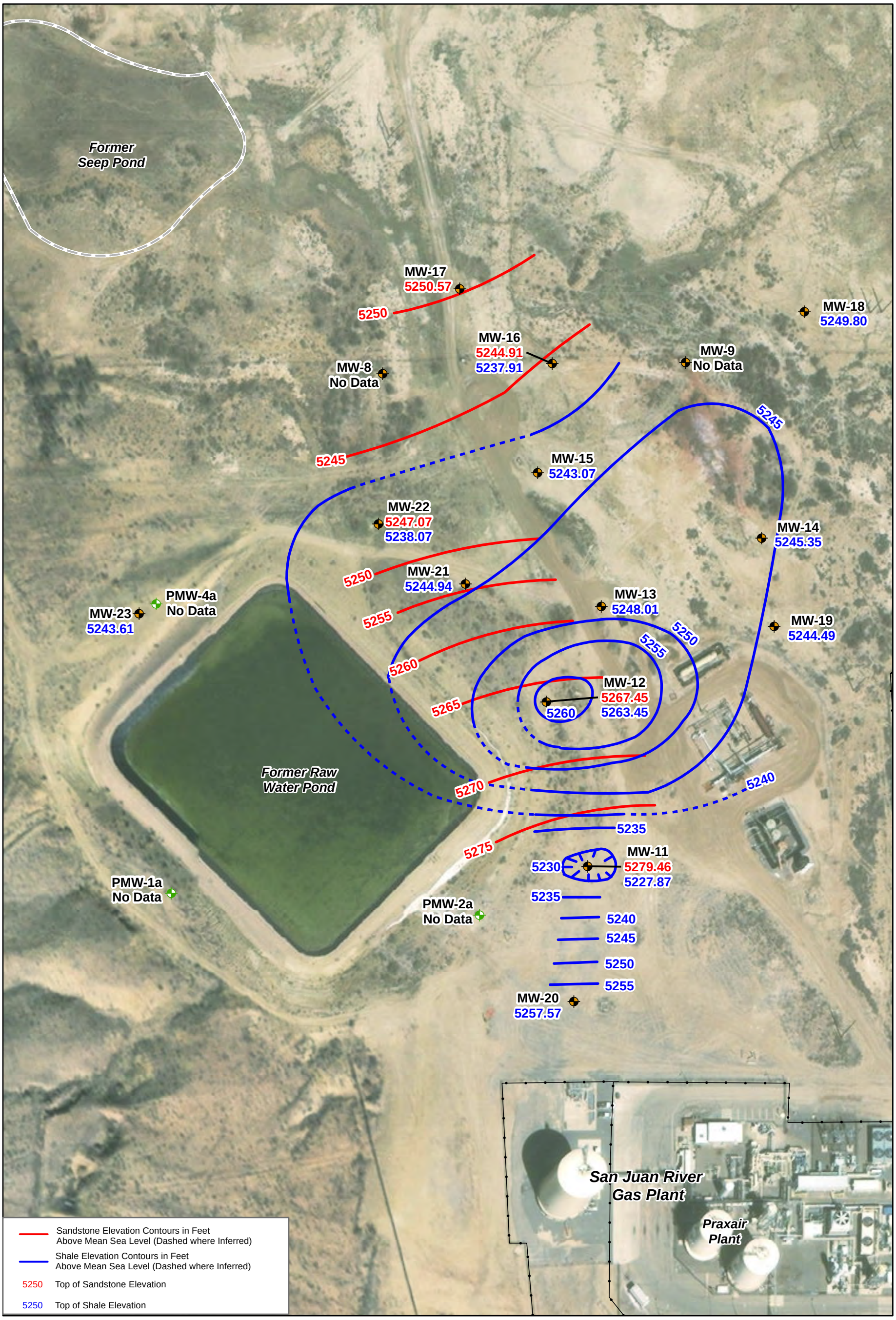
LITHOLOGY LEGEND

- GW = well graded gravel
- SW = well graded sand
- SP = poorly graded sand
- ML = silt
- SC = clayey sand
- CL = lean clay
- SS = sandstone bedrock
- SH = shale bedrock
- Groundwater Elevation (10/14/2019)

Note: ft amsl = feet above mean sea level
ft = feet

Figure 6. Lithologic Cross-Section C-C'
Site Characterization Report
San Juan River Gas Plant
Kirtland, New Mexico

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LEGEND

- Monitoring Wells
- Former Flare Pit
- Praxair Plant Monitoring Wells
- Site Feature
- Fence

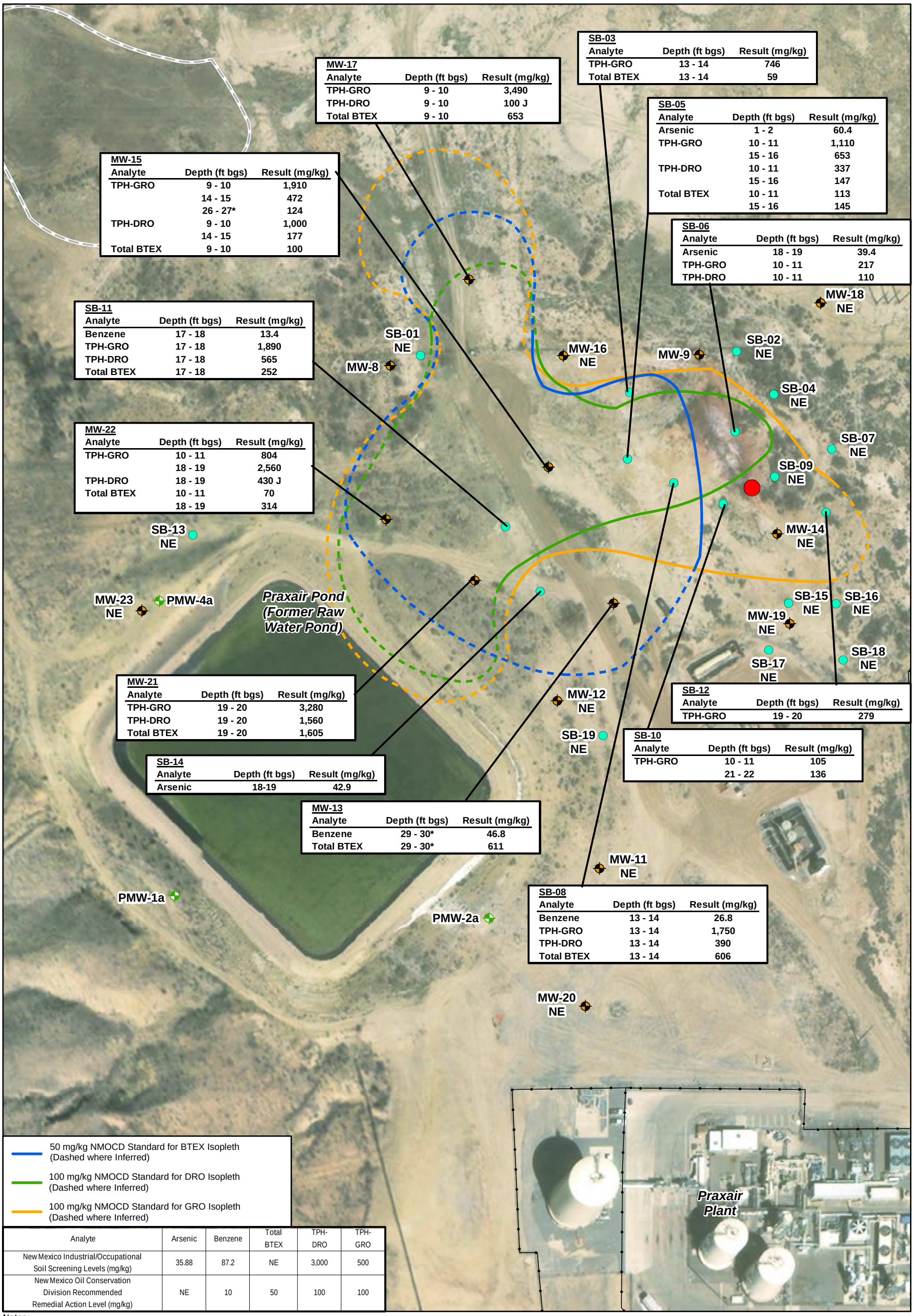
0 50 100 200
Feet
1:1,428 1 inch = 119 feet

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Figure 7. Top of Sandstone and Shale Elevations
Site Characterization Report
San Juan River Gas Plant
Kirtland, New Mexico

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Analyte	Arsenic	Benzene	Total BTEX	TPH-DRO	TPH-GRO
New Mexico Industrial/Occupational Soil Screening Levels (mg/kg)	35.88	87.2	NE	3,000	500
New Mexico Oil Conservation Division Recommended Remedial Action Level (mg/kg)	NE	10	50	100	100

Notes:
BTEX = benzene, toluene, ethylbenzene, and total xylenes
DRO = diesel range organics
ft bgs = feet below ground surface
GRO = gasoline range organics
J = analyte detected at concentration above instrument detection limit but below method detection limit
mg/kg = milligram(s) per kilogram
NE = not established
NMOCD = New Mexico Oil Conservation Division
TPH = total petroleum hydrocarbons
* = the sample was collected below the water table

LEGEND
Monitoring Wells
Praxair Plant Monitoring Wells
2017 Soil Borings
Condensate Discharge Pipe
Site Feature
Fence

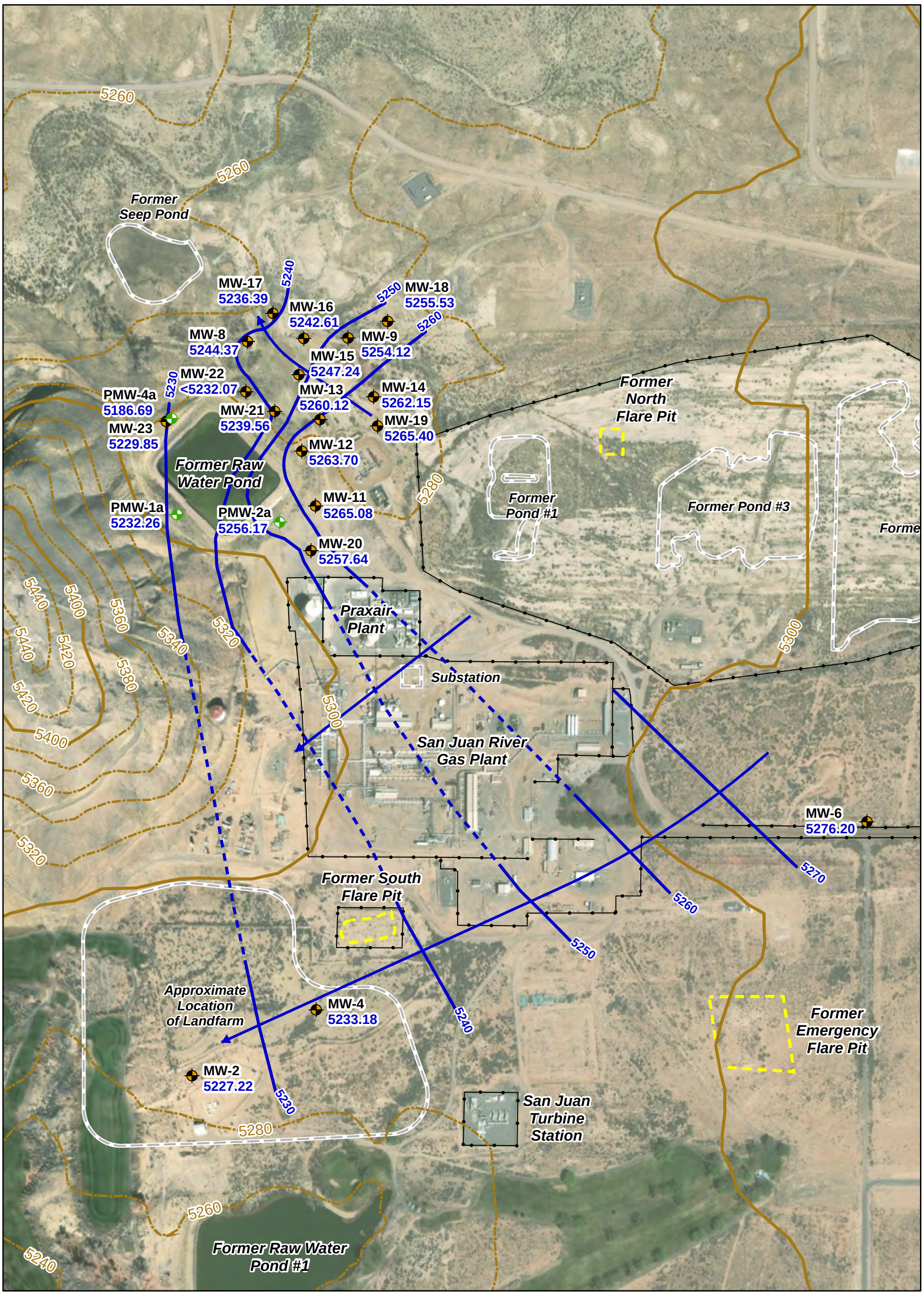
0 50 100 200
Feet
1:1,428
1 inch = 119 feet

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Figure 8. Soil Exceedances of Screening Criteria
Site Characterization Report
San Juan River Gas Plant
Kirtland, New Mexico

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LEGEND

- Monitoring Wells
- Praxair Plant Monitoring Wells
- Site Feature
- Fence
- Former Flare Pit
- Topographic Elevation Contours
- Groundwater Elevation Contours (Dashed where Inferred)
- Groundwater Flow Direction
- 5280 — Topographic elevation contours in feet above mean sea level
- 5280 — Groundwater elevation in feet above mean sea level
- <5280 — Well was dry Elevation shown is bottom of screen

0 125 250 500
Feet
1:4,426 1 inch = 369 feet

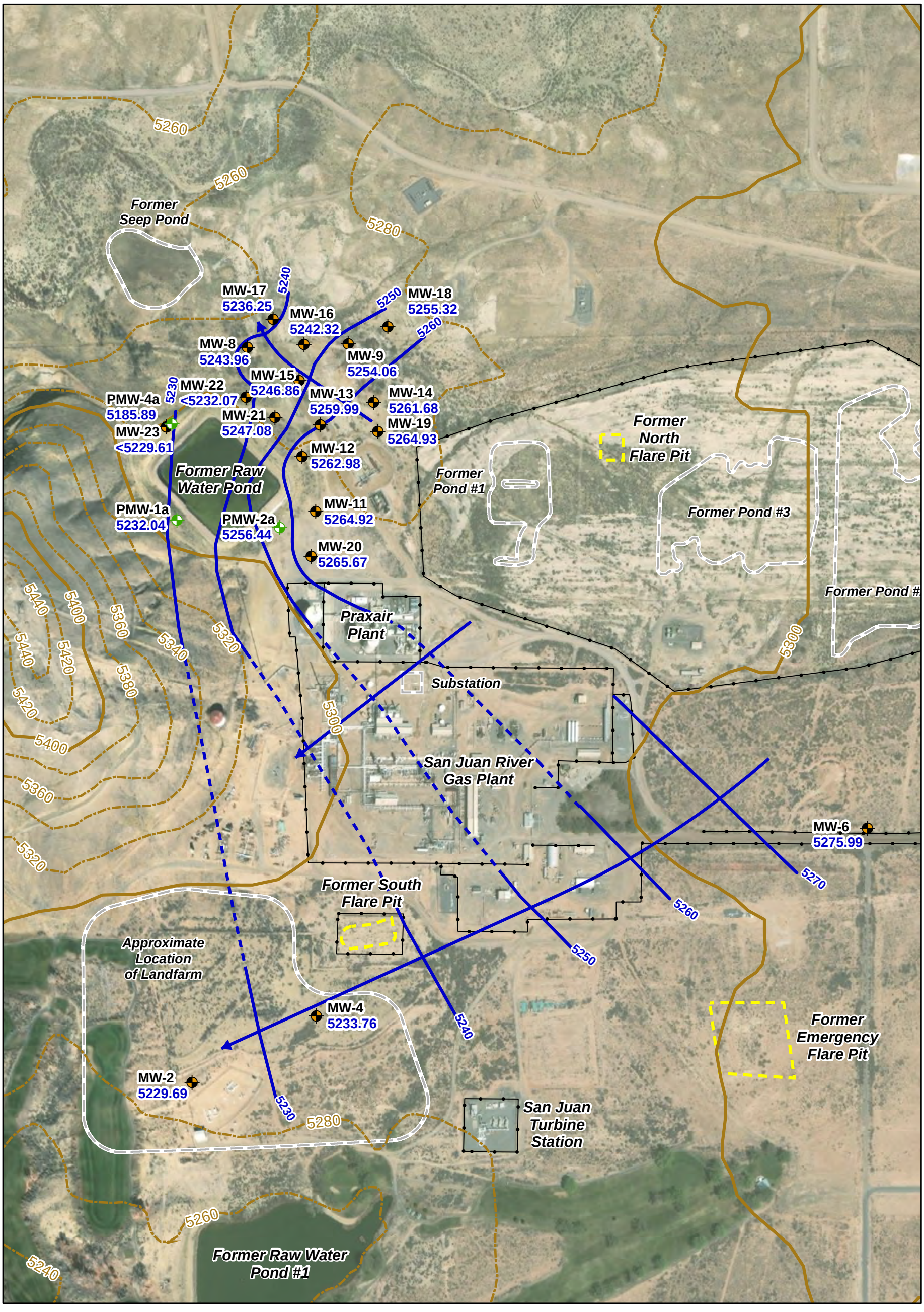
Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Notes:
1. Topographic source: USGS, 2017. 7.5-minute series, Youngs Lake Quadrangle
2. PMW-4a groundwater elevations were not used in contouring.

Figure 9. Potentiometric Surface Map
March 2019
Site Characterization Report
San Juan River Gas Plant
Kirtland, New Mexico

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LEGEND

- Monitoring Wells
- Praxair Plant Monitoring Wells
- Site Feature
- Fence
- Former Flare Pit
- Topographic Elevation Contours
- Groundwater Elevation Contours (Dashed where Inferred)
- Groundwater Flow Direction
- 5280 — Topographic elevation contours in feet above mean sea level
- 5280 — Groundwater elevation in feet above mean sea level
- <5280 — Well was dry Elevation shown is bottom of screen

0 125 250 500
Feet
1:4,426
1 inch = 369 feet

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Notes:
1. Topographic source: USGS, 2017. 7.5-minute series, Youngs Lake Quadrangle
2. PMW-4a groundwater elevations were not used in contouring.

Figure 10. Potentiometric Surface Map
October 2019
Site Characterization Report
San Juan River Gas Plant
Kirtland, New Mexico

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Notes:
J = Analyte detected at concentration above instrument detection limit but below method detection limit
mg/L = milligram(s) per liter
ND = Not detected
NMWQCC = New Mexico Water Quality Control Commission
NS-Dry = Not sampled, well dry
NS-PSH = Not sampled, PSH in well
PSH = Phase-Separated Hydrocarbons

LEGEND
- Monitoring Wells
- Praxair Plant Monitoring Wells
- PSH in Well
- Site Feature
- Fence

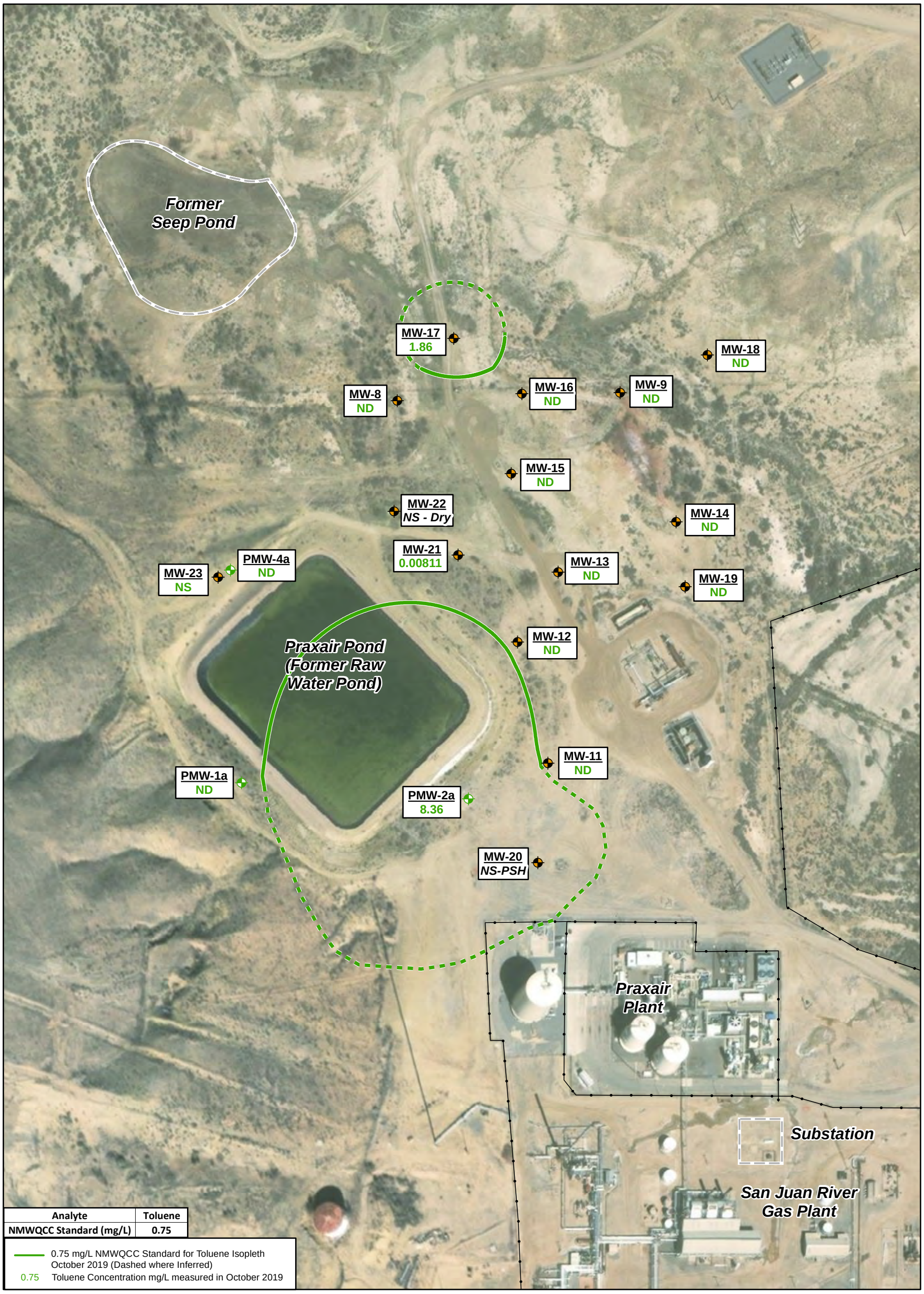
0 75 150 300
Feet
1:2,000 1 inch = 167 feet

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Figure 11. Benzene Detections in Groundwater - Study Area
October 2019
Site Characterization Report
San Juan River Gas Plant
Kirtland, New Mexico

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Notes:
J = Analyte detected at concentration above instrument detection limit but below method detection limit
mg/L = milligram(s) per liter
ND = Not detected
NMWQCC = New Mexico Water Quality Control Commission
NS-Dry= Not sampled, well dry
NS-PSH = Not sampled, PSH in well
PSH = Phase-Separated Hydrocarbons

LEGEND
- Monitoring Wells
- Praxair Plant Monitoring Wells
- Site Feature
- Fence

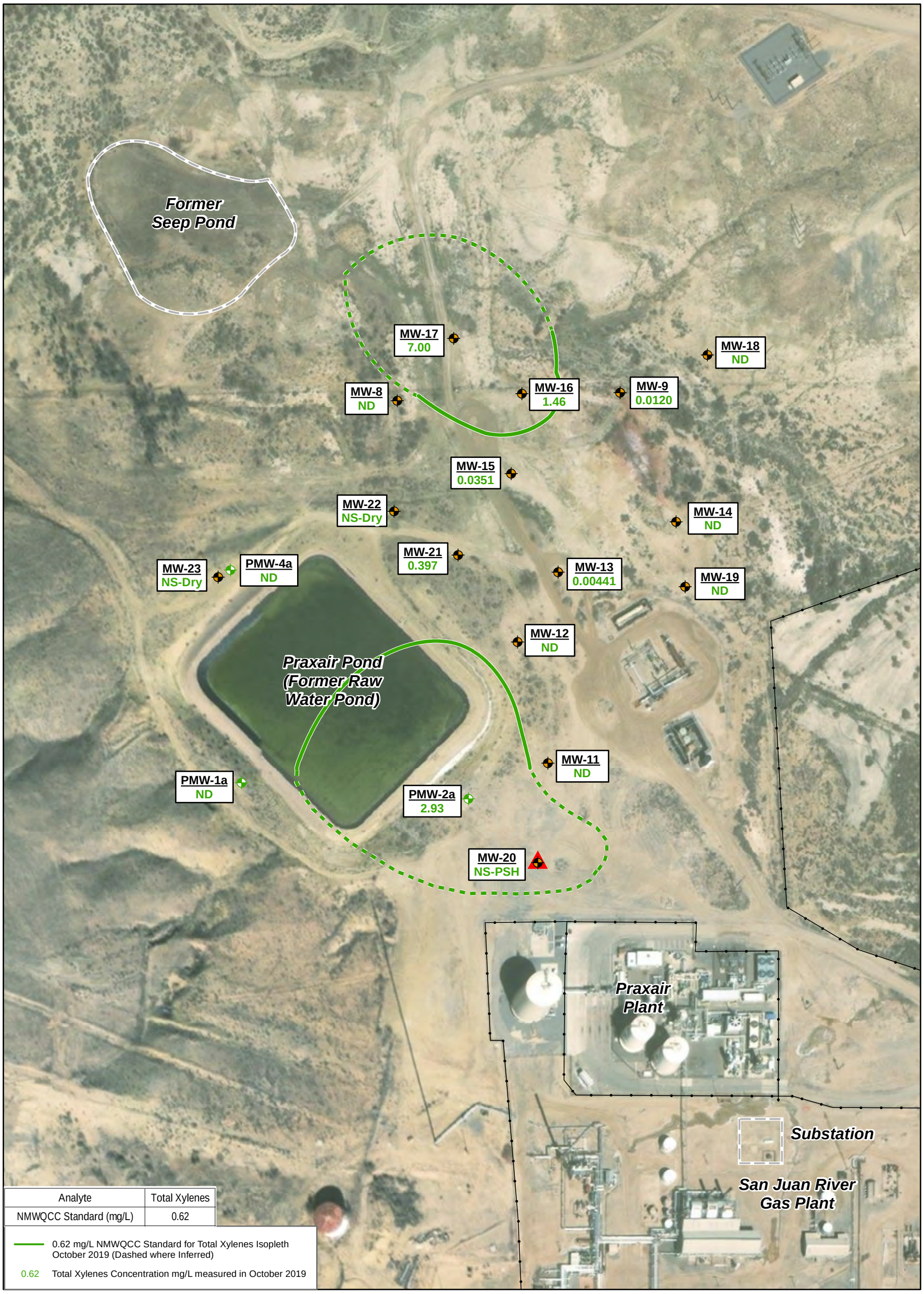
Figure 12. Toluene Detections in Groundwater - Study Area
October 2019
Site Characterization Report
San Juan River Gas Plant
Kirtland, New Mexico

N
0 75 150 300
Feet
1:2,000 1 inch = 167 feet

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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Notes:
BTEX = benzene, toluene, ethylbenzene, and total xylenes
J = Analyte detected at concentration above instrument detection limit but below method detection limit
mg/L = milligram(s) per liter
ND = Not detected
NMWQCC = New Mexico Water Quality Control Commission
NS-Dry = Not sampled, well dry
NS-PSH = Not sampled, PSH in well
PSH = Phase-Separated Hydrocarbons

LEGEND
- Monitoring Wells
- Praxair Plant Monitoring Wells
- PSH in Well
- Site Feature
- Fence

Figure 13. Total Xylenes Detections in Groundwater - Study Area
October 2019
Site Characterization Report
San Juan River Gas Plant
Kirtland, New Mexico

N
0 75 150 300
Feet
1:2,000 1 inch = 167 feet

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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Analyte	Benzene	Ethylbenzene	Toluene	Total Xylenes
NMWQCC Standard (mg/L)	0.01	0.75	0.75	0.62

Notes:
BTEX = benzene, toluene, ethylbenzene, and total xylenes
J = Analyte detected at concentration above instrument detection limit but below method detection limit
mg/L = milligram(s) per liter
ND = Not detected
NMWQCC = New Mexico Water Quality Control Commission
0.02 Concentration mg/L measured in October 2019

LEGEND
- Monitoring Wells
- Site Feature
- Fence
- Former Flare Pit

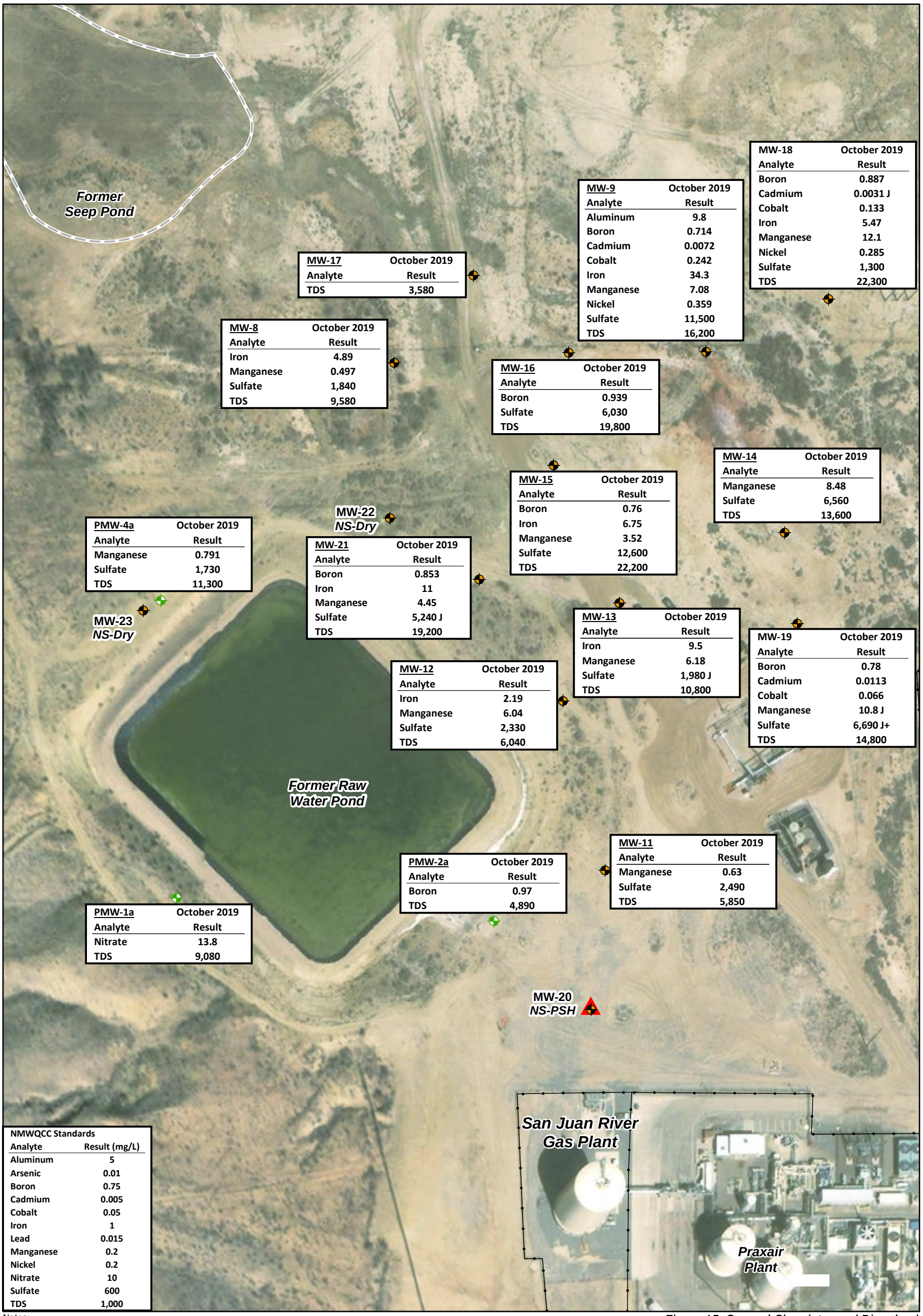
N
0 75 150 300
Feet
1:2,500 1 inch = 208 feet

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Figure 14. BTEX Detections in Groundwater - South Study Area
October 2019
Site Characterization Report
San Juan River Gas Plant
Kirtland, New Mexico

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Notes:
J = Analyte detected at concentration above instrument detection limit but below method detection limit
J+ = Analyte recovery was high in associated MS/MSD
J- = Analyte recovery was low in associated MS/MSD
mg/L = milligram(s) per liter
MS/MSD = Matrix Spike/Matrix Spike Duplicate
NMWQCC = New Mexico Water Quality Control Commission
NS-Dry = Not sampled, well dry
NS-PSH = Not sampled, PSH in well
PSH = Phase-Separated Hydrocarbons
TDS = Total Dissolved Solids

LEGEND

- Monitoring Wells
- Praxair Plant Monitoring Wells
- PSH in Well
- Site Feature
- Fence
- Former Flare Pit

0 50 100 200
Feet
1:1,428 1 inch = 119 feet

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Figure 15. General Chemistry and Dissolved Metals Exceedances - Study Area
October 2019
Site Characterization Report
San Juan River Gas Plant
Kirtland, New Mexico

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RDD DOCUMENT PATH: N:\KINDER_MORGAN\MAPFILES\SAN_JUAN_RIVER\SITE INVESTIGATION REPORT FIGURES\2019_MXDS\JM_UPDATES\FIGURE_15_GENCHEM_METALS_EXCEED_STUDY_AREA_10_6.MXD BOOTHM 10/12/2020



Notes:
mg/L = milligram(s) per liter
NMWQCC = New Mexico Water Quality Control Commission
NS-Dry = Not sampled, well dry
NS-PSH = Not sampled, PSH in well
PSH = Phase-Separated Hydrocarbons

LEGEND
- Monitoring Wells
- Praxair Plant Monitoring Wells
- PSH in Well
- Site Feature
- Fence

N
0 75 150 300
Feet
1:2,000 1 inch = 167 feet

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Figure 16. Chloride Detections in Groundwater - Study Area
October 2019
Site Characterization Report
San Juan River Gas Plant
Kirtland, New Mexico

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RDD N:\KINDER_MORGAN\MAPFILES\SAN_JUAN_RIVER\SITE INVESTIGATION REPORT FIGURES\2019_MXDS\JM_UPDATES\FIGURE_16_CHLORIDE_GROUNDWATER_2019.MXD BOOTHM 10/12/2020



Notes:
J = Analyte detected at concentration above instrument detection limit but below method detection limit
J+ = Analyte recovery was high in associated MS/MSD
J- = Analyte recovery was low in associated MS/MSD
mg/L = milligram(s) per liter
MS/MSD = Matrix Spike/Matrix Spike Duplicate
NE = No exceedance
NMWQCC = New Mexico Water Quality Control Commission
TDS = Total dissolved solids

LEGEND
- Monitoring Wells
- Site Feature
- Fence
- Former Flare Pit

0 75 150 300
Feet
1:2,500 1 inch = 208 feet

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Figure 17. General Chemistry and Dissolved Metals Exceedances - South Study Area
October 2019
Site Characterization Report
San Juan River Gas Plant
Kirtland, New Mexico

RDD N:\KINDER_MORGAN\MAPFILES\SAN_JUAN_RIVER\SITE INVESTIGATION REPORT FIGURES\2019_MXDS\JM_UPDATES\FIGURE_17_GENCHEM_METALS_EXCEED_SOUTH_STUDY_AREA.MXD BOOTHM 10/3/2020

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Appendix A
New Mexico Office of the State Engineer
Well Installation Permit Approvals

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STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
AZTEC

Tom Blaine, P.E.
State Engineer

100 Gossett Drive, Suite A
Aztec, New Mexico 87410

March 23, 2017

Joseph Wiley
El Paso Natural Gas Co., LLC
1001 Louisiana St, Room 956I
Houston, TX 77002

RE: Permit Approval for Non-Consumptive Wells, SJ-4231 POD1-POD6, San Juan River Gas Plant Site Investigation, El Paso Natural Gas Co., LLC

Dear Mr. Wiley:

On March 13, 2017, the New Mexico Office of the State Engineer (NMOSE) received an application to permit six new groundwater monitoring wells associated with the above referenced site investigation. Additional information and corrections to the application were received on March 20, 2017, which includes the drilling of 19 temporary soil borings to determine soil current conditions and followed by immediate plugging. Enclosed is a copy of the above numbered permit, which has been approved subject to the conditions set forth on the approval page and in the attached Conditions of Approval. Also enclosed is a receipt for the fees paid.

A standardized plugging method for the future abandonment of the wells and temporary soil borings covered by this permit has also been included in the Conditions of Approval. This eliminates the need to submit a separate Well Plugging Plan of Operations for approval by the NMOSE prior to plugging, unless an alternate plugging method is proposed, required by a separate oversight agency, necessary due to incompatibility with actual conditions, or artesian conditions are encountered.

Please be aware that there are deadlines to submit well records for the newly installed monitoring wells and plugging records for any abandoned wells and boreholes. These deadlines can be found in the attached Conditions of Approval. The well and plugging records should be sent to the NMOSE District V, 100 Gossett Drive, Suite A, Aztec, NM, 87410.

Also as previously mentioned, additional existing non-permitted wells have been identified with this site investigation on the site map provided with the application. NMOSE is requesting that these existing wells be brought into compliance by obtaining permit coverage. Please submit an

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application to NMOSE as soon as practicable to obtain the necessary permit coverage for these wells.

If you have any questions regarding this permitting action, please feel free to contact me at (505) 334-4751.

Sincerely,

Kimberly Kirby
Water Resource Specialist
Water Rights Division District V

Enclosures

cc: Aztec Reading (w/o enclosures)
SJ-4231 File
WATERS
Jeffrey Minchak, CH2M, via email: Jeffrey.Minchak@ch2m.com

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File No. SJ-4231 POD1-POD6

NEW MEXICO OFFICE OF THE STATE ENGINEER

APPLICATION FOR PERMIT TO DRILL A WELL WITH NO CONSUMPTIVE USE OF WATER

(check applicable box):

For fees, see State Engineer website: http://www.ose.state.nm.us/

Purpose: ☐ Pollution Control And / Or Recovery ☐ Geo-Thermal

☐ Exploratory ☐ Construction Site De-Watering ☐ Other (Describe):

☒ Monitoring ☐ Mineral De-Watering

A separate permit will be required to apply water to beneficial use.

STATE ENGINEER OFFICE AZTEC, NEW MEXICO 2017 MAR 13 PM 12: 22

☒ Temporary Request - Requested Start Date: 3/27/2017 Requested End Date: unknown

Plugging Plan of Operations Submitted? ☐ Yes ☒ No

USE Notation: A standardized plugging method has been included in the Conditions of Approval for abandonment of the wells and soil borings covered by this permit.

1. APPLICANT(S)

Name: Joseph Wiley	Name: Jeffrey Minchak
Contact or Agent: El Paso Natural Gas Co, LLC — check here if Agent ☐	Contact or Agent: CH2M — check here if Agent ☒
Mailing Address: 1001 Louisiana Street Room 956I	Mailing Address: 3721 Rutledge Rd NE, Suite B-1
City: Houston	City: Albuquerque
State: TX Zip Code: 77002	State: NM Zip Code: 87109
Phone: (832) 279-1610 ☐ Home ☒ Cell Phone (Work): (713) 420-3475	Phone: (505) 379-3222 ☐ Home ☒ Cell Phone (Work): (713) 420-3475
E-mail (optional): Joe_Wiley@kindermorgan.com	E-mail (optional): Jeffrey.Minchak@ch2m.com

FOR OSE INTERNAL USE — Application for Permit, Form wr-07, Rev 6/14/12

File No.: SJ-4231	Trn. No.:	Receipt No.:
Trans Description (optional):		
Sub-Basin:	PCW/LOG Due Date: March 23, 2018	

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STATE ENGINEER OFFICE
AZTEC, NEW MEXICO
2017 MAR 20 PM 2:50

2. WELL(S) Describe the well(s) applicable to this application.

Location Required: Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84).
District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.

☒ NM State Plane (NAD83) (Feet)
☒ NM West Zone
☐ NM East Zone
☐ NM Central Zone

☐ UTM (NAD83) (Meters)
☐ Zone 12N
☐ Zone 13N

☐ Lat/Long (WGS84) (to the nearest 1/10th of second)

Well Number (if known):	X or Easting or Longitude:	Y or Northing or Latitude:	Provide if known: -Public Land Survey System (PLSS) (*Quarters or Halves , Section, Township, Range*) OR - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name
SJ-4231 POD1 MW-11	2566074.83	2096951.57	NE1/4 NW1/4 of S1 T29N R15W
SJ-4231 POD2 MW-12	2566022.08	2097158.16	NE1/4 NW1/4 of S1 T29N R15W
SJ-4231 POD3 MW-13	2566092.16	2097280.33	NE1/4 NW1/4 of S1 T29N R15W
SJ-4231 POD4 MW-14	2566294.96	2097367.88	NE1/4 NW1/4 of S1 T29N R15W
SJ-4231 POD5 MW-15	2566010.88	2097448.23	NE1/4 NW1/4 of S1 T29N R15W

NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions)
Additional well descriptions are attached: ☒ Yes ☐ No **If yes, how many** =1= 3

Other description relating well to common landmarks, streets, or other:
Wells located at the San Juan River Gas Plant located at 99 Road 6500 Kirtland, NM 87417

Well is on land owned by: CCI San Juan, LLC

Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? ☒ Yes ☐ No
If yes, how many =3= 20 25 KDK

Approximate depth of well (feet): 90	Outside diameter of well casing (inches): 4.50
Driller Name: Cascade Drilling LP	Driller License Number: WD-1210

3. ADDITIONAL STATEMENTS OR EXPLANATIONS

For Item 4: Wells are associated with environmental site investigation of the San Juan River Gas Plant under New Mexico Oil Conservation Division - Environmental Bureau rules. The wells are required to provide data related to the environmental investigation of groundwater that contains petroleum-related concentrations in exceedance of New Mexico Water Quality Control Commission standards. Monitoring events are performed annually.

The purpose of the "SB-XX" locations presented in the Attachment is to obtain current soil conditions and then will be immediately plugged.

OSE Notation: This revised page 2 replaces page 2 received on March 13, 2017

FOR OSE INTERNAL USE — Application for Permit, Form wr-07

File No.: SJ-4231 POD1-POD6	Trn No.:

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4. SPECIFIC REQUIREMENTS: The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application:

Exploratory:	**Pollution Control and/or Recovery:**	**Construction De-Watering:**	**Mine De-Watering:**
☐ Include a description of any proposed pump test, if applicable.	☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for the pollution control or recovery operation. ☐ The estimated maximum period of time for completion of the operation. ☐ The annual diversion amount. ☐ The annual consumptive use amount. ☐ The maximum amount of water to be diverted and injected for the duration of the operation. ☐ The method and place of discharge.	☐ Include a description of the proposed dewatering operation, ☐ The estimated duration of the operation, ☐ The maximum amount of water to be diverted, ☐ A description of the need for the dewatering operation, and, ☐ A description of how the diverted water will be disposed of.	☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for mine dewatering. ☐ The estimated maximum period of time for completion of the operation. ☐ The source(s) of the water to be diverted. ☐ The geohydrologic characteristics of the aquifer(s). ☐ The maximum amount of water to be diverted per annum. ☐ The maximum amount of water to be diverted for the duration of the operation. ☐ The quality of the water. ☐ The method of measurement of water diverted. ☐ The recharge of water to the aquifer. ☐ Description of the estimated area of hydrologic effect of the project. ☐ The method and place of discharge. ☐ An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. ☐ A description of the methods employed to estimate effects on surface water rights and underground water rights. ☐ Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.
Monitoring: ■ Include the reason for the monitoring well, and, ■ The duration of the planned monitoring.	☐ The method of measurement of water produced and discharged. ☐ The source of water to be injected. ☐ The method of measurement of water injected. ☐ The characteristics of the aquifer. ☐ The method of determining the resulting annual consumptive use of water and depletion from any related stream system. ☐ Proof of any permit required from the New Mexico Environment Department. ☐ An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.	**Geo-Thermal:** ☐ Include a description of the geothermal heat exchange project, ☐ The amount of water to be diverted and re-injected for the project, ☐ The time frame for constructing the geothermal heat exchange project, and, ☐ The duration of the project. ☐ Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.	

ACKNOWLEDGEMENT

I, We (name of applicant(s)), Joseph Wiley
Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

Joseph Wiley
Applicant Signature

Applicant Signature

STATE ENGINEER OFFICE
AZTEC, NEW MEXICO
2017 MAR 13 PM 12: 22

ACTION OF THE STATE ENGINEER

This application is:

☒ approved ☐ partially approved ☐ denied

provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the attached conditions of approval.

Witness my hand and seal this 23rd day of March 20 17, for the State Engineer.

Tom Blaine, PE, State Engineer

By: K. Kirby
Signature

Kimberly Kirby
Print

Title: Water Resource Specialist, Water Rights Division District V
Print

FOR OSE INTERNAL USE — Application for Permit, Form wr-07

File No. SJ-4231 POD1-POD6	Trn No.

Received by OCD: 11/13/2025 11:14:36 AM

Released to Imaging: 11/14/2025 9:30:04 AM

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NEW MEXICO OFFICE OF THE STATE ENGINEER

ATTACHMENT 1
POINT OF DIVERSION DESCRIPTIONS

This Attachment is to be completed if more than one (1) point of diversion is described on an Application or Declaration.

a. Is this a:	b. Information on Attachment(s):
☐ Move-From Point of Diversion(s) ☐ Move-To Point of Diversion(s)	Number of points of diversion involved in the application: ~~9~~ 25 Total number of pages attached to the application: 3

☐ **Surface Point of Diversion** **OR** ☒ **Well**

Name of ditch, acequia, or spring:	
Stream or water course:	
Tributary of:	

2017 MAR 2 PM 2:50 STATE ENGINEER OFFICE SANTA FE, NEW MEXICO

c. Location (Required):
Required: Move to POD location coordinate must be either New Mexico State Plane (NAD 83), UTM (NAD 83), or Lat/Long (WGS84)

NM State Plane (NAD83) (feet)	UTM (NAD83) (meters)	☐ Lat/Long–(WGS84) 1/10th of second	OTHER (allowable only for move-from descriptions - see application form for format)
NM West Zone ☒ NM Central Zone ☐ NM East Zone ☐	Zone 13N ☐ Zone 12N ☐		☒ PLSS (quarters, section, township, range) ☐ Hydrographic Survey, Map & Tract ☐ Lot, Block & Subdivision ☐ Grant

POD Number:	X or Longitude	Y or Latitude	Other Location Description:
MW-16 SJ-4231 POD6	2566029.91	2097588.64	NE1/4 NW1/4 of S1 T29N R15W
SB-01	2565850.24	2097582.42	NE1/4 NW1/4 of S1 T29N R15W
SB-02	2566244.09	2097587.40	NE1/4 NW1/4 of S1 T29N R15W
SB-03	2566110.71	2097536.69	NE1/4 NW1/4 of S1 T29N R15W
SB-04	2566290.42	2097533.83	NE1/4 NW1/4 of S1 T29N R15W
SB-05	2566108.15	2097453.11	NE1/4 NW1/4 of S1 T29N R15W
SB-06	2566242.30	2097487.11	NE1/4 NW1/4 of S1 T29N R15W
SB-07	2566362.56	2097465.55	Other Location Description: NW/4 NE/4 ~~NE1/4 NE1/4~~ of S1 T29N R15W
SB-08	2566165.63	2097423.38	NE1/4 NW1/4 of S1 T29N R15W

OSE Notation: This Attachment 1 (3 pages) replaces that received on March 13, 2017. No OSE POD# assigned to soil borings which are to be immediately plugged following sampling.

FOR OSE INTERNAL USE

Form wr-08
POD DESCRIPTIONS - ATTACHMENT 1

File Number: SJ-4231 POD1-POD6	Trn Number:
Trans Description (optional):	

Received by OCD: 11/13/2025 11:14:36 AM
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NEW MEXICO OFFICE OF THE STATE ENGINEER

ATTACHMENT 1
POINT OF DIVERSION DESCRIPTIONS

This Attachment is to be completed if more than one (1) point of diversion is described on an Application or Declaration.

a. Is this a:	b. Information on Attachment(s):
☐ Move-From Point of Diversion(s) ☐ Move-To Point of Diversion(s)	Number of points of diversion involved in the application: ~~3~~ 25 Total number of pages attached to the application: 3

☐ **Surface Point of Diversion** **OR** ☒ **Well**

Name of ditch, acequia, or spring:	
Stream or water course:	
Tributary of:	

2017 MAR 27 PM 12:50 STATE ENGINEER AZTEC, NM OFFICE

c. Location (Required):
Required: Move to POD location coordinate must be either New Mexico State Plane (NAD 83), UTM (NAD 83), or Lat/Long (WGS84)

NM State Plane (NAD83) (feet)	UTM (NAD83) (meters)	☐ Lat/Long–(WGS84) 1/10th of second	OTHER (allowable only for move-from descriptions - see application form for format)
NM West Zone ☒ NM Central Zone ☐ NM East Zone ☐	Zone 13N ☐ Zone 12N ☐		☒ PLSS (quarters, section, township, range) ☐ Hydrographic Survey, Map & Tract ☐ Lot, Block & Subdivision ☐ Grant

POD Number:	X or Longitude	Y or Latitude	Other Location Description:
SB-09	2566291.27	2097431.34	NE1/4 NW1/4 of S1 T29N R15W
SB-10	2566227.08	2097397.72	NE1/4 NW1/4 of S1 T29N R15W
SB-11	2565956.37	2097369.14	NE1/4 NW1/4 of S1 T29N R15W
SB-12	2566355.14	2097387.07	NW/4 NE/4 ~~NE1/4 NE1/4~~ of S1 T29N R15W
SB-13	2565567.01	2097358.68	NE1/4 NW1/4 of S1 T29N R15W
SB-14	2565999.39	2097288.48	NE1/4 NW1/4 of S1 T29N R15W
SB-15	2566308.80	2097273.76	NW/4 NE/4 ~~NE1/4 NW1/4~~ of S1 T29N R15W
SB-16	2566367.80	2097272.93	NW/4 NE/4 ~~NE1/4 NE1/4~~ of S1 T29N R15W
SB-17	2566284.00	2097215.20	NE1/4 NW1/4 of S1 T29N R15W

FOR OSE INTERNAL USE

Form wr-08
POD DESCRIPTIONS - ATTACHMENT 1

File Number: SJ-4231 POD1-POD6	Trn Number:
Trans Description (optional):	

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NEW MEXICO OFFICE OF THE STATE ENGINEER

ATTACHMENT 1
POINT OF DIVERSION DESCRIPTIONS

This Attachment is to be completed if more than one (1) point of diversion is described on an Application or Declaration.

a. Is this a:	b. Information on Attachment(s):
☐ Move-From Point of Diversion(s) ☐ Move-To Point of Diversion(s)	Number of points of diversion involved in the application: 25 Total number of pages attached to the application: 3

☐ **Surface Point of Diversion** **OR** ☒ **Well**

Name of ditch, acequia, or spring:	
Stream or water course:	
Tributary of:	

c. Location (Required):
Required: Move to POD location coordinate must be either New Mexico State Plane (NAD 83), UTM (NAD 83), or Lat/Long (WGS84)

NM State Plane (NAD83) (feet)	UTM (NAD83) (meters)	☐ Lat/Long–(WGS84) 1/10th of second	OTHER (allowable only for move-from descriptions - see application form for format)
NM West Zone ☒ NM Central Zone ☐ NM East Zone ☐	Zone 13N ☐ Zone 12N ☐		☒ PLSS (quarters, section, township, range) ☐ Hydrographic Survey, Map & Tract ☐ Lot, Block & Subdivision ☐ Grant

POD Number:	X or Longitude	Y or Latitude	Other Location Description:
SB-18	2566376.71	2097203.24	~~NE1/4 NE1/4~~ NW/4 NE/4 of S1 T29N R15W
POD Number: SB-19	X or Longitude: 2566007.74	Y or Latitude: 2097108.76	Other Location Description: NE1/4 NW1/4 of S1 T29N R15W
POD Number:	X or Longitude	Y or Latitude	Other Location Description:
POD Number:	X or Longitude	Y or Latitude	Other Location Description:
POD Number:	X or Longitude	Y or Latitude	Other Location Description:
POD Number:	X or Longitude	Y or Latitude	Other Location Description:
POD Number:	X or Longitude	Y or Latitude	Other Location Description:
POD Number:	X or Longitude	Y or Latitude	Other Location Description:
POD Number:	X or Longitude	Y or Latitude	Other Location Description:

STATE ENGINEER OFFICE
AZTEC, NEW MEXICO
2017 MAR 20 PM 2:49

FOR OSE INTERNAL USE

Form wr-08
POD DESCRIPTIONS - ATTACHMENT 1

File Number: SJ-4231 POD1-POD3	Trn Number:
Trans Description (optional):	

Received by OCD: 11/13/2025 11:14:36 AM
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NMOSE Permit to Drill a Non-Consumptive Well(s) - Conditions of Approval
SJ-4231 POD1 – POD6

The New Mexico Office of the State Engineer (NMOSE) has determined that existing water rights will not be impaired by this activity. This application is approved without publication provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state. This application approval (i.e., permit) is further subject to the following conditions of approval.

1. This permit is approved as follows:

Permittee(s):	El Paso Natural Gas Company, LLC (CH2M, as agent) 1001 Louisiana St., Room 956I Houston, TX 77002
Permit Number:	SJ-4231
Application File Date:	March 13, 2017
Priority:	N/A
Source:	Groundwater
Point(s) of Diversion:	SJ-4231 POD1 through POD6 includes six newly proposed groundwater monitoring wells associated with a site investigation for the San Juan River Gas Plant located on land owned by CCI San Juan LLC, San Juan County, New Mexico. The application also proposes the temporary installation and abandonment of 19 soil borings. The wells (aka, point of diversion; POD) and soil borings will be located within the NE¼ NW¼ (aka, Lot 3) and NW¼ NE¼ (aka, Lot 2) of Section 1, Township 29 North, Range 15 West, NMPM, at the approximate point locations (State Plane NM Central, NAD83; feet) as shown in the Tables below.

Table 1: Proposed Monitoring Wells

POD Name and Owner's Well Identification	X	Y
SJ-4231 POD1 (MW-11)	2,566,074.83	2,096,951.57
SJ-4231 POD2 (MW-12)	2,566,022.08	2,097,158.16
SJ-4231 POD3 (MW-13)	2,566,092.16	2,097,280.33
SJ-4231 POD4 (MW-14)	2,566,294.96	2,097,367.88
SJ-4231 POD5 (MW-15)	2,566,010.88	2,097,448.23
SJ-4231 POD6 (MW-16)	2,566,029.91	2,097,588.64

Table 2: Proposed Soil Borings to Obtain Current Soil Conditions and be Immediately Plugged

POD Name and Owner's Well Identification	X	Y
SB-01 (no POD# assigned)	2,565,850.24	2,097,582.42
SB-02 (no POD# assigned)	2,566,244.09	2,097,587.40
SB-03 (no POD# assigned)	2,566,110.71	2,097,536.96
SB-04 (no POD# assigned)	2,566,290.42	2,097,533.83
SB-05 (no POD# assigned)	2,566,108.15	2,097,453.11

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POD Name and Owner's Well Identification	X	Y
SB-06 (no POD# assigned)	2,566,242.30	2,097,487.11
SB-07 (no POD# assigned)	2,566,362.56	2,097,465.55
SB-08 (no POD# assigned)	2,566,165.63	2,097,423.38
SB-09 (no POD# assigned)	2,566,291.27	2,097,431.34
SB-10 (no POD# assigned)	2,566,227.08	2,097,397.72
SB-11 (no POD# assigned)	2,565,956.37	2,097,369.14
SB-12 (no POD# assigned)	2,566,355.14	2,097,387.07
SB-13 (no POD# assigned)	2,565,567.01	2,097,358.68
SB-14 (no POD# assigned)	2,565,999.39	2,097,288.48
SB-15 (no POD# assigned)	2,566,308.80	2,097,273.76
SB-16 (no POD# assigned)	2,566,367.80	2,097,272.93
SB-17 (no POD# assigned)	2,566,284.00	2,097,215.20
SB-18 (no POD# assigned)	2,566,376.71	2,097,203.24
SB-19 (no POD# assigned)	2,566,007.74	2,097,108.76

Purpose of Use: Groundwater monitoring

Place of Use: N/A

Amount of Water: N/A

2. No water shall be appropriated and beneficially used from any wells or borings approved under this permit.

3. No water shall be diverted from the well(s) except for initial well development and periodic sampling purposes. Upon completion of monitoring activities the well(s) shall be plugged in accordance with Subsection C of 19.27.4.30 NMAC, unless a permit to use water is acquired from the NMOSE.

4. The well(s) may continue to be used indefinitely for groundwater sampling or monitoring required for the current site investigation and any associated remediation, so long as they remain in good repair. **A new permit shall be obtained from the NMOSE prior to replacing a well(s) or for any change in use as approved herein.**

5. The soil borings are not proposed to be completed as monitoring wells, but to be temporarily installed for the immediate collection of soil samples through the vadose zone into groundwater. The soil borings are proposed to be plugged immediately following soil sample collection. **A new permit shall be obtained from the NMOSE prior to any change in use as approved herein.**

6. Water well drilling and well drilling activities, including well plugging, are regulated under NMOSE Regulations 19.27.4 NMAC. These regulations apply, and provide both general and specific direction regarding the drilling of wells in New Mexico. Note that the construction of any well that allows groundwater to flow uncontrolled to the land surface or to move appreciably between geologic units is prohibited. Based on the proposed well construction information

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provided regarding the subject well(s), the following variances have been provided from 19.27.4.29 and 19.27.4.30 NMAC.

a. Subsection C of 19.27.4.29 NMAC requires that drilling equipment be disinfected with a chlorine bleach solution. Due to the environmental investigative purpose of these wells, chlorine may bias or degrade contaminates under investigation in the soil and groundwater samples to be collected. Therefore, NMOSE is granting a variance to allow for steam and the use of a suitable cleaning solution for the cleaning of drilling equipment between the drilling of each borehole/well.

b. Paragraph (2) of Subsection A of 19.27.4.30 NMAC requires that for wells completed less than 20 feet below land surface, the seal be placed from land surface to the bottom of the blank casing. However, due to the need for collection of groundwater samples at particular and discrete intervals, and a screened interval that accounts for fluctuations in the water levels, the seal may be placed above the filter pack which may be extended up to two feet above the top of the screened interval.

7. In accordance with Subsection A of 19.27.4.29 NMAC, on-site supervision of well drilling/plugging is required by the holder of a New Mexico Well Driller License or a NMOSE-registered Drill Rig Supervisor. The New Mexico licensed Well Driller shall ensure that well drilling activities are completed in accordance with 19.27.4.29, 19.27.4.30 and 19.27.4.31 NMAC. However, pursuant to 72-12-12 NMSA 1978 and 19.27.4.8 NMAC, a driller's license is not required for the construction of a driven well with an outside casing diameter of 2⅜ inches or less and that does not require the use of a drill rig (e.g., auger) for installation. This exemption is not applicable to well plugging.

8. The permittee has not indicated whether artesian conditions may be encountered at the proposed well location(s). If artesian conditions are encountered during drilling, all rules and regulations pertaining to the drilling and casing and plugging of artesian wells shall be followed.

9. A Well Record documenting the as-built well construction and materials used shall be filed for each of the new wells in accordance with Subsection K of 19.27.4.29 NMAC. **Well Records shall be filed with the State Engineer (NMOSE District V, 100 Gossett Drive, Suite A, Aztec, NM, 87410) within 20 days after completion of the well(s).** Well installation(s) shall be complete and the well record(s) filed no later than one year from the date of approval of this permit.

10. If the required Well Record documentation is not received within one year of the date of permit approval, this permit will automatically expire.

11. When the permittee receives approval or direction to permanently abandon the well(s)/borehole(s) covered by this permit, plugging shall be performed by a New Mexico licensed well driller. The well(s)/borehole(s) shall be plugged pursuant to Subsection C of 19.27.4.30 NMAC using the following method, unless an alternate plugging method has been proposed by or on behalf of the well owner and approved by the NMOSE. If a well/borehole has encountered artesian conditions, a Well Plugging Plan of Operations shall be submitted and NMOSE approval obtained *prior* to the initiation of *any* well plugging activities concerning artesian wells. Additionally, if the following standardized plugging sealant is not appropriate for use due to incompatibility with the water quality or any soil and water contaminates encountered, a Well Plugging Plan of Operations shall be submitted and NMOSE approval obtained *prior* to the initiation of *any* well plugging activities.

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a. Obstructions in a well/borehole shall be identified and removed if possible. If an obstruction cannot be removed, the method used to grout below and around the obstruction shall be described in detail in the plugging record.

b. Prior to plugging, calculate the theoretical volume of sealant needed for abandonment of the well/borehole based on the actual measured pluggable depth of the well/borehole and the volume factor for the casing/borehole diameter. Compare the actual volume of sealant placed in the well/borehole with the theoretical volume to verify the actual volume of sealant is equal to or exceeds the theoretical volume.

c. Portland Type I/II cement shall be used for the plugging sealant. The water mixed with the cement to create the plugging sealant shall be potable water or of similar quality. Portland cement has a fundamental water demand of 5.2 gallons of water per 94-lb sack of cement. Up to a maximum of 6.0 gallons per 94-lb sack is acceptable to allow for greater pumpability.

   Pure bentonite powder ("90 barrel yield") is allowed as a cement additive by NMOSE and American Water Works Association (AWWA) guidelines. If a bentonite additive is used, the following rates and mixing guidelines shall be followed. For a rate or a mixing procedure other than that provided below, the NMOSE District V office must be contacted for pre-approval. Neither granular bentonite nor extended-yield bentonite shall be mixed with cement for the purpose of this plugging activity. When supplementing a cement slurry with bentonite powder, water demand for the mix increases at a rate of approximately 0.65 gallon of water for each 1% increment of bentonite bdwc (by dry weight cement) above the stated base water demand of 5.2 gallons water per 94-lb sack of cement for neat cement. Bentonite powder must be hydrated separately with its required increment of water before being mixed into the wet neat cement. If water is otherwise added to the combination of dry ingredients or the dry bentonite is blended into wet cement, the alkalinity of the cement will restrict the yield of the bentonite powder, resulting in excess free water in the slurry and excessive cement shrinkage upon curing.

d. Placement of the sealant within the well/borehole shall be by pumping through a tremie pipe extended to near the bottom of the well/borehole and kept below the top of the slurry column (i.e., immersed in the slurry) as the well/borehole is plugged from bottom upwards in a manner that displaces the standing water column.

e. Prior to, or upon completion of plugging, the well casing may be cut-off below grade as necessary to allow for approved construction onsite, provided a minimum six-inch thickness of reinforced abandonment plugging sealant or concrete completely covers the top of the cut-off casing. Any remaining void to the surface may be filled with native soil, concrete, or asphalt as needed to match the surrounding surface material and blended with the surface topography to prevent ponding.

f. **Within 20 days after completion of well/borehole plugging, a complete Plugging Record shall be filed with the State Engineer** in accordance with Paragraph (3) of Subsection C of 19.27.4.30 NMAC for each well/boring plugged. The Well Plugging Record(s) shall be filed with the State Engineer at the NMOSE District V Office, 100 Gossett Drive, Suite A, Aztec, NM 87410. The required well plugging record form is available at http://www.ose.state.nm.us/PDF/WellDrillers/WD-11.pdf.

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12. In accordance with Subsection C of 19.27.4.30 NMAC, a well/borehole that does not encounter groundwater shall be immediately plugged by filling with drill cutting or clean native fill to within 10 feet of land surface and by plugging the remaining 10 feet to the land surface with a neat cement slurry or cement-bentonite sealant as described above. A Plugging Record shall be filed with the State Engineer as described above.

13. Should another regulatory agency sharing jurisdiction of the project authorize, or by regulation require, more stringent requirements than stated herein, the more stringent procedure should be followed. These, among others, may include provisions regarding pre-authorization to proceed, type of methods and materials used, inspection, or prohibition of free discharge of any fluid or other material to or from the well that is related to the drilling and/or monitoring process.

14. Pursuant to 72-12-3 NMSA 1978, the applicant has provided written documentation with the application, which the applicant claims as confirmation that access has been granted for the aforementioned well(s) to be located on property owned by someone other than the well owner/applicant. NMOSE approval of this permit in no way infers the right of access to land not owned by the well owner/applicant.

15. The State Engineer retains jurisdiction of this permit.

The application for non-consumptive use for well(s) SJ-4231 POD1-POD6, submitted on March 13, 2017, including corrections and additional information received on March 20, 2017, is hereby approved with the aforesaid conditions applied, when signed by an authorized designee of the State Engineer:

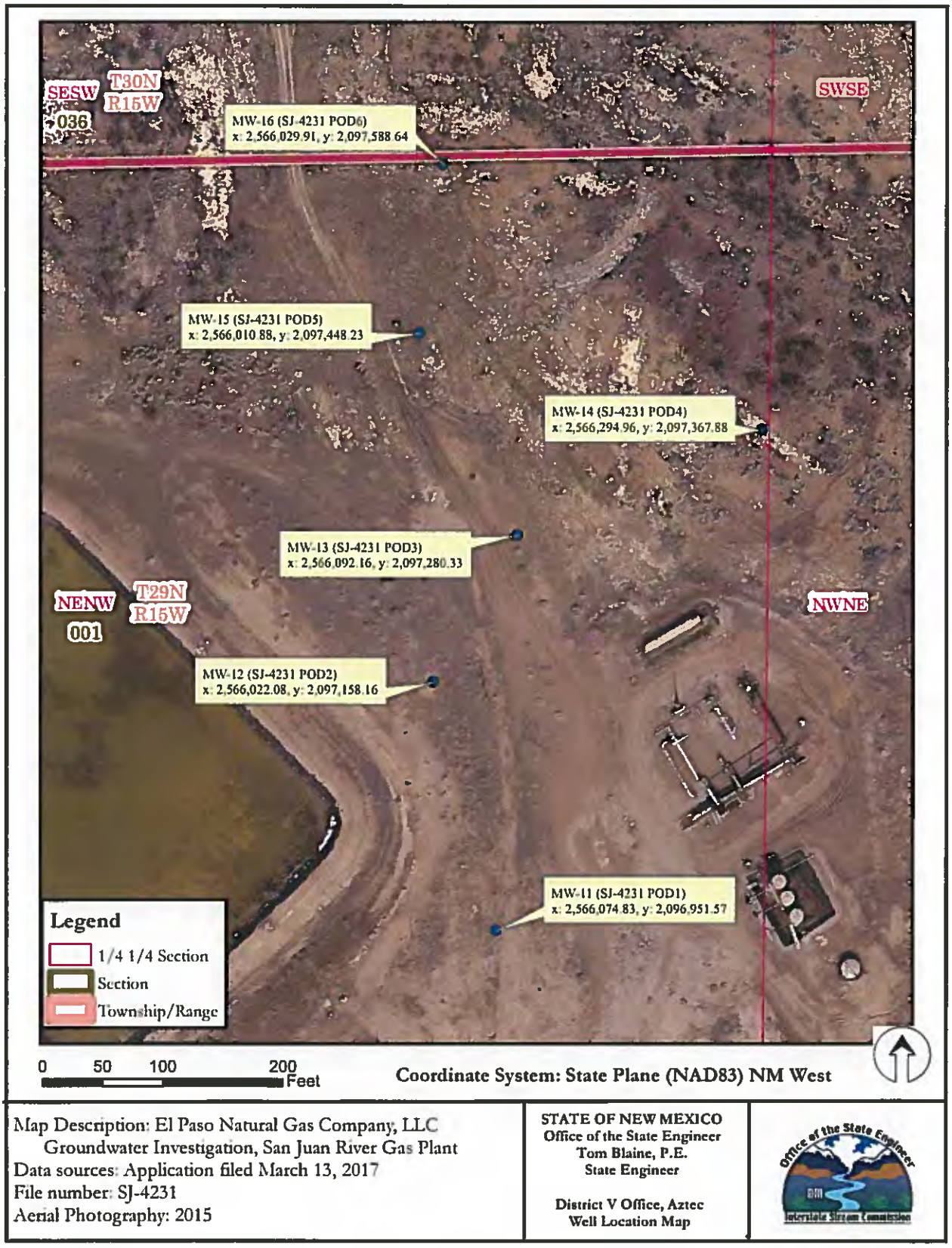
Witness my hand and seal this 23rd day of March, A.D. 2017.
Tom Blaine, P.E., State Engineer

By: _____
Kimberly Kirby, Water Resource Specialist
Water Rights Division District V

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Map Description: El Paso Natural Gas Company, LLC
Groundwater Investigation, San Juan River Gas Plant
Data sources: Application filed March 13, 2017
File number: SJ-4231
Aerial Photography: 2015

STATE OF NEW MEXICO
Office of the State Engineer
Tom Blaine, P.E.
State Engineer

District V Office, Aztec
Well Location Map

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STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
AZTEC

Tom Blaine, P.E.
State Engineer

100 Gossett Drive, Suite A
Aztec, New Mexico 87410

September 4, 2018

El Paso CGP Company, LLC
Attn: Joseph Wiley
1001 Louisiana St, Room 757 A
Houston, TX 77002

RE: Permit Approval to Use Wells with no Water Right, SJ-4231 POD14-POD18, El Paso CGP Company, LLC, San Juan River Gas Plant Site Investigation

Dear Mr. Wiley:

On September 4, 2018, the New Mexico Office of the State Engineer received an application for a permit for the use of five existing groundwater monitoring wells for site investigation activities at the above referenced location. Enclosed is a copy of the above numbered permit that has been approved subject to the conditions set forth on the approval pages and in the attached Conditions of Approval. Also enclosed is a receipt for the fees paid.

Although the wells have already been completed, this office is requesting that well completion records be provided if they are available. Additionally, a standardized plugging method has also been included in the Conditions of Approval for the future abandonment of the monitoring wells covered by this permit. This eliminates the need to submit a separate Well Plugging Plan of Operations for approval by the NMOSE prior to plugging, unless an alternate plugging method is proposed, required by a separate oversight agency, necessary due to incompatibility with actual conditions, or artesian conditions are encountered. Well completion and plugging records should be sent to the NMOSE District V, 100 Gossett Drive, Suite A, Aztec, NM, 87410.

If you have any questions regarding this permitting action, please feel free to contact me at (505) 334-4571.

Sincerely,

Blaine Watson

Blaine Watson
District V Manager
Water Rights Division – District V Office

Enclosures

cc: Aztec Reading (w/o enclosures)
SJ-4231 File
WATERS
Jeffrey Minchak, CH2M, via email: jeffrey.minchak@jacobs.com
Brandon Powell, NMOCD District 3, via email: brandon.powell@state.nm.us

Received by OCD: 11/13/2025 11:14:36 AM
Released to Imaging: 11/14/2025 9:30:04 AM

OFFICE OF THE STATE ENGINEER/INTERSTATE STREAM COMMISSION – AZTEC OFFICE

OFFICIAL RECEIPT NUMBER: 5 - 6200 DATE: 9-4-2018 FILE NO.: SJ-4231

TOTAL: 25.00 RECEIVED: twenty-five DOLLARS ☐ CASH: ☒ CHECK NO.: 798

PAYOR: Aleeca A. Forsberg ADDRESS: 2519 Bixby St. NW

CITY: Albuquerque STATE: NM ZIP: 87120 RECEIVED BY: MJ

INSTRUCTIONS: Indicate the number of actions to the left of the appropriate type of filing. Complete the receipt information. **Original** to payor; **pink** copy to Program Support/ASD; **yellow** copy remains in district office; and **goldenrod** copy to accompany application being filed. If a mistake is made, void the original and all copies and submit to Program Support/ASD as part of the daily deposit.

A. Ground Water Filing Fees

___	1. Change of Ownership of Water Right	$ 2.00
___	2. Application to Appropriate or Supplement Domestic 72-12-1 Well	$ 125.00
___	3. Application to Repair or Deepen 72-12-1 Well	$ 75.00
___	4. Application for Replacement 72-12-1 Well	$ 75.00
___	5. Application to Change Purpose of Use 72-12-1 Well	$ 75.00
___	6. Application for Stock Well/Temp. Use	$ 5.00
___	7. Application to Appropriate Irrigation, Municipal, or Commercial Use	$ 25.00
___	8. Declaration of Water Right	$ 1.00
___	9. Application for Supplemental Non 72-12-1 Well	$ 25.00
___	10. Application to Change Place or Purpose of Use Non 72-12-1 Well	$ 25.00
___	11. Application to Change Point of Diversion and Place and/or Purpose of Use from Surface Water to Ground Water	$ 50.00
___	12. Application to Change Point of Diversion and Place and/or Purpose of Use from Ground Water to Ground Water	$ 50.00
___	13. Application to Change Point of Diversion of Non 72-12-1 Well	$ 25.00
___	14. Application to Repair or Deepen Non 72-12-1 Well	$ 5.00
5	15. Application for Test, Expl. Observ. Well	$ 5.00
___	16. Application for Extension of Time	$ 25.00
___	17. Proof of Application to Beneficial Use	$ 25.00
___	18. Notice of Intent to Appropriate	$ 25.00

B. Surface Water Filing Fees

___	1. Change of Ownership of a Water Right	$ 5.00
___	2. Declaration of Water Right	$ 10.00
___	3. Amended Declaration	$ 25.00
___	4. Application to Change Point of Diversion and Place and/or Purpose of Use from Surface Water to Surface Water	$ 200.00
___	5. Application to Change Point of Diversion and Place and/or Purpose of Use from Ground Water to Surface Water	$ 200.00
___	6. Application to Change Point of Diversion	$ 100.00
___	7. Application to Change Place and/or Purpose of Use	$ 100.00
___	8. Application to Appropriate	$ 25.00
___	9. Notice of Intent to Appropriate	$ 25.00
___	10. Application for Extension of Time	$ 50.00
___	11. Supplemental Well to a Surface Right	$ 100.00
___	12. Return Flow Credit	$ 100.00
___	13. Proof of Completion of Works	$ 25.00
___	14. Proof of Application of Water to Beneficial Use	$ 25.00
___	15. Water Development Plan	$ 100.00
___	16. Declaration of Livestock Water Impoundment	$ 10.00
___	17. Application for Livestock Water Impoundment	$ 10.00

C. Well Driller Fees

___	1. Application for Well Driller's License	$ 50.00
___	2. Application for Renewal of Well Driller's License	$ 50.00

D. Reproduction of Documents

___ @ 25¢/copy $_____

___ Map(s) $_____

E. Certification $_____

F. *Credit Card Convenience Fee $_____

G. Other _____ $_____

Comments:

Remit app. for 5 existing MWs @ San Juan River Gas Plant site; POD 14-18; El Paso Natural Gas Co, LLC via CH2M

All fees are non-refundable.

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File No. SJ-4231 POD14-POD18

NEW MEXICO OFFICE OF THE STATE ENGINEER

WR-07 APPLICATION FOR PERMIT TO DRILL

A WELL WITH NO WATER RIGHT

(check applicable box):

STATE ENGINEER OFFICE
AZTEC, NEW MEXICO
2018 SEP -4 AM 11:41

For fees, see State Engineer website: http://www.ose.state.nm.us/

Purpose:	☐ Pollution Control And/Or Recovery	☐ Ground Source Heat Pump
☐ Exploratory Well (Pump test)	☐ Construction Site/Public Works Dewatering	☐ Other(Describe):
☒ Monitoring Well	☐ Mine Dewatering	

A separate permit will be required to apply water to beneficial use regardless if use is consumptive or nonconsumptive.

☒ Temporary Request - Requested Start Date: 8/15/18 Requested End Date: unknown

Plugging Plan of Operations Submitted? ☐ Yes ☒ No

1. APPLICANT(S)

Name: Joseph Wiley	Name: Jeffrey Minchak
Contact or Agent: check here if Agent ☐	Contact or Agent: check here if Agent ☒
El Paso Natural Gas Co, LLC	CH2M
Mailing Address: 1001 Louisiana Street, Room 757A	Mailing Address: 3721 Rutledge Rd NE, Suite B-1
City: Houston	City: Albuquerque
State: TX Zip Code: 77002	State: NM Zip Code: 87109
Phone: (713) 420-3475 ☐ Home ☐ Cell Phone (Work):	Phone: (505) 379-3222 ☐ Home ☒ Cell Phone (Work):
E-mail (optional): Joe_Wiley@kindermorgan.com	E-mail (optional): Jeffrey.Minchak@jacobs.com

FOR OSE INTERNAL USE Application for Permit, Form WR-07, Rev 11/17/16

File No.: SJ-4231 POD14-POD18	Trn. No.:	Receipt No.: 5-6200
Trans Description (optional):		
Sub-Basin:	PCW/LOG Due Date: 9/4/2019	

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2. **WELL(S)** Describe the well(s) applicable to this application.

Location Required: Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84).
District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.

☒ NM State Plane (NAD83) (Feet)
☒ NM West Zone
☐ NM East Zone
☐ NM Central Zone

☐ UTM (NAD83) (Meters)
☐ Zone 12N
☐ Zone 13N

☐ Lat/Long (WGS84) (to the nearest 1/10th of second)

Well Number (if known): SJ-4231 POD#	X or Easting or Longitude:	Y or Northing or Latitude:	Provide if known: -Public Land Survey System (PLSS) (*Quarters or Halves , Section, Township, Range*) OR - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name
14 MW-2	2565601.55	2094766.24	NE1/4 SW1/4 S1 T29N R15W
15 MW-4	2566075.84	2095018.85	SE1/4 NW1/4 S1 T29N R15W
16 MW-6	2568178.91	2095736.13	SE1/4 NE1/4 S1 T29N R15W
17 MW-8	2565812.79	2097569.43	NE1/4 NW1/4 (L3) S1 T29N R15W
18 MW-9	2566197.66	2097583.43	NE1/4 NW1/4 (L3) S1 T29N R15W

NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions)
Additional well descriptions are attached: ☐ Yes ☒ No **If yes, how many**_____

Other description relating well to common landmarks, streets, or other:
Monitoring wells located at the San Juan River Gas Plant located at 99 Road 6500 Kirtland, NM 84717

Well is on land owned by: Wells are located on land owned by CCI San Juan, LLC

Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? ☐ Yes ☒ No
If yes, how many_____

Approximate depth of well (feet): see below	Outside diameter of well casing (inches): see below
Driller Name:	Driller License Number:

3. **ADDITIONAL STATEMENTS OR EXPLANATIONS**

The monitoring wells listed in this application are believed to have been installed in the 1990s. MW-2 and MW-4 are 2.375-in OD PVC wells. MW-6, MW-8, and MW-9 are 4.500-inch OD PVC wells. Well depths are as follows:
MW-2: 57.9 feet bgs
MW-4: 55.93 feet bgs
MW-6: 42.67 feet bgs
MW-8: 22.17 feet bgs
MW-9: 22.09 feet bgs

For Item 4: The monitoring wells have been used to provide data related to the investigation and remediation of groundwater that contains contaminants related to oil and gas operations at the site which exceed the New Mexico Water Quality Control Commission standards. Monitoring events are performed annually and are expected to continue for the next 10 years.

2010 SEP -4 AM 11:44
STATE ENGINEER OFFICE
AZTEC, NEW MEXICO

FOR OSE INTERNAL USE — Application for Permit, Form WR-07

File No.: SJ-4231 POD14-POD18	Trn No.:

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4. SPECIFIC REQUIREMENTS: The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application:

Exploratory:	Pollution Control and/or Recovery:	Construction De-Watering:	Mine De-Watering:
☐ Include a description of any proposed pump test, if applicable.	☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for the pollution control or recovery operation. ☐ The estimated maximum period of time for completion of the operation. ☐ The annual diversion amount. ☐ The annual consumptive use amount. ☐ The maximum amount of water to be diverted and injected for the duration of the operation. ☐ The method and place of discharge.	☐ Include a description of the proposed dewatering operation, ☐ The estimated duration of the operation, ☐ The maximum amount of water to be diverted, ☐ A description of the need for the dewatering operation, and, ☐ A description of how the diverted water will be disposed of.	☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for mine dewatering. ☐ The estimated maximum period of time for completion of the operation. ☐ The source(s) of the water to be diverted. ☐ The geohydrologic characteristics of the aquifer(s). ☐ The maximum amount of water to be diverted per annum. ☐ The maximum amount of water to be diverted for the duration of the operation. ☐ The quality of the water. ☐ The method of measurement of water diverted. ☐ The recharge of water to the aquifer. ☐ Description of the estimated area of hydrologic effect of the project. ☐ The method and place of discharge. ☐ An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. ☐ A description of the methods employed to estimate effects on surface water rights and underground water rights. ☐ Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.
Monitoring: ■ Include the reason for the monitoring well, and, ■ The duration of the planned monitoring.	☐ The method of measurement of water produced and discharged. ☐ The source of water to be injected. ☐ The method of measurement of water injected. ☐ The characteristics of the aquifer. ☐ The method of determining the resulting annual consumptive use of water and depletion from any related stream system. ☐ Proof of any permit required from the New Mexico Environment Department. ☐ An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.	**Ground Source Heat Pump:** ☐ Include a description of the geothermal heat exchange project, ☐ The number of boreholes for the completed project and required depths. ☐ The time frame for constructing the geothermal heat exchange project, and, ☐ The duration of the project. ☐ Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.	

ACKNOWLEDGEMENT

I, We (name of applicant(s)), Joseph Wiley
Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

Joseph Wiley
Applicant Signature

Applicant Signature

STATE ENGINEER OFFICE
ROSWELL, NEW MEXICO
2018 SEP -4 AM 11:44

ACTION OF THE STATE ENGINEER

This application is:

☒ approved ☐ partially approved ☐ denied

provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the attached conditions of approval.

Witness my hand and seal this 4th day of September 20 18, for the State Engineer,

Tom Blaine, P.E., State Engineer

By: Blaine Watson
Signature

Blaine Watson
Print

Title: District V Manager
Print

FOR OSE INTERNAL USE

Application for Permit, Form WR-07

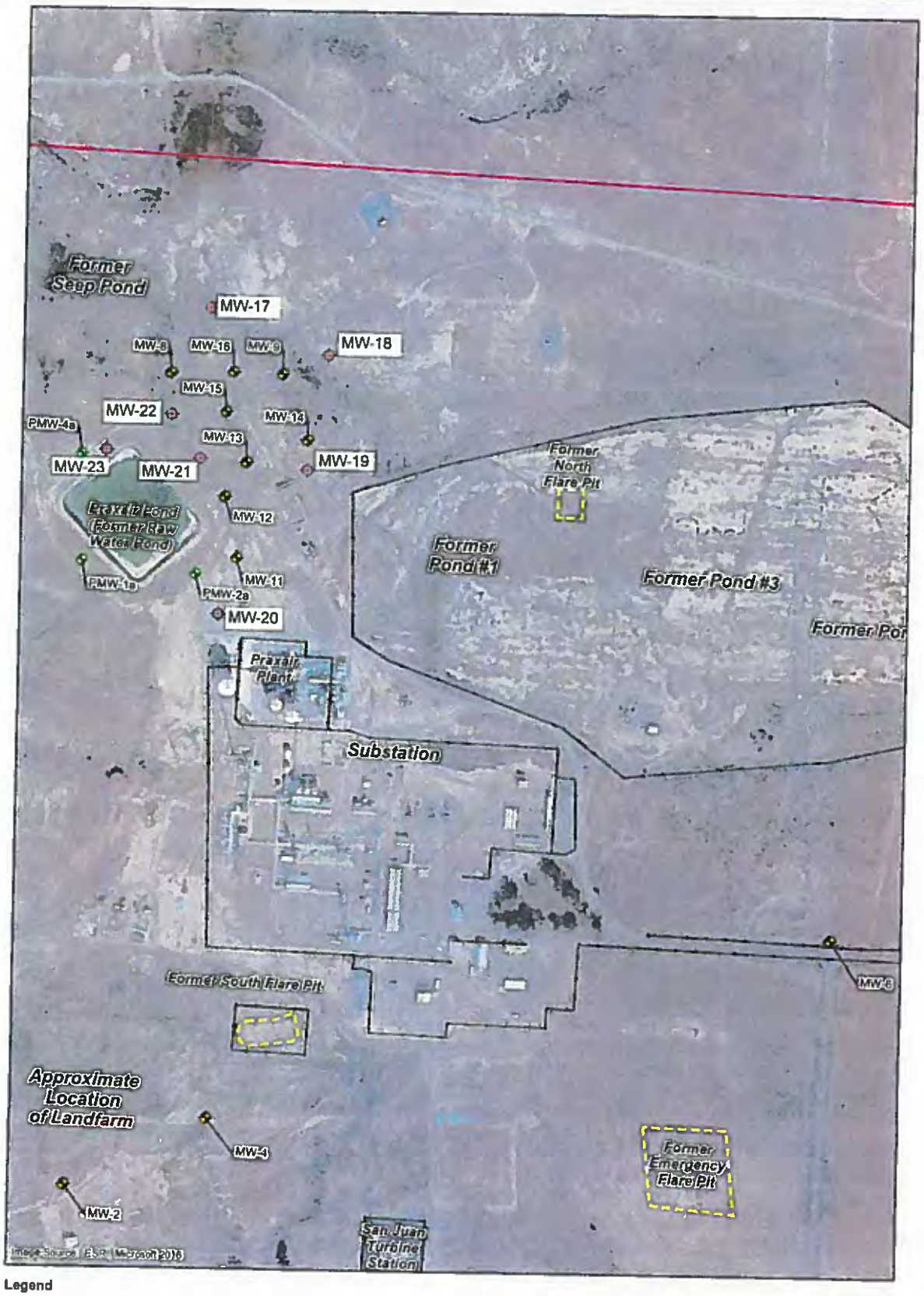
File No.: SJ-4231 POD14-POD18	Trn No.:

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STATE ENGINEER OFFICE
AZTEC, NEW MEXICO
2018 SEP -4 AM 11:44



Legend

- Fence
- Former Flare Pit
- Site Feature
- Proposed Monitoring Well Location
- Existing Monitoring Well
- Praxair Plant Monitoring Well

Figure 2
Proposed Monitoring Well Locations

San Juan River Gas Plant
Kirtland, New Mexico

ch2m:

OSE File #: SJ-4231 POD14-POD18

Received by OCD: 11/13/2025 11:14:36 AM

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NMOSE Permit to Drill a Non-Consumptive Well(s) - Conditions of Approval
SJ-4231 POD14-POD18

Upon review of the application materials, the New Mexico Office of the State Engineer (NMOSE) has determined that existing water rights will not be impaired by this activity. This application is approved without publication provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state. This application approval (i.e., permit) is further subject to the following conditions of approval.

1. This permit is approved as follows:

Permittee(s): El Paso CGP Company, LLC
via Jeffrey Minchak, CH2M (Jacobs), as Agent
1001 Louisiana St, Room 757A
Houston, TX 77002

Permit Number: SJ-4231

Application File Date: September 4, 2018

Priority: N/A

Source: Groundwater

Point(s) of Diversion: Five points of diversion (PODs), SJ-4231 POD14-POD18, are proposed. The PODs consist of five existing groundwater monitoring wells associated with the El Paso CGP San Juan River Gas Plant site investigation (Table 1). The wells are located on parcels owned by El Paso Natural Gas Company or CCI San Juan, LLC near Kirtland, San Juan County, New Mexico. The PODs will be located within the NE/4 SW/4, the SE/4 NW/4, the SE/4 NE/4, and the NE/4 NW/4 of Section 1, T29N, R15W, NMPM, at the following approximate point locations (State Plane NM West, NAD83; feet).

Table 1: Existing Monitoring Wells

POD Number and Owner's Well Name	Casing: Outside Diameter (inches)	and Depth (feet)	X (feet)	Y (feet)
SJ-4231 POD14 (MW-2)	2.375	57.9	2,565,601.55	2,094,766.24
SJ-4231 POD15 (MW-4)	2.375	55.93	2,566,075.84	2,095,018.85
SJ-4231 POD16 (MW-6)	4.5	42.67	2,568,178.91	2,095,736.13
SJ-4231 POD17 (MW-8)	4.5	22.17	2,565,812.79	2,097,569.43
SJ-4231 POD18 (MW-9)	4.5	22.09	2,566,197.66	2,097,583.43

Purpose of Use: Groundwater monitoring

Place of Use: N/A

Amount of Water: N/A

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2. No water shall be appropriated and beneficially used from any wells or borings approved under this permit.

3. No water shall be diverted from the well(s) except for initial well development and periodic sampling purposes. Upon completion of monitoring activities the well(s) shall be plugged in accordance with Subsection C of 19.27.4.30 NMAC, unless a permit to use water is acquired from the NMOSE.

4. The well(s) may continue to be used indefinitely for groundwater sampling or monitoring required for the current site investigation and any associated remediation, so long as they remain in good repair. **A new permit shall be obtained from the NMOSE prior to replacing a well(s) or for any change in use as approved herein.**

5. Water well drilling and well drilling activities, including well plugging, are regulated under NMOSE Regulations 19.27.4 NMAC. These regulations apply, and provide both general and specific direction regarding the drilling of wells in New Mexico. Note that the construction of any well that allows groundwater to flow uncontrolled to the land surface or to move appreciably between geologic units is prohibited. Based on the proposed well construction information provided regarding the subject well(s), the following variances have been provided from 19.27.4.29 and 19.27.4.30 NMAC.

6. In accordance with Subsection A of 19.27.4.29 NMAC, on-site supervision of well drilling/plugging is required by the holder of a New Mexico Well Driller License or a NMOSE-registered Drill Rig Supervisor. The New Mexico licensed Well Driller shall ensure that well drilling activities are completed in accordance with 19.27.4.29, 19.27.4.30 and 19.27.4.31 NMAC. However, pursuant to 72-12-12 NMSA 1978 and 19.27.4.8 NMAC, a driller's license is not required for the construction of a driven well with an outside casing diameter of 2⅜ inches or less and that does not require the use of a drill rig (e.g., auger) for installation. This exemption is not applicable to well plugging.

7. The permittee has not stated whether artesian conditions are likely to be encountered at the proposed well/borehole location(s). However, if artesian conditions are encountered during drilling, all rules and regulations pertaining to the drilling and casing and plugging of artesian wells shall be followed.

8. A Well Record documenting the as-built well construction and materials used shall be filed for each of the new wells in accordance with Subsection N of 19.27.4.29 NMAC. **Well Records shall be filed with the State Engineer (NMOSE District V, 100 Gossett Drive, Suite A, Aztec, NM, 87410) within 30 days after completion of the well(s).** Well installation(s) shall be complete and the well record(s) filed no later than one year from the date of approval of this permit. The well record form is available at http://www.ose.state.nm.us/STST/wdForms.php.

9. If the required Well Record documentation is not received within one year of the date of permit approval, this permit will automatically expire.

10. When the permittee receives approval or direction to permanently abandon the well(s)/borehole(s) covered by this permit, plugging shall be performed by a New Mexico licensed well driller. The well(s)/borehole(s) shall be plugged pursuant to Subsection C of 19.27.4.30 NMAC using the following method, unless an alternate plugging method has been

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proposed by or on behalf of the well owner and approved by the NMOSE. If a well/borehole has encountered artesian conditions, a Well Plugging Plan of Operations shall be submitted and NMOSE approval obtained *prior* to the initiation of *any* well plugging activities concerning artesian wells. Additionally, if the following standardized plugging sealant is not appropriate for use due to incompatibility with the water quality or any soil and water contaminates encountered, a Well Plugging Plan of Operations shall be submitted and NMOSE approval obtained *prior* to the initiation of *any* well plugging activities.

a. Obstructions in a well/borehole shall be identified and removed if possible. If an obstruction cannot be removed, the method used to grout below and around the obstruction shall be described in detail in the plugging record.

b. Prior to plugging, calculate the theoretical volume of sealant needed for abandonment of the well/borehole based on the actual measured pluggable depth of the well/borehole and the volume factor for the casing/borehole diameter. Compare the actual volume of sealant placed in the well/borehole with the theoretical volume to verify the actual volume of sealant is equal to or exceeds the theoretical volume.

c. Portland Type I/II cement shall be used for the plugging sealant. The water mixed with the cement to create the plugging sealant shall be potable water or of similar quality. Portland cement has a fundamental water demand of 5.2 gallons of water per 94-lb sack of cement. Up to a maximum of 6.0 gallons per 94-lb sack is acceptable to allow for greater pumpability.

   Pure bentonite powder ("90 barrel yield") is allowed as a cement additive by NMOSE and American Water Works Association (AWWA) guidelines. If a bentonite additive is used, the following rates and mixing guidelines shall be followed. For a rate or a mixing procedure other than that provided below, the NMOSE District V office must be contacted for pre-approval. Neither granular bentonite nor extended-yield bentonite shall be mixed with cement for the purpose of this plugging activity. When supplementing a cement slurry with bentonite powder, water demand for the mix increases at a rate of approximately 0.65 gallon of water for each 1% increment of bentonite bdwc (by dry weight cement) above the stated base water demand of 5.2 gallons water per 94-lb sack of cement for neat cement. Bentonite powder must be hydrated separately with its required increment of water before being mixed into the wet neat cement. If water is otherwise added to the combination of dry ingredients or the dry bentonite is blended into wet cement, the alkalinity of the cement will restrict the yield of the bentonite powder, resulting in excess free water in the slurry and excessive cement shrinkage upon curing.

d. Placement of the sealant within the well/borehole shall be by pumping through a tremie pipe extended to near the bottom of the well/borehole and kept below the top of the slurry column (i.e., immersed in the slurry) as the well/borehole is plugged from bottom upwards in a manner that displaces the standing water column.

e. Prior to, or upon completion of plugging, the well casing may be cut-off below grade as necessary to allow for approved construction onsite, provided a minimum six-inch thickness of reinforced abandonment plugging sealant or concrete completely covers the top of the cut-off casing. Any remaining void to the surface may be filled with native

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soil, concrete, or asphalt as needed to match the surrounding surface material and blended with the surface topography to prevent ponding.

f. **Within 30 days after completion of well/borehole plugging, a complete Plugging Record shall be filed with the State Engineer** in accordance with Paragraph (3) of Subsection C of 19.27.4.30 NMAC for each well/boring plugged. The Well Plugging Record(s) shall be filed with the State Engineer at the NMOSE District V Office, 100 Gossett Drive, Suite A, Aztec, NM 87410. The well plugging record form is available at http://www.ose.state.nm.us/STST/wdForms.php.

11. In accordance with Subsection C of 19.27.4.30 NMAC, a well/borehole that does not encounter groundwater may be immediately plugged by filling with drill cuttings or clean native fill to within 10 feet of land surface and by plugging the remaining 10 feet to the land surface with a sealant approved by the Office of the State Engineer. A Plugging Record shall be filed with the State Engineer as described above.

12. Should another regulatory agency sharing jurisdiction of the project authorize, or by regulation require, more stringent requirements than stated herein, the more stringent procedure should be followed. These, among others, may include provisions regarding pre-authorization to proceed, type of methods and materials used, inspection, or prohibition of free discharge of any fluid or other material to or from the well that is related to the drilling and/or monitoring process.

13. Pursuant to 72-12-3 NMSA 1978, the applicant may or may not have provided written documentation which the applicant claims as confirmation that access has been granted for the aforementioned well(s) to be located on property owned by someone other than the well owner/applicant. NMOSE approval of this permit in no way infers the right of access to land not owned by the well owner/applicant.

14. The State Engineer retains jurisdiction of this permit.

The application for non-consumptive use for well(s) SJ-4231 POD14-POD18, submitted on September 4, 2018, is hereby approved with the aforesaid conditions applied, when signed by an authorized designee of the State Engineer:

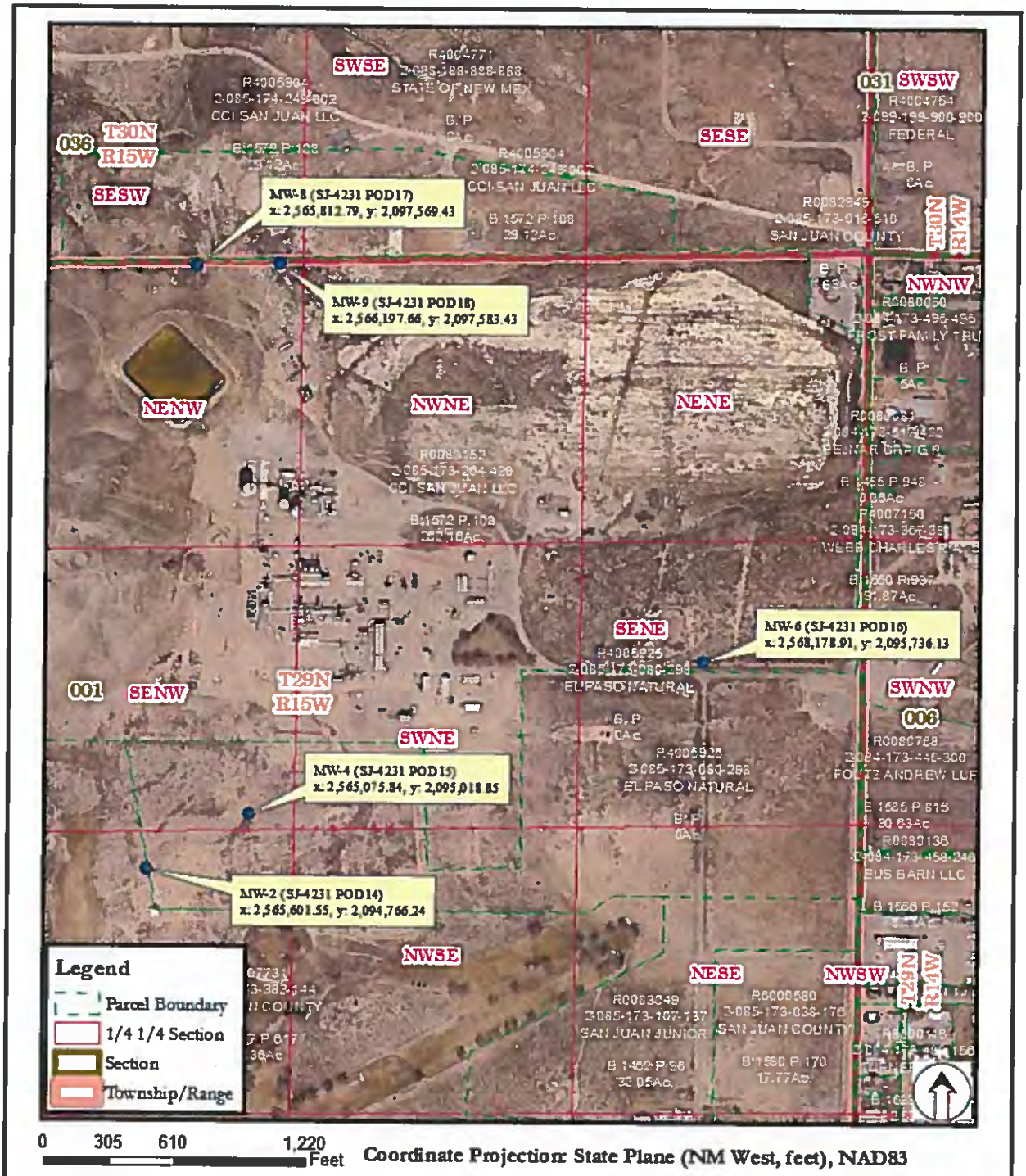
Witness my hand and seal this 4th day of September, A.D. 2018.
Tom Blaine, P.E., State Engineer

By: Blaine Watson
Blaine Watson, Manager
Water Rights Division District V

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Map Description: El Paso CGP Company; San Juan River Gas Plant Site Investigation
Data sources: Application filed September 4, 2018
File number: SJ-4231
Aerial Photography: 2017

STATE OF NEW MEXICO
Office of the State Engineer
Tom Blaine, P.E.
State Engineer

District V Office, Aztec
Well Location Map

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STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
AZTEC

Tom Blaine, P.E.
State Engineer

100 Gossett Drive, Suite A
Aztec, New Mexico 87410

July 27, 2018

El Paso CGP Company, LLC
Attn: Joseph Wiley
1001 Louisiana St, Room 1310 B
Houston, TX 77002

RE: Permit Approval to Drill Wells with no Water Right, SJ-4231 POD7-POD13, El Paso CGP Company, LLC, San Juan River Gas Plant Site Investigation

Dear Mr. Wiley:

On July 11, 2018, the New Mexico Office of the State Engineer received an application for a permit for the drilling and use of seven proposed groundwater monitoring wells for site investigation activities at the above referenced location. Enclosed is a copy of the above numbered permit that has been approved subject to the conditions set forth on the approval pages and in the attached Conditions of Approval. Also enclosed is a receipt for the fees paid.

Additionally, a standardized plugging method has also been included in the Conditions of Approval for the future abandonment of the monitoring wells covered by this permit. This eliminates the need to submit a separate Well Plugging Plan of Operations for approval by the NMOSE prior to plugging, unless an alternate plugging method is proposed, required by a separate oversight agency, necessary due to incompatibility with actual conditions, or artesian conditions are encountered. Well completion and plugging records should be sent to the NMOSE District V, 100 Gossett Drive, Suite A, Aztec, NM, 87410.

If you have any questions regarding this permitting action, please feel free to contact me at (505) 334-4571.

Sincerely,

Blaine Watson
District V Manager
Water Rights Division – District V Office

Enclosures

cc: Aztec Reading (w/o enclosures)
SJ-4231 File
WATERS
Jeffrey Minchak, CH2M, via email: jeffrey.minchak@jacobs.com
Brandon Powell, NMOCD District 3, via email: brandon.powell@state.nm.us

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OFFICE OF THE STATE ENGINEER/INTERSTATE STREAM COMMISSION – AZTEC OFFICE

OFFICIAL RECEIPT NUMBER: 5 - 6156 DATE: 7-11-18 FILE NO.: SJ-4231 POD 7-13

TOTAL: 35.00 RECEIVED: Thirty Five DOLLARS ☐ CASH: ☐ CHECK NO.:

PAYOR: Aleeca A Forsberg ADDRESS: 1612 Pablo Ct NE

CITY: Albuquerque STATE: NM ZIP: 87112 RECEIVED BY: MT

INSTRUCTIONS: Indicate the number of actions to the left of the appropriate type of filing. Complete the receipt information. **Original** to payor; **pink** copy to Program Support/ASD; **yellow** copy remains in district office; and **goldenrod** copy to accompany application being filed. If a mistake is made, void the original and all copies and submit to Program Support/ASD as part of the daily deposit.

A. Ground Water Filing Fees

___	1. Change of Ownership of Water Right	$ 2.00
___	2. Application to Appropriate or Supplement Domestic 72-12-1 Well	$ 125.00
___	3. Application to Repair or Deepen 72-12-1 Well	$ 75.00
___	4. Application for Replacement 72-12-1 Well	$ 75.00
___	5. Application to Change Purpose of Use 72-12-1 Well	$ 75.00
___	6. Application for Stock Well/Temp. Use	$ 5.00
___	7. Application to Appropriate Irrigation, Municipal, or Commercial Use	$ 25.00
___	8. Declaration of Water Right	$ 1.00
___	9. Application for Supplemental Non 72-12-1 Well	$ 25.00
___	10. Application to Change Place or Purpose of Use Non 72-12-1 Well	$ 25.00
___	11. Application to Change Point of Diversion and Place and/or Purpose of Use from Surface Water to Ground Water	$ 50.00
___	12. Application to Change Point of Diversion and Place and/or Purpose of Use from Ground Water to Ground Water	$ 50.00
___	13. Application to Change Point of Diversion of Non 72-12-1 Well	$ 25.00
___	14. Application to Repair or Deepen Non 72-12-1 Well	$ 5.00
7	15. Application for Test, Expl. Observ. Well	$ 5.00
___	16. Application for Extension of Time	$ 25.00
___	17. Proof of Application to Beneficial Use	$ 25.00
___	18. Notice of Intent to Appropriate	$ 25.00

B. Surface Water Filing Fees

___	1. Change of Ownership of a Water Right	$ 5.00
___	2. Declaration of Water Right	$ 10.00
___	3. Amended Declaration	$ 25.00
___	4. Application to Change Point of Diversion and Place and/or Purpose of Use from Surface Water to Surface Water	$ 200.00
___	5. Application to Change Point of Diversion and Place and/or Purpose of Use from Ground Water to Surface Water	$ 200.00
___	6. Application to Change Point of Diversion	$ 100.00
___	7. Application to Change Place and/or Purpose of Use	$ 100.00
___	8. Application to Appropriate	$ 25.00
___	9. Notice of Intent to Appropriate	$ 25.00
___	10. Application for Extension of Time	$ 50.00
___	11. Supplemental Well to a Surface Right	$ 100.00
___	12. Return Flow Credit	$ 100.00
___	13. Proof of Completion of Works	$ 25.00
___	14. Proof of Application of Water to Beneficial Use	$ 25.00
___	15. Water Development Plan	$ 100.00
___	16. Declaration of Livestock Water Impoundment	$ 10.00
___	17. Application for Livestock Water Impoundment	$ 10.00

C. Well Driller Fees

___	1. Application for Well Driller's License	$ 50.00
___	2. Application for Renewal of Well Driller's License	$ 50.00

D. Reproduction of Documents

___ @ 25¢/copy $_____

___ Map(s) $_____

E. Certification $_____

F. *Credit Card Convenience Fee $_____

G. Other_____ $_____

Comments:

App. for 6 new MWS @ El Paso Natural Gas Co.'s San Juan River Gas Plant

All fees are non-refundable.

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File No. SJ-4231 POD7-POD13

NEW MEXICO OFFICE OF THE STATE ENGINEER

WR-07 APPLICATION FOR PERMIT TO DRILL

A WELL WITH NO WATER RIGHT

(check applicable box):

STATE ENGINEER OFFICE
AZTEC, NEW MEXICO
2019 JUL 11 AM 11 58

For fees, see State Engineer website: http://www.ose.state.nm.us/

Purpose:	☐ Pollution Control And/Or Recovery	☐ Ground Source Heat Pump
☐ Exploratory Well (Pump test)	☐ Construction Site/Public Works Dewatering	☐ Other(Describe):
☒ Monitoring Well	☐ Mine Dewatering	

A separate permit will be required to apply water to beneficial use regardless if use is consumptive or nonconsumptive.

☒ Temporary Request - Requested Start Date: 7/5/18 Requested End Date: unknown

Plugging Plan of Operations Submitted? ☐ Yes ☒ No

1. APPLICANT(S)

Name: Joseph Wiley	Name: Jeffrey Minchak
Contact or Agent: check here if Agent ☐ El Paso Natural Gas Co, LLC	Contact or Agent: check here if Agent ☒ CH2M
Mailing Address: 1001 Louisiana Street, Room 757A	Mailing Address: 3721 Rutledge Rd NE, Suite B-1
City: Houston	City: Albuquerque
State: TX Zip Code: 77002	State: NM Zip Code: 87109
Phone: (713) 420-3475 ☐ Home ☐ Cell Phone (Work):	Phone: (505) 379-3222 ☐ Home ☒ Cell Phone (Work):
E-mail (optional): Joe_Wiley@kindermorgan.com	E-mail (optional): Jeffrey.Minchak@jacobs.com

FOR OSE INTERNAL USE Application for Permit, Form WR-07, Rev 11/17/16

File No.: SJ-4231 POD7-POD13	Trn. No.:	Receipt No.: 5-6156
Trans Description (optional):		
Sub-Basin:	PCW/LOG Due Date: July 27, 2019	

Received by OCD: 11/13/2025 11:14:36 AM

Released to Imaging: 11/14/2025 9:30:04 AM

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2. **WELL(S)** Describe the well(s) applicable to this application.

Location Required: Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84).
District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.

☒ NM State Plane (NAD83) (Feet)
☒ NM West Zone
☐ NM East Zone
☐ NM Central Zone

☐ UTM (NAD83) (Meters)
☐ Zone 12N
☐ Zone 13N

☐ Lat/Long (WGS84) (to the nearest 1/10th of second)

Well Number (if known):	X or Easting or Longitude:	Y or Northing or Latitude:	Provide if known: -Public Land Survey System (PLSS) (*Quarters or Halves, Section, Township, Range*) OR - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name
SJ-4231 POD 7 (MW-17)	2565938.02	2097797.49	SE/4 SW/4 of S36 T30N R15W
SJ-4231 POD 8 (MW-18)	2566349.85	2097654.88	SW SE/4 of S36 T30N R15W
SJ-4231 POD 9 (MW-19)	2566298.01	2097255.28	NE/4 NW/4 of S1 T29N R15W
SJ-4231 POD 10 (MW-20)	2566019.32	2096748.43	NE/4 NW/4 of S1 T29N R15W
SJ-4231 POD 11 (MW-21)	2565929.62	2097277.50	NE/4 NW/4 of S1 T29N R15W

NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions)
Additional well descriptions are attached: ☒ Yes ☐ No **If yes, how many** 2

Other description relating well to common landmarks, streets, or other:
Wells located at the San Juan River Gas Plant located at 99 Road 6500 Kirtland, NM 84717

Well is on land owned by: CCI San Juan, LLC

Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? ☒ Yes ☐ No
If yes, how many 2

Approximate depth of well (feet): 40	Outside diameter of well casing (inches): 4.5
Driller Name: Cascade Drilling LP	Driller License Number: WD-1210

3. **ADDITIONAL STATEMENTS OR EXPLANATIONS**

For Item 4: Wells are associated with environmental site investigation at the San Juan River Gas Plant under New Mexico Oil Conservation Division - Environmental Bureau rules. The wells are required to provide data related to the environmental investigation of groundwater that contains petroleum-related concentrations in exceedance of New Mexico Water Quality Control Commission standards. Monitoring wells are expected to be in use for 10 years and are monitored annually.

Wells are associated with existing permit SJ-4231 POD1-POD6.

2010 JUL 11 11 50 STATE ENGINEER OFFICE AZTEC, NEW MEXICO

FOR OSE INTERNAL USE — Application for Permit, Form WR-07

File No.: SJ-4231 POD 7-POD13	Trn No.:

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4. SPECIFIC REQUIREMENTS: The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application:

Exploratory: ☐ Include a description of any proposed pump test, if applicable.	**Pollution Control and/or Recovery:** ☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for the pollution control or recovery operation. ☐ The estimated maximum period of time for completion of the operation. ☐ The annual diversion amount. ☐ The annual consumptive use amount. ☐ The maximum amount of water to be diverted and injected for the duration of the operation. ☐ The method and place of discharge.	**Construction De-Watering:** ☐ Include a description of the proposed dewatering operation, ☐ The estimated duration of the operation, ☐ The maximum amount of water to be diverted, ☐ A description of the need for the dewatering operation, and, ☐ A description of how the diverted water will be disposed of.	**Mine De-Watering:** ☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for mine dewatering. ☐ The estimated maximum period of time for completion of the operation. ☐ The source(s) of the water to be diverted. ☐ The geohydrologic characteristics of the aquifer(s). ☐ The maximum amount of water to be diverted per annum. ☐ The maximum amount of water to be diverted for the duration of the operation. ☐ The quality of the water. ☐ The method of measurement of water diverted. ☐ The recharge of water to the aquifer. ☐ Description of the estimated area of hydrologic effect of the project. ☐ The method and place of discharge. ☐ An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. ☐ A description of the methods employed to estimate effects on surface water rights and underground water rights. ☐ Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.
Monitoring: ■ Include the reason for the monitoring well, and, ■ The duration of the planned monitoring.	☐ The method of measurement of water produced and discharged. ☐ The source of water to be injected. ☐ The method of measurement of water injected. ☐ The characteristics of the aquifer. ☐ The method of determining the resulting annual consumptive use of water and depletion from any related stream system. ☐ Proof of any permit required from the New Mexico Environment Department. ☐ An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.	**Ground Source Heat Pump:** ☐ Include a description of the geothermal heat exchange project, ☐ The number of boreholes for the completed project and required depths. ☐ The time frame for constructing the geothermal heat exchange project, and, ☐ The duration of the project. ☐ Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.	

ACKNOWLEDGEMENT

I, We (name of applicant(s)) Joseph Wiley
Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

Joseph Wiley
Applicant Signature

Applicant Signature

STATE ENGINEER OFFICE
AZTEC, NEW MEXICO
2018 JUL 11 AM 11:50

ACTION OF THE STATE ENGINEER

This application is:

☒ approved ☐ partially approved ☐ denied

provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the attached conditions of approval.

Witness my hand and seal this 27th day of July 20 18, for the State Engineer,

Tom Blaine, P.E., State Engineer

By: Blaine Watson
Signature

Blaine Watson
Print

Title: District V Manager
Print

STATE ENGINEER OF NEW MEXICO

FOR OSE INTERNAL USE

Application for Permit, Form WR-07

File No.: SJ-4231 POD7-POD13	Trn No.:

Received by OCD: 11/13/2025 11:14:36 AM

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NEW MEXICO OFFICE OF THE STATE ENGINEER

ATTACHMENT 1
POINT OF DIVERSION DESCRIPTIONS

This Attachment is to be completed if more than one (1) point of diversion is described on an Application or Declaration.

a. Is this a:	b. Information on Attachment(s):
☐ Move-From Point of Diversion(s) ☐ Move-To Point of Diversion(s)	Number of points of diversion involved in the application: 2 Total number of pages attached to the application: 1

☐ **Surface Point of Diversion** **OR** ☒ **Well**

Name of ditch, acequia, or spring:	
Stream or water course:	San Juan Underground Water Basin
Tributary of:	

c. Location (Required):
Required: Move to POD location coordinate must be either New Mexico State Plane (NAD 83), UTM (NAD 83), or Lat/Long (WGS84)

NM State Plane (NAD83) (feet) NM West Zone ☒ NM Central Zone ☐ NM East Zone ☐	UTM (NAD83) (meters) Zone 13N ☐ Zone 12N ☐	☐ Lat/Long–(WGS84) 1/10th of second	OTHER (allowable only for move-from descriptions - see application form for format) ☐ PLSS (quarters, section, township, range) ☐ Hydrographic Survey, Map & Tract ☐ Lot, Block & Subdivision ☐ Grant
POD Number: SJ-4231 POD 12 (MW-22)	X or Longitude: 2565822.83	Y or Latitude: 2097424.64	Other Location Description: NE/4 NW/4 of S1 T29N R15W
POD Number: SJ-4231 POD 13 (MW-23)	X or Longitude: 2565606.91	Y or Latitude: 2097292.45	Other Location Description: NE/4 NW/4 of S1 T29N R15W
POD Number:	X or Longitude:	Y or Latitude:	Other Location Description:
POD Number:	X or Longitude:	Y or Latitude:	Other Location Description:
POD Number:	X or Longitude:	Y or Latitude:	Other Location Description:
POD Number:	X or Longitude:	Y or Latitude:	Other Location Description:
POD Number:	X or Longitude:	Y or Latitude:	Other Location Description:
POD Number:	X or Longitude:	Y or Latitude:	Other Location Description:

STATE ENGINEER OFFICE
AZTEC, NEW MEXICO
2018 JUL 11 AM 11 50

FOR OSE INTERNAL USE

Form wr-08
POD DESCRIPTIONS - ATTACHMENT 1

File Number:	Trn Number:
Trans Description (optional):	

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STATE ENGINEER OFFICE
AZTEC, NEW MEXICO
2018 JUL 11 AM 11 51



Legend

- Fence
- Former Flare Pit
- Site Feature
- Proposed Monitoring Well Location
- Existing Monitoring Well
- Praxair Plant Monitoring Well

Figure 2
Proposed Monitoring Well Locations

San Juan River Gas Plant
Kirtland, New Mexico

ch2m

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NMOSE Permit to Drill a Non-Consumptive Well(s) and Well Plugging Plan of Operations
Conditions of Approval
SJ-4231 POD7-POD13

Upon review of the application materials, the New Mexico Office of the State Engineer (NMOSE) has determined that existing water rights will not be impaired by this activity. This application is approved without publication provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state. This application approval (i.e., permit) is further subject to the following conditions of approval.

1. This permit is approved as follows:

Permittee(s): El Paso CGP Company, LLC
via Jeffrey Minchak, CH2M (Jacobs), as Agent
1001 Louisiana St, Room 1310 B
Houston, TX 77002

Permit Number: SJ-4231

Application File Date: July 11, 2018

Priority: N/A

Source: Groundwater

Point(s) of Diversion: Seven new points of diversion (PODs), SJ-4231 POD7-POD13, are proposed to be installed for temporary use to conduct groundwater monitoring activities associated with the El Paso CGP San Juan River Gas Plant site investigation (Table 1). The wells (aka, point of diversion; POD) will be located on land owned by CCI San Juan, LLC near Kirtland, San Juan County, New Mexico. The PODs will be located within the SE/4 SW/4 and SW/4 SE/4 of Section 36, Township 30 North, Range 15 West, and the NE/4 NW/4 of Section 1, T29N, R15W, NMPM, at the following approximate point locations (State Plane NM West, NAD83; feet).

Table 1: Proposed Monitoring Wells.

POD Number and Owner's Well Name	Casing: Outside Diameter (inches) and Depth (feet)		X (feet)	Y (feet)
SJ-4231 POD7 (MW-17)	4.5	40	2,565,938.02	2,097,797.49
SJ-4231 POD8 (MW-18)	4.5	40	2,566,349.85	2,097,654.88
SJ-4231 POD9 (MW-19)	4.5	40	2,566,298.01	2,097,255.28
SJ-4231 POD10 (MW-20)	4.5	40	2,566,019.32	2,096,748.43
SJ-4231 POD11 (MW-21)	4.5	40	2,565,929.62	2,097,277.50
SJ-4231 POD12 (MW-22)	4.5	40	2,565,822.83	2,097,424.64
SJ-4231 POD13 (MW-23)	4.5	40	2,565,606.91	2,097,292.45

Purpose of Use: Groundwater monitoring

Place of Use: N/A

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Amount of Water: N/A

2. No water shall be appropriated and beneficially used from any wells or borings approved under this permit.

3. No water shall be diverted from the well(s) except for initial well development and periodic sampling purposes. Upon completion of monitoring activities the well(s) shall be plugged in accordance with Subsection C of 19.27.4.30 NMAC, unless a permit to use water is acquired from the NMOSE.

4. The well(s) may continue to be used indefinitely for groundwater sampling or monitoring required for the current site investigation and any associated remediation, so long as they remain in good repair. **A new permit shall be obtained from the NMOSE prior to replacing a well(s) or for any change in use as approved herein.**

5. Water well drilling and well drilling activities, including well plugging, are regulated under NMOSE Regulations 19.27.4 NMAC. These regulations apply, and provide both general and specific direction regarding the drilling of wells in New Mexico. Note that the construction of any well that allows groundwater to flow uncontrolled to the land surface or to move appreciably between geologic units is prohibited. Based on the proposed well construction information provided regarding the subject well(s), the following variances have been provided from 19.27.4.29 and 19.27.4.30 NMAC.

6. In accordance with Subsection A of 19.27.4.29 NMAC, on-site supervision of well drilling/plugging is required by the holder of a New Mexico Well Driller License or a NMOSE-registered Drill Rig Supervisor. The New Mexico licensed Well Driller shall ensure that well drilling activities are completed in accordance with 19.27.4.29, 19.27.4.30 and 19.27.4.31 NMAC. However, pursuant to 72-12-12 NMSA 1978 and 19.27.4.8 NMAC, a driller's license is not required for the construction of a driven well with an outside casing diameter of 2⅞ inches or less and that does not require the use of a drill rig (e.g., auger) for installation. This exemption is not applicable to well plugging.

7. The permittee has not stated whether artesian conditions are likely to be encountered at the proposed well/borehole location(s). However, if artesian conditions are encountered during drilling, all rules and regulations pertaining to the drilling and casing and plugging of artesian wells shall be followed.

8. A Well Record documenting the as-built well construction and materials used shall be filed for each of the new wells in accordance with Subsection N of 19.27.4.29 NMAC. **Well Records shall be filed with the State Engineer (NMOSE District V, 100 Gossett Drive, Suite A, Aztec, NM, 87410) within 30 days after completion of the well(s).** Well installation(s) shall be complete and the well record(s) filed no later than one year from the date of approval of this permit. The well record form is available at http://www.ose.state.nm.us/STST/wdForms.php.

9. If the required Well Record documentation is not received within one year of the date of permit approval, this permit will automatically expire.

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10. When the permittee receives approval or direction to permanently abandon the well(s)/borehole(s) covered by this permit, plugging shall be performed by a New Mexico licensed well driller. The well(s)/borehole(s) shall be plugged pursuant to Subsection C of 19.27.4.30 NMAC using the following method, unless an alternate plugging method has been proposed by or on behalf of the well owner and approved by the NMOSE. If a well/borehole has encountered artesian conditions, a Well Plugging Plan of Operations shall be submitted and NMOSE approval obtained *prior* to the initiation of *any* well plugging activities concerning artesian wells. Additionally, if the following standardized plugging sealant is not appropriate for use due to incompatibility with the water quality or any soil and water contaminates encountered, a Well Plugging Plan of Operations shall be submitted and NMOSE approval obtained *prior* to the initiation of *any* well plugging activities.

    a. Obstructions in a well/borehole shall be identified and removed if possible. If an obstruction cannot be removed, the method used to grout below and around the obstruction shall be described in detail in the plugging record.

    b. Prior to plugging, calculate the theoretical volume of sealant needed for abandonment of the well/borehole based on the actual measured pluggable depth of the well/borehole and the volume factor for the casing/borehole diameter. Compare the actual volume of sealant placed in the well/borehole with the theoretical volume to verify the actual volume of sealant is equal to or exceeds the theoretical volume.

    c. Portland Type I/II cement shall be used for the plugging sealant. The water mixed with the cement to create the plugging sealant shall be potable water or of similar quality. Portland cement has a fundamental water demand of 5.2 gallons of water per 94-lb sack of cement. Up to a maximum of 6.0 gallons per 94-lb sack is acceptable to allow for greater pumpability.

    Pure bentonite powder ("90 barrel yield") is allowed as a cement additive by NMOSE and American Water Works Association (AWWA) guidelines. If a bentonite additive is used, the following rates and mixing guidelines shall be followed. For a rate or a mixing procedure other than that provided below, the NMOSE District V office must be contacted for pre-approval. Neither granular bentonite nor extended-yield bentonite shall be mixed with cement for the purpose of this plugging activity. When supplementing a cement slurry with bentonite powder, water demand for the mix increases at a rate of approximately 0.65 gallon of water for each 1% increment of bentonite bdwc (by dry weight cement) above the stated base water demand of 5.2 gallons water per 94-lb sack of cement for neat cement. Bentonite powder must be hydrated separately with its required increment of water before being mixed into the wet neat cement. If water is otherwise added to the combination of dry ingredients or the dry bentonite is blended into wet cement, the alkalinity of the cement will restrict the yield of the bentonite powder, resulting in excess free water in the slurry and excessive cement shrinkage upon curing.

    d. Placement of the sealant within the well/borehole shall be by pumping through a tremie pipe extended to near the bottom of the well/borehole and kept below the top of the slurry column (i.e., immersed in the slurry) as the well/borehole is plugged from bottom upwards in a manner that displaces the standing water column.

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e. Prior to, or upon completion of plugging, the well casing may be cut-off below grade as necessary to allow for approved construction onsite, provided a minimum six-inch thickness of reinforced abandonment plugging sealant or concrete completely covers the top of the cut-off casing. Any remaining void to the surface may be filled with native soil, concrete, or asphalt as needed to match the surrounding surface material and blended with the surface topography to prevent ponding.

f. **Within 30 days after completion of well/borehole plugging, a complete Plugging Record shall be filed with the State Engineer** in accordance with Paragraph (3) of Subsection C of 19.27.4.30 NMAC for each well/boring plugged. The Well Plugging Record(s) shall be filed with the State Engineer at the NMOSE District V Office, 100 Gossett Drive, Suite A, Aztec, NM 87410. The well plugging record form is available at http://www.ose.state.nm.us/STST/wdForms.php.

11. In accordance with Subsection C of 19.27.4.30 NMAC, a well/borehole that does not encounter groundwater may be immediately plugged by filling with drill cuttings or clean native fill to within 10 feet of land surface and by plugging the remaining 10 feet to the land surface with a sealant approved by the Office of the State Engineer. A Plugging Record shall be filed with the State Engineer as described above.

12. Should another regulatory agency sharing jurisdiction of the project authorize, or by regulation require, more stringent requirements than stated herein, the more stringent procedure should be followed. These, among others, may include provisions regarding pre-authorization to proceed, type of methods and materials used, inspection, or prohibition of free discharge of any fluid or other material to or from the well that is related to the drilling and/or monitoring process.

13. Pursuant to 72-12-3 NMSA 1978, the applicant may or may not have provided written documentation which the applicant claims as confirmation that access has been granted for the aforementioned well(s) to be located on property owned by someone other than the well owner/applicant. NMOSE approval of this permit in no way infers the right of access to land not owned by the well owner/applicant.

14. The State Engineer retains jurisdiction of this permit.

The application for non-consumptive use for well(s) SJ-4231 POD7-POD13, submitted on July 11, 2018, is hereby approved with the aforesaid conditions applied, when signed by an authorized designee of the State Engineer:

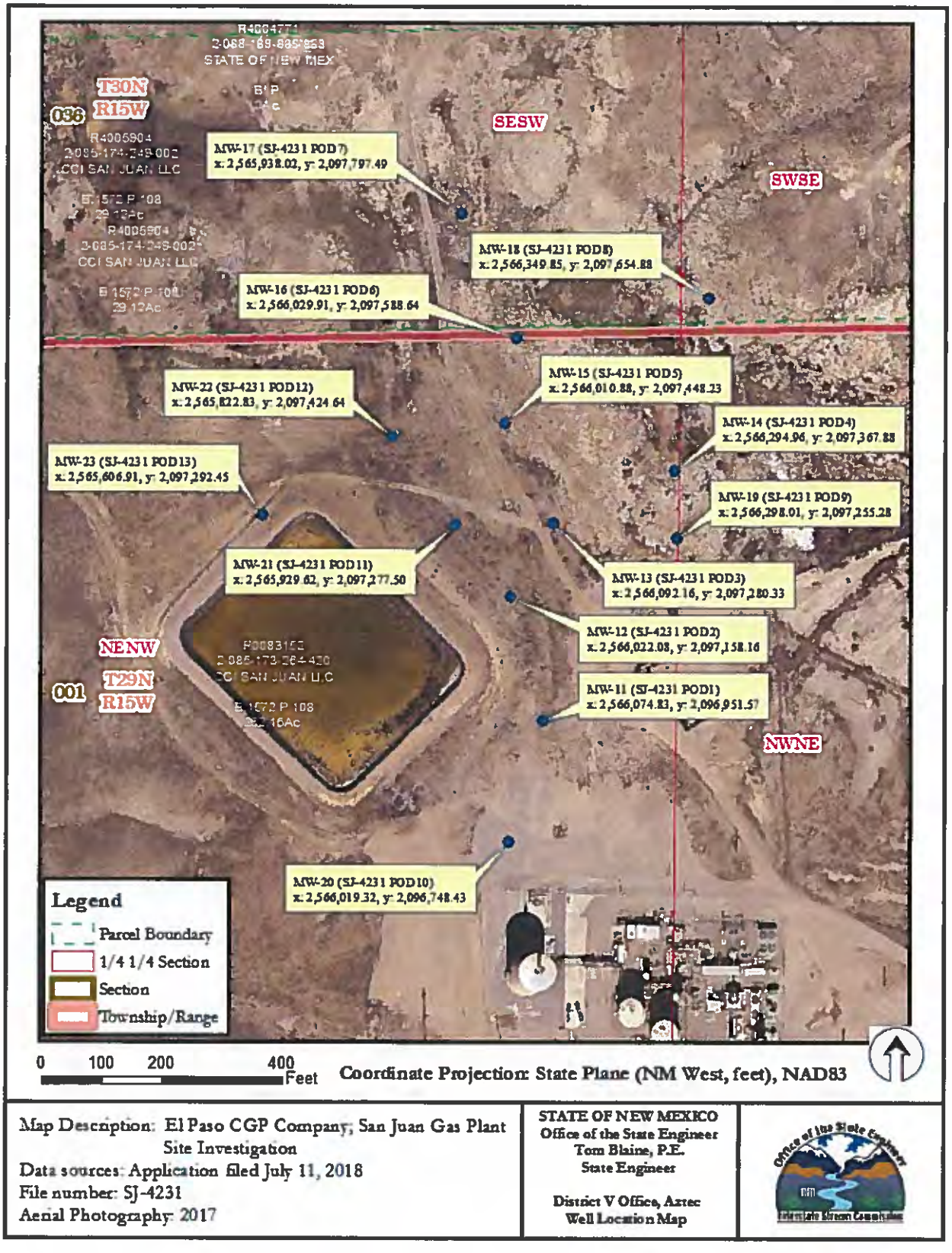
Witness my hand and seal this 27th day of July, A.D. 2018.
Tom Blaine, P.E., State Engineer

By: _____
Blaine Watson, Manager
Water Rights Division District V

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Map Description: El Paso CGP Company, San Juan Gas Plant Site Investigation
Data sources: Application filed July 11, 2018
File number: SJ-4231
Aerial Photography: 2017

STATE OF NEW MEXICO
Office of the State Engineer
Tom Blaine, P.E.
State Engineer

District V Office, Aztec
Well Location Map

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Appendix B
Soil Boring Logs and Well Completion Diagrams

ch2m.	PROJECT NUMBER 683527.01.02	BORING NUMBER SB-01	SHEET # 1 of 1
	SOIL BORING LOG		LOGGER: K. Mouzakis
PROJECT : San Juan River Gas Plant Site Investigation	Date: 4/12/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Not surveyed / TOTAL DEPTH OF BORING: 8 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1	2	CL	**LEAN CLAY** (CL), 2.5 Y 4/4, olive brown, moist, medium plasticity	VOCs = 0.0 ppm
2				
3			**Pea Gravel, backfill from hydro-excavation**	
4				
5			5	5
6				
7				
8				Refusal at 8 ft bgs
9				
10			10	10
11				
12				
13				
14				
15			15	15
16				
17				
18				
19				
20			20	20
21				
22				
23				
24				
25			25	

Sampler Signature: Katy Mouzakis Date: 4/12/2017

ch2m:	PROJECT NUMBER 683527.01.02	BORING NUMBER SB-02	SHEET # 1 of 1	
	SOIL BORING LOG		LOGGER: K. Mouzakis	
PROJECT : San Juan River Gas Plant Site Investigation	Date: 4/12/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Not surveyed	TOTAL DEPTH OF BORING: 20 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1	2	CL	**LEAN CLAY** (CL), 2.5 YR 5/4, weak red, soft, medium plasticity, 10-20% coarse sand	VOCs = 0.0 ppm
2				
3			**Pea Gravel, backfill from hydro-excavation**	
4				
5			5	5
6				
7				
8				
9				
10			10	10
11				
12			No Recovery	
13				
14	1	CL	**LEAN CLAY** (CL), mottled orange and black, firm, stiff, medium plasticity	VOCs = 0.0 ppm
15			15	15
16				
17				
18				
19	1	CL	**LEAN CLAY** (CL), moist, soft, with 20% sand	VOCs = 0.0 ppm
20		Shale	**SHALE**, low plasticity 20	Refusal at 20 ft bgs 20
21				
22				
23				
24				
25			25	25

Sampler Signature: Katy Mouzakis Date: 4/12/2017

ch2m:	PROJECT NUMBER 683527.01.02	BORING NUMBER SB-03	SHEET # 1 of 1
	SOIL BORING LOG		LOGGER: K. Mouzakis
PROJECT : San Juan River Gas Plant Site Investigation	Date: 4/11/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Not surveyed / TOTAL DEPTH OF BORING: 17 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1–2	1.5	CL	**LEAN CLAY** (CL), 10 YR 6/3, pale brown, moist, medium plasticity	VOCs = 0.0 ppm
3–8			**Pea Gravel, backfill from hydro-excavation**	
9–13	2.5	CL	**LEAN CLAY** (CL), 7.5 YR 5/8, strong brown and 2.5 Y 5/1, gray, dry to moist, medium plasticity, slight staining and odor	VOCs = 170 ppm
14–17	1.5	Shale	**SHALE**, 2.5 Y 5/1, gray, dry to moist, low to medium plasticity, soft to stiff, no odors	VOCs = 180 ppm Refusal at 17 ft bgs
18–25				

Sampler Signature: Katy Mouzakis Date: 4/11/2017

ch2m.	PROJECT NUMBER 683527.01.02	BORING NUMBER SB-04	SHEET # 1 of 1	
	SOIL BORING LOG		LOGGER: K. Mouzakis	
PROJECT : San Juan River Gas Plant Site Investigation	Date: 4/11/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Not surveyed	TOTAL DEPTH OF BORING: 24 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1–8			**Pea Gravel, backfill from hydro-excavation**	
9–13	2	CL	**LEAN CLAY** (CL), 2.5 Y 5/2, greyish brown, moist to wet, medium plasticity, soft, 20% sub-angular well graded coarse gravel	VOCs = 0.2 ppm slight odor
14–18	2	Shale	**SHALE**, weathered, 2.5 Y 5/1 grey, dry, medium plasticity, soft	VOCs = 3.4 ppm
19–23	2.5	Shale	**SHALE**, weathered, 2.5 Y 5/1 grey, and black, 2.5 Y 3/1, very dark grey, dry, medium plasticity, soft Last 2" to 3" is unweathered Shale	VOCs = 0.1 ppm
24			No Recovery	Refusal at 24 ft bgs
25				

Sampler Signature: Katy Mouzakis Date: 4/11/2017

ch2m.	PROJECT NUMBER 683527.01.02	BORING NUMBER SB-05	SHEET # 1 of 2
	SOIL BORING LOG		LOGGER: K. Mouzakis
PROJECT : San Juan River Gas Plant Site Investigation	Date: 4/12/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Not surveyed TOTAL DEPTH OF BORING: 38 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1–2	2	CL	**LEAN CLAY** (CL), 10 YR 5/4, yellowish brown, moist, low to medium plasticity, soft, 10% coarse sand	
3–8			**Pea Gravel, backfill from hydro-excavation**	
9–10	3	Shale	**LEAN CLAY** (CL), 2.5 Y 5/1, gray, dry, medium plasticity	
11			**LEAN CLAY** (CL), 2.5 Y 5/1, gray, dry, medium plasticity, staining and strong odor	VOCs = 115 ppm
12–13			No Recovery	
14–15	5	Shale	**LEAN CLAY** (CL), 2.5 YR 4/1, dark reddish gray, dry, medium plasticity, strong odor, black staining	VOCs = 371 ppm VOCs = 471 ppm
16–17				VOCs = 106 ppm
18–20	3	Shale	**LEAN CLAY** (CL), 2.5 YR 4/1, dark reddish gray, dry to moist, medium plasticity, strong odor, 20% orange staining	VOCs = 4.6 ppm
21–24	4.5	Shale	**LEAN CLAY** (CL), 2.5 YR 5/4, weak red, dry, low plasticity, no odor	VOCs = 10.3 ppm
25				

Sampler Signature: Katy Mouzakis Date: **4/12/2017**

ch2m:	PROJECT NUMBER 683527.01.02	BORING NUMBER SB-05	SHEET # 2 of 2	
	SOIL BORING LOG		LOGGER: K. Mouzakis	
PROJECT : San Juan River Gas Plant Site Investigation	Date: 4/12/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Not surveyed	TOTAL DEPTH OF BORING: 38 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
26		Shale	**LEAN CLAY** (CL), 2.5 YR 5/4, weak red, dry, low plasticity, no odor	VOCs = 4.6 ppm
27				
28				
29	4	Shale	**SHALE**, weathered, 2.5 YR 6/1, reddish grey , dry	
30				VOCs = 1.7 ppm
31				
32	4.5	Shale	**SHALE**, weathered, 2.5 YR 6/1, reddish grey , dry	
33				
34				
35				VOCs = 0.2 ppm
36				End of boring
37				
38				
39				
40				
41				
42				
43				
44				
45				
46				
47				
48				
49				
50				

Sampler Signature: Katy Mouzakis Date: 4/12/2017

ch2m:	PROJECT NUMBER 683527.01.02	BORING NUMBER SB-06	SHEET # 1 of 2	
	SOIL BORING LOG		LOGGER: K. Mouzakis	
PROJECT : San Juan River Gas Plant Site Investigation	Date: 4/11/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Not surveyed	TOTAL DEPTH OF BORING: 33 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1–8	8		**Pea Gravel, backfill from hydro-excavation**	
5				5
8–13	3	CL	**LEAN CLAY** (CL), 2.5 Y 3/2, very dark grayish brown, dry to moist, low to medium plasticity, soft, with orange mottles	VOCs = 58.1 ppm
10				10
13–18	2	CL	**SANDY LEAN CLAY** (CL), 2.5 Y 4/1, dark gray, no to low plasticity, soft, 25% fine to coarse sand	VOCs = 9.1 ppm
15				15
18–23	2	CL	**LEAN CLAY** (CL), 2.5 Y 5/2, grayish brown, dry, medium plasticity, stiff, slight odor	VOCs = 14.2 ppm
20				20
23–25	3	Shale	**SHALE**, 2.5 Y 5/1, gray, dry, low to medium plasticity, soft, no odor	VOCs = 0.4 ppm
25				25

Sampler Signature: Katy Mouzakis Date: **4/11/2017**

ch2m.	PROJECT NUMBER 683527.01.02	BORING NUMBER SB-06	SHEET # 2 of 2
	SOIL BORING LOG		LOGGER: K. Mouzakis
PROJECT : San Juan River Gas Plant Site Investigation	Date: 4/11/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Not surveyed / TOTAL DEPTH OF BORING: 33 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
26–28		Shale	**SHALE**, 2.5 Y 5/1, gray, dry, low to medium plasticity, soft, no odor	
29–33	2	Shale	**SHALE**, 2.5 Y 3/1, very dark gray, dry, low to medium plasticity, soft	VOCs = 0.0 ppm Refusal at 33 ft bgs
34–50				

Sampler Signature: Katy Mouzakis Date: 4/11/2017

ch2m.	PROJECT NUMBER 683527.01.02	BORING NUMBER SB-07	SHEET # 1 of 2	
	SOIL BORING LOG		LOGGER: K. Mouzakis	
PROJECT : San Juan River Gas Plant Site Investigation	Date: 4/11/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Not surveyed	TOTAL DEPTH OF BORING: 27 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1–2	2	CL	**SANDY LEAN CLAY** (CL), 2.5 Y 5/4, olive brown, moist, low to mediume plasticity, 30% coarse sand, 5% fine to coarse gravel	VOCs = 0.0 ppm
3–8			**Pea Gravel, backfill from hydro-excavation**	
9–13	2	CL	**LEAN CLAY** (CL), 2.5 YR 5/4, light olive brown, dry to moist, medium plasticity, stiff	VOCs = 0.1 ppm
14–18	3	CL	**LEAN CLAY** (CL), 2.5 YR 4/3, olive brown, dry to moist, medium plasticity, medium stiffness. Weathered Shale	VOCs = 0.7 ppm
19–23	4	CL	**LEAN CLAY WITH SAND** (CL), 2.5 Y 4/2, dark graying brown, dry, medium plasticity, soft, fine to coarse grained sand	VOCs = 0.0 ppm
24–25	2	Shale	**SHALE**, 2.5 Y 4/1, gray, dry, low to medium plasticity	VOCs = 0.1 ppm

Sampler Signature: Katy Mouzakis Date: 4/11/2017

ch2m.	PROJECT NUMBER 683527.01.02	BORING NUMBER SB-07	SHEET # 2 of 2
	SOIL BORING LOG		LOGGER: K. Mouzakis
PROJECT : San Juan River Gas Plant Site Investigation	Date: 4/11/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Not surveyed / TOTAL DEPTH OF BORING: 27 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
26		Shale	**SHALE**, 2.5 Y 4/1, gray, dry, low to medium plasticity	VOCs = 0.1 ppm
27			27	Refusal at 27 ft bgs 27
28				
29				
30			30	30
31				
32				
33				
34				
35			35	35
36				
37				
38				
39				
40			40	40
41				
42				
43				
44				
45			45	45
46				
47				
48				
49				
50			50	50

Sampler Signature: Katy Mouzakis Date: 4/11/2017

ch2m.	PROJECT NUMBER 683527.01.02	BORING NUMBER SB-08	SHEET # 1 of 2	
	SOIL BORING LOG		LOGGER: K. Mouzakis	
PROJECT : San Juan River Gas Plant Site Investigation	Date: 4/11/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Not surveyed	TOTAL DEPTH OF BORING: 35 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1–2	2	CL	**LEAN CLAY** (CL), 10 YR 5/6, yellowish brown, moist, medium plasticity, medium stiffness, mottling gray and orange	
3–8			**Pea Gravel, backfill from hydro-excavation**	VOCs = 4.6 ppm
9–13	1	CL	**LEAN CLAY WITH SAND** (CL), 2.5 Y 3/1, very dark gray, dry to moist, low to medium plasticity, soft, fine to coarse graded sand. Some odor	VOCs = 61.7 ppm
14–18	2	CL	**LEAN CLAY WITH SAND** (CL), 2.5 Y 1/1, black, dry, low to medium plasticity, soft, fine to coarse graded sand. Strong odor and staining.	VOCs = 450 ppm
19–23	1	CL	**LEAN CLAY** (CL), 2.5 Y 4/2, dark grayish brown, dry, low to medium plasticity, soft, trace shale pieces	VOCs = 7.7 ppm
24–25	2	CL	**LEAN CLAY** (CL), 2.5 Y 5/1, gray, dry, medium plasticity, weathered shale	VOCs = 1.4 ppm

Sampler Signature: Katy Mouzakis Date: **4/11/2017**

ch2m.	PROJECT NUMBER 683527.01.02	BORING NUMBER SB-08	SHEET # 2 of 2
	SOIL BORING LOG		LOGGER: K. Mouzakis
PROJECT : San Juan River Gas Plant Site Investigation	Date: 4/11/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Not surveyed / TOTAL DEPTH OF BORING: 35 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
26–28		CL	**LEAN CLAY** (CL), 2.5 Y 5/1, gray, dry, medium plasticity, weathered shale	
29–33	3	CL	**LEAN CLAY** (CL), 2.5 Y 5/1, gray, dry, weathered shale	VOCs = 4.0 ppm
34	1	Shale	**SHALE**, 2.5 Y 3/1, very dark gray, dry, low to medium plasticity	VOCs = 0.0 ppm
35				Refusal at 35 ft bgs
36–50				

Sampler Signature: Katy Mouzakis Date: 4/11/2017

ch2m SM	PROJECT NUMBER 683527.01.02	BORING NUMBER SB-09	SHEET # 1 of 1
	SOIL BORING LOG		LOGGER: K. Mouzakis
PROJECT : San Juan River Gas Plant Site Investigation	Date: 3/28/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Not surveyed / TOTAL DEPTH OF BORING: 14 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1–8			**Pea Gravel, backfill from hydro-excavation**	
9–10		CL	**LEAN CLAY WITH GRAVEL** (CL), 2.5 Y 6/6, olive yellow, medium plasticity, stiff. Slight odor and staining	VOCs = 7.8 ppm
11	2.5	CL	**LEAN CLAY** (CL), 2.5 Y 6/6, olive yellow, medium plasticity, stiff. Mottling white and gray	
12		GW	**WELL GRADED GRAVEL** (GW), 2.5 Y 5/4, light olive brown, damp to wet	
13			No Recovery	
14	0.5	CL	**LEAN CLAY** (CL), 2.5 Y 6/6, olive yellow, medium plasticity, stiff. Mottling white and gray	VOCs = 1 ppm
15				Refusal at 14 ft bgs
16–25				

Sampler Signature: Katy Mouzakis Date: 3/28/2017

ch2m:	PROJECT NUMBER 683527.01.02	BORING NUMBER SB-10	SHEET # 1 of 2
	SOIL BORING LOG		LOGGER: K. Mouzakis
PROJECT : San Juan River Gas Plant Site Investigation	Date: 3/28/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Not surveyed / TOTAL DEPTH OF BORING: 38.5 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1–8			**Pea Gravel, backfill from hydro-excavation**	
9–10		ML	**SILT WITH SAND** (ML), 2.5 Y 5/1, gray, wet, dark gray and brown mottling. Some staining an odor	VOCs = 17.5 ppm
10–11	3	CL	**LEAN CLAY** (CL), 10 YR 5/6, yellowish brown, damp, medium plasticity, stiff, tracel gravel. Staining and hydrocarbon odor	Water present in core barrel
11–13			No Recovery	
14–15	1	CL	**LEAN CLAY** (CL) 5 YR 4/4, reddish brown, moist, medium stiffness. Slight stain	VOCs = 18.5 ppm
15–20	2.5	ML	**SILT WITH GRAVEL** (ML), 10 YR 6/4, light yellowish brown, dry to damp, low plasticity, weakly cemented. Slight odor	VOCs = 31.3 ppm
20–25	1.5	ML	**SILT WITH GRAVEL** (ML), 10 YR 6/4, light yellowish brown, dry, low plasticity, weakly cemented.	VOCs = 3.6 ppm

Sampler Signature: Katy Mouzakis Date: 3/27/2017

ch2m:	PROJECT NUMBER 683527.01.02	BORING NUMBER SB-10	SHEET # 2 of 2
	SOIL BORING LOG		LOGGER: K. Mouzakis
PROJECT : San Juan River Gas Plant Site Investigation	Date: 3/28/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Not surveyed / TOTAL DEPTH OF BORING: 38.5 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
26			No Recovery	
27				
28				
29	5	Shale	**SHALE**, 2.5 Y 3/1, dark gray, dry, 20% organic matter	
30				VOCs = 0.3 ppm
31				
32				
33				
34	5	Shale	**SHALE**, 2.5 Y 3/1, dark gray, dry, 20% organic matter	VOCs = 0.9 ppm
35				
36				
37				
38				
39				Refusal at 38.5 ft bgs
40				
41				
42				
43				
44				
45				
46				
47				
48				
49				
50				

Sampler Signature: Katy Mouzakis Date: 3/27/2017

ch2m	PROJECT NUMBER 683527.01.02	BORING NUMBER SB-11	SHEET # 1 of 2	
	SOIL BORING LOG		LOGGER: K. Mouzakis	
PROJECT : San Juan River Gas Plant Site Investigation	Date: 3/31/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Not surveyed	TOTAL DEPTH OF BORING: 30 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1			**LEAN CLAY (CL),** 2.5 Y 5/4, light olive brown, medium plasticity, few silt	
2			**Pea Gravel, backfill from hydro-excavation**	
3				
4				
5			5	5
6				
7				
8				
9			**Pea Gravel, backfill from hydro-excavation**	
10	2	CL	**LEAN CLAY** (CL) 10 YR 6/4, light yellowish brown 10	VOCs = 6.7 ppm 10
11				
12				
13				
14	4	CL	**LEAN CLAY** (CL), 10 YR 3/2, very dark grayish brown, moist, medium plasticity, soft. Strong odor, uniform staining from 16 to 18 ft bgs	
15			15	15
16				VOCs = 334.7 ppm
17				
18				
19	5	CL	**LEAN CLAY** (CL), 2.5 YR 4/6, light olive brown, dry, low plasticity, stiff. Slight odor. Sandstone intervals	
20			20	VOCs = 20 ppm 20
21				
22				
23				
24	4	Sandstone	**SANDSTONE**, weathered, 2.5 Y 4/1, dark gray, moist. Stained	
25			25	25

Sampler Signature: Katy Mouzakis Date: **3/31/2017**

ch2m:	PROJECT NUMBER 683527.01.02	BORING NUMBER SB-11	SHEET # 2 of 2
	SOIL BORING LOG		LOGGER: K. Mouzakis
PROJECT : San Juan River Gas Plant Site Investigation	Date: 3/31/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Not surveyed / TOTAL DEPTH OF BORING: 30 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
26		Sandstone	**SANDSTONE**, weathered, 2.5 Y 4/1, dark gray, moist. Stained	VOCs = 28.5 ppm
27				
28				
29	2	Sandstone	**SANDSTONE**, unweathered, 10 YR 6/3, pale brown, dry, low to no plasticity, stiff, poorly graded	VOCs = 5.6 ppm
30				Refusal at 30 ft bgs
31				
32				
33				
34				
35				
36				
37				
38				
39				
40				
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42				
43				
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45				
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47				
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Sampler Signature: Katy Mouzakis Date: 3/31/2017

ch2m:	PROJECT NUMBER 683527.01.02	BORING NUMBER SB-12
	SOIL BORING LOG	SHEET # 1 of 2
		LOGGER: K. Mouzakis
PROJECT : San Juan River Gas Plant Site Investigation	Date: 4/10/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP
		COORDINATES: Not surveyed
		TOTAL DEPTH OF BORING: 30 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1–8			**Pea Gravel, backfill from hydro-excavation**	
9–13	2	CL	**LEAN CLAY WITH GRAVEL** (CL), 2.5 Y 4/4, olive brown, wet, low plasticity, soft, gravel is well graded, 5% coarse sand	VOCs = 0.0 ppm
14–18	1	CL	**LEAN CLAY** (CL), 2.5 Y 4/4, olive brown, wet, very stiff, 20% fine to coarse poorly graded sand	VOCs = 0.0 ppm
19	4	CL	**LEAN CLAY** (CL), 2.5 Y 4/4, olive brown, wet, very stiff, 20% fine to coarse poorly graded sand	
20–23		CL	**LEAN CLAY** (CL), 2.5 Y 4/2, dark grayish brown, dry, medium plasticity, soft, 5% sand	VOCs = 66.2 ppm
24–25	3	Shale	**SHALE**, weathered, 2.5 Y 4/1, dark gray, dry, low to medium plasticity, soft	

Sampler Signature: Katy Mouzakis Date: **4/10/2017**

ch2m:	PROJECT NUMBER 683527.01.02	BORING NUMBER SB-12	SHEET # 2 of 2	
	SOIL BORING LOG		LOGGER: K. Mouzakis	
PROJECT : San Juan River Gas Plant Site Investigation	Date: 4/10/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Not surveyed	TOTAL DEPTH OF BORING: 30 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
26		Shale	**SHALE,** weathered, 2.5 Y 4/1, dark gray, dry, low to medium plasticity, soft	VOCs = 1.2 ppm
27				
28				
29	1	Shale	**SHALE**, weathered, 2.5 Y 4/1, dark gray, dry, low to medium plasticity, soft	VOCs = 0.0 ppm
30				Refusal at 30 ft bgs
31				
32				
33				
34				
35				
36				
37				
38				
39				
40				
41				
42				
43				
44				
45				
46				
47				
48				
49				
50				

Sampler Signature: Katy Mouzakis Date: 4/10/2017

ch2m:	PROJECT NUMBER 683527.01.02	BORING NUMBER SB-13	SHEET # 1 of 1
	SOIL BORING LOG		LOGGER: K. Mouzakis
PROJECT : San Juan River Gas Plant Site Investigation	Date: 4/5/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Not surveyed / TOTAL DEPTH OF BORING: 22 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1–8			**Pea Gravel, backfill from hydro-excavation**	
9–13	2	ML	**GRAVELLY SILT** (ML), 7.5 YR 4/4, brown, dry, no plasticity	
14–18	2	ML	**SANDY SILT** (ML), 2.5 YR 6/3, light yellowish brown, dry, no to low plasticity, sand is coarse	
19–22	1	CL	**SANDY CLAY** (CL), 2.5 YR 5/4, brown, low to medium plasticity, soft	Refusal at 22 ft bgs
23–25				

Sampler Signature: Katy Mouzakis Date: 4/5/2017

ch2m:	PROJECT NUMBER 683527.01.02	BORING NUMBER SB-14	SHEET # 1 of 2
	SOIL BORING LOG		LOGGER: K. Mouzakis
PROJECT : San Juan River Gas Plant Site Investigation	Date: 3/31/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Not surveyed / TOTAL DEPTH OF BORING: 38.5 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1–13			**Pea Gravel, backfill from hydro-excavation**	
14–18	1	ML	**SILT WITH GRAVEL** (ML), 2.5 Y 4/2, dark grayish brown, dry to moist, no plasticity, soft, gravel is fine to coarse	VOCs = 0.1 ppm
19–23	1.5	CL	**LEAN CLAY** (CL), 2.5 Y 5/2, grayish brown, dry, soft, medium plasticity, mottled olive brown. Staining and odor	VOCs = 73.1 ppm
24–25		CL	**LEAN CLAY** (CL), 2.5 Y 5/2, grayish brown, dry, soft, medium plasticity, mottled olive brown. Staining and odor	VOCs = 7.0 ppm

Sampler Signature: Katy Mouzakis Date: **3/31/2017**

ch2m	PROJECT NUMBER 683527.01.02	BORING NUMBER SB-14	SHEET # 2 of 2
	SOIL BORING LOG		LOGGER: K. Mouzakis
PROJECT : San Juan River Gas Plant Site Investigation	Date: 3/31/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Not surveyed / TOTAL DEPTH OF BORING: 38.5 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
26			No Recovery	
27				
28				
29			**SHALE**, weathered, 2.5 Y 4/1, dark gray, dry	
30	4	Shale		
31				
32				
33				
34			**SHALE**, weathered, 2.5 Y 5/1, gray, dry, hard	
35	4	Shale		
36				
37				
38				Refusal at 38 ft bgs
39				
40				
41				
42				
43				
44				
45				
46				
47				
48				
49				
50				

Sampler Signature: Katy Mouzakis Date: 3/31/2017

ch2m:	PROJECT NUMBER 683527.01.02	BORING NUMBER SB-15	SHEET # 1 of 1	
	SOIL BORING LOG		LOGGER: K. Mouzakis	
PROJECT : San Juan River Gas Plant Site Investigation	Date: 4/10/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Not surveyed	TOTAL DEPTH OF BORING: 21 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1	1	CL	**SANDY CLAY (CL)**, 2.5 Y 5/4, light olive brown, dry to moist, low plasticity, soft, few coarse sand, trace gravel	
2			**Pea Gravel, backfill from hydro-excavation**	
3				
4				
5			5	5
6				
7				
8				
9	3	CL	**LEAN CLAY** (CL), 2.5 YR 5/3, light olive brown, dry to moist, medium plasticity, soft to stiff, trace gravel	
10			10	10
11				
12				
13				
14	2	CL	**LEAN CLAY** (CL), 2.4 YR 5/4, light olive brown, dry to moist, medium plasticity, soft to stiff	
15			15	VOCs = 0.2 ppm 15
16				
17				
18				
19	2	CL	**LEAN CLAY** (CL), 2.5 YR 4/2, dark grayish brown, dry, low to medium plasticity, soft, 20% coarse poorly graded sand	
20			20	VOCs = 0.1 ppm 20
21				Refusal at 21 ft bgs
22				
23				
24				
25			25	25

Sampler Signature: Katy Mouzakis Date: 4/10/2017

ch2m.	PROJECT NUMBER 683527.01.02	BORING NUMBER SB-16	SHEET # 1 of 1	
	SOIL BORING LOG		LOGGER: K. Mouzakis	
PROJECT : San Juan River Gas Plant Site Investigation	Date: 4/10/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Not surveyed	TOTAL DEPTH OF BORING: 24 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1	1	CL	**LEAN CLAY (CL)**, 2.5 YR 5/4, weak red, moist, medium plasticity, soft to firm	
2			**Pea Gravel, backfill from hydro-excavation**	
3				
4				
5			5	5
6				
7				
8				
9			**LEAN CLAY** (CL), 2.5 YR 5/3, light olive brown, wet, low to medium plasticity	
10	2	CL	10	VOCs = 0.0 ppm 10
11				
12				
13				
14			**LEAN CLAY** (CL), 2.4 YR 5/4, light olive brown, dry to moist, medium plasticity, medium stiff	
15	3	CL	15	VOCs = 0.0 ppm 15
16				
17				
18				
19			**LEAN CLAY** (CL), 2.5 YR 4/2, dark grayish brown, dry, low to medium plasticity, soft, 20% coarse poorly graded sand	
20	3	CL	20	VOCs = 0.5 ppm 20
21				
22				
23				
24	1	Shale	**SHALE**, weathered, 2.5 Y 4/1, dark gray, dry, low to medium plasticity	
25			25	Refusal at 24 ft bgs 25

Sampler Signature: Katy Mouzakis Date: **4/10/2017**

ch2m:	PROJECT NUMBER 683527.01.02	BORING NUMBER SB-17	SHEET # 1 of 2	
	SOIL BORING LOG		LOGGER: K. Mouzakis	
PROJECT : San Juan River Gas Plant Site Investigation	Date: 4/5/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Not surveyed	TOTAL DEPTH OF BORING: 27 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1	1	SP	**POORLY GRADED SAND WITH GRAVEL (SP)**, 2.5 Y 5/4, light olive brown	
2			**Pea Gravel, backfill from hydro-excavation**	
3				
4				
5				
6				
7				
8				
9	4		**Pea Gravel, backfill from hydro-excavation**	
10				
11		CL	**GRAVELLY CLAY** (CL), 2.5 YR 1/1, dark gray, medium plasticity	VOCs = 85 ppm
12				
13			No Recovery	
14	5	ML	**SILT** (ML), 2.5 YR 3/3, dusky red, dry, no plasticity, soft, 20% clay, trace gravel	
15				VOCs = 0.0 ppm
16				
17				
18				
19	5	CL	**LEAN CLAY WITH SAND** (CL) 2.5 YR 3/3, dusky red, wet, low plasticity, soft, coarse sand	
20		CL	**LEAN CLAY** (CL), 2.5 YR 5/4, weak red, dry, medium plasticity, trace gravel and sand	VOCs = 0.2 ppm
21				
22				
23				
24	2	Sandstone	**SANDSTONE**, 2.5 YR 5/4, light olive brown, dry, no to low plasticity, gray mottling	
25				

Sampler Signature: Katy Mouzakis Date: **4/5/2017**

ch2m:	PROJECT NUMBER 683527.01.02	BORING NUMBER SB-17	SHEET # 2 of 2
	SOIL BORING LOG		LOGGER: K. Mouzakis
PROJECT : San Juan River Gas Plant Site Investigation	Date: 4/5/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Not surveyed / TOTAL DEPTH OF BORING: 27 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
26	2	Sandstone	**SANDSTONE**, 2.5 YR 5/4, light olive brown, dry, no to low plasticity, gray mottling	VOCs = 0.0 ppm
27				Refusal at 27 ft bgs
28				
29				
30				
31				
32				
33				
34				
35				
36				
37				
38				
39				
40				
41				
42				
43				
44				
45				
46				
47				
48				
49				
50				

Sampler Signature: Katy Mouzakis Date: 4/5/2017

ch2m:	PROJECT NUMBER 683527.01.02	BORING NUMBER SB-18	SHEET # 1 of 1	
	SOIL BORING LOG		LOGGER: K. Mouzakis	
PROJECT : San Juan River Gas Plant Site Investigation	Date: 4/5/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Not surveyed	TOTAL DEPTH OF BORING: 27 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1	1	CL	**LEAN CLAY (CL)**, low to medium plasticity, soft, few rounded coarse sand	
2			**Pea Gravel, backfill from hydro-excavation**	
3				
4				
5			5	5
6				
7				
8				
9			**Pea Gravel, backfill from hydro-excavation**	
10			10	VOCs = 0.0 ppm 10
11	3	CL	**LEAN CLAY** (CL), 2.5 YR 4/4, light olive brown, dry to moist, low to medium plasticity, soft, 10-15% coarse sand	
12				
13				
14			**LEAN CLAY** (CL), 2.5 YR 5/1, gray, moist, medium plasticity, stiff, mottled orange and brown	
15			15	VOCs = 0.1 ppm
16	3	CL		
17				
18				
19			**LEAN CLAY** (CL), 2.5 YR 5/1, gray, moist, medium plasticity, stiff, mottled orange and brown	
20			20	VOCs = 0.1 ppm 20
21	4	CL		
22				
23				
24	2	Shale	**SHALE**, 2.5 Y 4/1, dark gray, dry, low to medium plasticity, stiff	VOCs = 0.1 ppm
25			25	Refusal at 25 ft bgs 25

Sampler Signature: Katy Mouzakis Date: **4/10/2017**

ch2m.	PROJECT NUMBER 683527.01.02	BORING NUMBER SB-19	SHEET # 1 of 1
	SOIL BORING LOG		LOGGER: K. Mouzakis
PROJECT : San Juan River Gas Plant Site Investigation	Date: 4/5/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Not surveyed / TOTAL DEPTH OF BORING: 27 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1–8			**Pea Gravel, backfill from hydro-excavation**	
9–13	5	CL	**LEAN CLAY** (CL), 10 YR 5/6, yellowish brown, dry, medium plasticity, stiff, 10% silt	VOCs = 1.0 ppm
14–15	5	CL	**LEAN CLAY** (CL), 10 YR 5/6, yellowish brown, dry, medium plasticity, stiff, 10% silt	VOCs = 0.1 ppm
16–18		CL	**SANDY LEAN CLAY WITH GRAVEL** (CL), 10 YR 6/4, light yellowish brown, medium to low plasticity, soft, well cemented	Refusal at 18 ft bgs
19–25				

Sampler Signature: Katy Mouzakis Date: 3/27/2017

ch2m.	PROJECT NUMBER 683527.01.02	BORING NUMBER MW-11	SHEET # 1 of 4
	SOIL BORING LOG		LOGGER: K. Mouzakis
PROJECT : San Juan River Gas Plant Site Investigation	Date: 3/31/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Northing: 2096944.968 Easting: 2566072.204 / TOTAL DEPTH OF BORING: 78 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1–8			**Pea Gravel, backfill from hydro-excavation**	
9–13	3	Sandstone	**SANDSTONE**, 2.5 Y 6/4, light yellowish brown, dry, no plasticity, strongly cemented	VOCs = 0.1 ppm
14–18	4	Sandstone/ Shale	**SANDSTONE WITH WEATHERED SHALE**, 2.5 Y 6/4, light yellowish brown, dry	VOCs = 0.1 ppm
19–22	4	Sandstone/ Shale	**SANDSTONE WITH WEATHERED SHALE**, 2.5 Y 6/4, light yellowish brown, dry	VOCs = 0.0 ppm Refusal at 23 ft bgs with HSA
23–25			No Recovery	4/2/17 continue drilling with air rotary

Sampler Signature: Katy Mouzakis Date: 4/2/2017

ch2m.	PROJECT NUMBER 683527.01.02	BORING NUMBER MW-11	SHEET # 2 of 4	
	SOIL BORING LOG		LOGGER: K. Mouzakis	
PROJECT : San Juan River Gas Plant Site Investigation	Date: 3/31/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Northing: 2096944.968 Easting: 2566072.204	TOTAL DEPTH OF BORING: 78 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
26			No Recovery	
27				
28				
29				
30				
31				
32			**SANDSTONE WITH SHALE**, dry, 2.5 Y 5/3, light olive brown, medium plasticity, poorly graded sand, shale fragments.	
33				
34				
35				VOCs = 0.0 ppm
36	0	Sandstone/ Shale		
37				
38				
39				
40				
41				
42			**SANDSTONE**, 2.5 Y 5/1, gray, moist, low plasticity, poorly graded fine sand, 35% clay, some staining	
43				VOCs = 0.0 ppm
44				
45				
46	0	Sandstone		
47				
48				
49				
50				

Sampler Signature: Katy Mouzakis Date: 4/2/2017

ch2m.	PROJECT NUMBER 683527.01.02	BORING NUMBER MW-11	SHEET # 3 of 4	
	SOIL BORING LOG		LOGGER: K. Mouzakis	
PROJECT : San Juan River Gas Plant Site Investigation	Date: 3/31/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Northing: 2096944.968 Easting: 2566072.204	TOTAL DEPTH OF BORING: 78 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
51			**SHALE**, 2.5 Y 1, black dry to moist, low to medium plasticity, strong odor	
52				
53				VOCs = 91.7 ppm
54	0	Shale		
55			55	55
56				
57				
58				
59			**SHALE**, 2.5 Y 4/1, black, dry, hard	
60			60	60
61				VOCs = 28.1 ppm
62				
63				
64	0	Shale		
65			65	65
66				
67				
68				
69				
70			70	70
71			**SHALE**, 2.5 Y 4/1, black, dry, hard	
72				
73	0	Shale		VOCs = 0.0 ppm
74				
75			75	75

Sampler Signature: Katy Mouzakis Date: 4/2/2017

ch2m.	PROJECT NUMBER 683527.01.02	BORING NUMBER MW-11	SHEET # 4 of 4
	SOIL BORING LOG		LOGGER: K. Mouzakis
PROJECT : San Juan River Gas Plant Site Investigation	Date: 3/31/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Northing: 2096944.968 Easting: 2566072.204 / TOTAL DEPTH OF BORING: 78 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
76	0	Shale	**SHALE**, 2.5 Y 4/1, black, dry, hard	VOCs = 0.0 ppm
77				
78			EOB @ 78 ft bgs	
79				
80				
81				
82				
83				
84				
85				
86				
87				
88				
89				
90				
91				
92				
93				
94				
95				
96				
97				
98				
99				
100				

Sampler Signature: Katy Mouzakis Date: 4/2/2017

ch2m.	PROJECT NUMBER 683527.01.02	BORING NUMBER MW-12	SHEET # 1 of 3
	SOIL BORING LOG		LOGGER: K. Mouzakis
PROJECT : San Juan River Gas Plant Site Investigation	Date: 3/30/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Northing: 2097153.946 Easting: 2566020.393 TOTAL DEPTH OF BORING: 71 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1–4	2	GW-GM	**WELL GRADED GRAVEL WITH SAND** (GW-GM), 2.5 YR 5/3, light olive brown, dry, non-plastic, fine gravel, fine to coarse sand, weakly cemented	VOCs = 0.3 ppm
5–9	1		**Pea Gravel, backfill from hydro-excavation**	VOCs = 0.0 ppm
10–13	2	CL	**GRAVELLY LEAN CLAY** (CL), 10 YR 4/6, light olive brown, dry, medium plasticity, medium stiffness, 30% fine to coarse gravel up to 8 cm in diameter, 5% coarse sand	VOCs = 0.0 ppm
14–17	3	Sandstone	**SANDSTONE** 2.5 YR Y 6/4, light yellowish brown, dry, non-plastic, poorly graded, strongly cemented, rounded	VOCs = 0.0 ppm Refusal with HSA
18–22	0	Shale	**SHALE** 2.5 Y 3/1, dark gray, dry, medium plasticity, soft, loosely cemented, trace sand, no staining or odor	Begin air rotary
23–25			No Recovery	

Sampler Signature: Katy Mouzakis Date: 4/2/2017

ch2m:	PROJECT NUMBER 683527.01.02	BORING NUMBER MW-12	SHEET # 2 of 3	
	SOIL BORING LOG		LOGGER: K. Mouzakis	
PROJECT : San Juan River Gas Plant Site Investigation	Date: 3/30/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Northing: 2097153.946 Easting: 2566020.393	TOTAL DEPTH OF BORING: 71 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
26			No Recovery	
27				
28				
29				
30				
31			**SHALE**	
32				
33				
34				
35	0	Shale		
36				
37				
38				
39				
40				
41			**SHALE**	
42				
43				
44				
45	0	Shale		
46				
47				
48				
49				
50				VOCs = 0.0 ppm

Sampler Signature: Katy Mouzakis Date: 4/2/2017

ch2m:	PROJECT NUMBER 683527.01.02	BORING NUMBER MW-12	SHEET # 3 of 3	
	SOIL BORING LOG		LOGGER: K. Mouzakis	
PROJECT : San Juan River Gas Plant Site Investigation	Date: 3/30/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Northing: 2097153.946 Easting: 2566020.393	TOTAL DEPTH OF BORING: 71 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
51			**SHALE**, wet	
52				
53				
54				
55	0	Shale		
56				
57				
58				VOCs = 0.0 ppm
59				
60				
61			**SHALE**	
62				
63				
64				
65	0	Shale		VOCs = 0.0 ppm
66				
67				
68				
69				
70				
71	0	Shale	**SHALE**	VOCs = 0.0 ppm
72			EOB @ 71 ft bgs	
73				
74				
75				

Sampler Signature: Katy Mouzakis Date: 4/2/2017

ch2m:	PROJECT NUMBER 683527.01.02	BORING NUMBER MW-13	SHEET # 1 of 4
	SOIL BORING LOG		LOGGER: K. Mouzakis
PROJECT : San Juan River Gas Plant Site Investigation	Date: 3/28/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Northing: 2097274.899 Easting: 2566090.106 TOTAL DEPTH OF BORING: 80 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1			**Pea Gravel, backfill from hydro-excavation**	
2				
3				
4				VOCs = 0.0 ppm
5			5	5
6				
7				
8				
9				VOCs = 0.0 ppm
10		CL	**LEAN CLAY** (CL), 2.5 Y 6/6, olive yellow, dry, low plasticity, firm, trace coarse gravel, no odor 10	10
11	2.5			
12		CL	**LEAN CLAY** (CL), 2.5 Y 6/6, olive yellow, dry, low plasticity, firm, trace coarse gravel, slight odor	
13			No Recovery	
14			**SILT** (ML), 2.5 Y 5/4, light olive brown, non-plastic, no odors	
15	1.5	ML	15	15
16				
17			**GRAVELLY LEAN CLAY** (CL), 2.5 Y 5/4, light olive brown, moist, medium plasticity	
18	0.5	CL		
19				
20			**LEAN CLAY** (CL), 2.5 Y 6/3, light yellowish brown, dry, medium pasticity, soft 20	20
21				
22	1	CL		
23				
24				
25	1	ML	**SILT** (ML), 2.5 Y 5/2, grayish brown, dry to moist, low plasticity, trace coarse sand and fine gravel, with clay, light staining and odor 25	25

Sampler Signature: Katy Mouzakis Date: 3/29/2017

ch2m:	PROJECT NUMBER 683527.01.02	BORING NUMBER MW-13	SHEET # 2 of 4
	SOIL BORING LOG		LOGGER: K. Mouzakis
PROJECT : San Juan River Gas Plant Site Investigation	Date: 3/28/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Northing: 2097274.899 Easting: 2566090.106
			TOTAL DEPTH OF BORING: 80 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
26			No Recovery	
27				
28				
29				
30			**SHALE**, weathered, 2.5 Y 3/1, dark gray, dry, strong hydrocarbon odor	30
31				
32	4	Shale		VOCs = 170 ppm
33				
34				
35	0.5	Shale	**SHALE**, unweathered, 2.5 Y 3/1, dark gray, dry, no odor	35 Refusal with HSA
36			**SHALE**, 2.5 Y 3/1, dark gray, dry	Resume drilling with air rotary
37				
38	0	Shale		
39				
40				40
41				VOCs = 0.0 ppm
42			**SHALE**, 2.5 Y 3/1, dark gray, dry	
43				
44				
45				45
46	0	Shale		
47				
48				
49				
50				VOCs = 0.0 ppm 50

Sampler Signature: Katy Mouzakis Date: 3/29/2017

ch2m:	PROJECT NUMBER 683527.01.02	BORING NUMBER MW-13	SHEET # 3 of 4	
	SOIL BORING LOG		LOGGER: K. Mouzakis	
PROJECT : San Juan River Gas Plant Site Investigation	Date: 3/28/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Northing: 2097274.899 Easting: 2566090.106	TOTAL DEPTH OF BORING: 80 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
51			**SHALE**, 2.5 Y 3/1, dark gray, dry	
52				
53				
54				
55	0	Shale	55	55
56				
57				
58				
59				
60			60	VOCs = 0.0 ppm 60
61			**SHALE**, 2.5 Y 3/1, dark gray, dry	
62				
63				
64				
65			65	65
66				
67				
68	0	Shale		
69				
70			70	70
71				
72				
73				
74				
75			75	75

Sampler Signature: Katy Mouzakis Date: 3/29/2017

ch2m:	PROJECT NUMBER 683527.01.02	BORING NUMBER MW-13	SHEET # 4 of 4
	SOIL BORING LOG		LOGGER: K. Mouzakis
PROJECT : San Juan River Gas Plant Site Investigation	Date: 3/28/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Northing: 2097274.899 Easting: 2566090.106 / TOTAL DEPTH OF BORING: 80 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
76		Shale	**SHALE**, 2.5 Y 3/1, dark gray, dry	
77				
78				
79				
80				
81			EOB @ 80 ft bgs	
82				
83				
84				
85				
86				
87				
88				
89				
90				
91				
92				
93				
94				
95				
96				
97				
98				
99				
100				

Sampler Signature: Katy Mouzakis Date: 3/29/2017

ch2m:	PROJECT NUMBER 683527.01.02	BORING NUMBER MW-14	SHEET # 1 of 2
	SOIL BORING LOG		LOGGER: K. Mouzakis
PROJECT : San Juan River Gas Plant Site Investigation	Date: 4/10/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Northing: 2097361.550 Easting: 2566293.541 TOTAL DEPTH OF BORING: 41 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1	2	ML	**SILT** (ML), 2.5 YR 5/4. weak red, moist, medium plasticity, firm, with clay	VOCs = 0.4 ppm
2				
3	6		**Pea Gravel, backfill from hydro-excavation**	VOCs = 0.0 ppm
4				
5			5	5
6				
7				
8				
9	2.5	CL	**Pea Gravel, backfill from hydro-excavation**	VOCs = 0.0 ppm
10			**LEAN CLAY** (CL), 2.5 Y 5/3, light olive brown, wet, medium plasticity, medium stiffness	10
11			10	
12				
13				
14	2.5	CL	**LEAN CLAY** (CL), 2.5 Y 4/1, dark gray, moist, with orange mottling	
15		CL	**LEAN CLAY** (CL), 2.5 YR 5/4, light olive brown, dry, low plasticity, with silt	15
16			15	
17				
18				
19	4	CL	**LEAN CLAY** (CL), mottled black (2.5 Y 4/1), dark gray, orange (2.5 YR 5/8), strong odor and staining	VOCs = 65.1 ppm
20			20	20
21				
22				
23				
24	1.5	Shale	**SHALE**, weathered, 2.5 Y 4/1, dark gray, dry, low to medium plasticity, soft	
25			25	25

Sampler Signature: Katy Mouzakis Date: 4/13/2017

ch2m:	PROJECT NUMBER 683527.01.02	BORING NUMBER MW-14	SHEET # 2 of 2
	SOIL BORING LOG		LOGGER: K. Mouzakis
PROJECT : San Juan River Gas Plant Site Investigation	Date: 4/10/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Northing: 2097361.550 Easting: 2566293.541 / TOTAL DEPTH OF BORING: 41 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
26	1.5	Shale	**SHALE**, weathered, 2.5 Y 4/1, dark gray, dry, low to medium plasticity, soft	VOCs = 0.0 ppm
27				
28	1	Shale	**SHALE**, weathered, 2.5 Y 4/1, dark gray, dry, low to medium plasticity, soft	
29				
30			30	30
31	0	Shale	**SHALE**, light olive brown, moist	VOCs = 0.0 ppm
32				
33				
34				
35			35	35
36	0	Shale	**SHALE**, gray, dry	
37				
38				
39				
40			40	VOCs = 1.1 ppm 40
41				
42			EOB @ 41 ft bgs	
43				
44				
45			45	45
46				
47				
48				
49				
50			50	50

Sampler Signature: Katy Mouzakis Date: 4/13/2017

ch2m:	PROJECT NUMBER 683527.01.02	BORING NUMBER MW-15	SHEET # 1 of 2
	SOIL BORING LOG		LOGGER: K. Mouzakis
PROJECT : San Juan River Gas Plant Site Investigation	Date: 4/12/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Northing: 2097444.523 Easting: 2566009.023 / TOTAL DEPTH OF BORING: 41 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1–2	2	ML	**SILT** (ML), dry to moist, medium plasticity, noncohesive, soft, with clay	VOCs = 0.0 ppm
3–8	6		**Pea Gravel, backfill from hydro-excavation**	VOCs = 0.0 ppm
9–13	2.5	CL	**LEAN CLAY** (CL), 2.5 Y 2.5/1, black, moist, low plasticity, soft, completely stained, strong odor. Start to see native brown color at 10.5 feet bgs	VOCs = 381.9 ppm
14–18	2	CL	**LEAN CLAY** (CL), 2.5 Y 5/2, grayish brown, dry, medium plasticity, soft, medium odor	VOCs = 322.8 ppm
19–23	3	CL	**LEAN CLAY** (CL), 2.5 Y 3/2, very dark grayish brown, dry, medium plasticity, stiff, slight odor	VOCs = 93 ppm
24–25	2	CL	**LEAN CLAY** (CL) and weathered Shale, 2.5 Y 5/1, gray, dry, medium plasticity, mottled brown and orange, no odor or staining	

Sampler Signature: Katy Mouzakis Date: 4/12/2017

ch2m:	PROJECT NUMBER 683527.01.02	BORING NUMBER MW-15	SHEET # 2 of 2
	SOIL BORING LOG		LOGGER: K. Mouzakis
PROJECT : San Juan River Gas Plant Site Investigation	Date: 4/12/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Northing: 2097444.523 Easting: 2566009.023 / TOTAL DEPTH OF BORING: 41 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
26	2	CL	**LEAN CLAY (CL) and weathered SHALE**, 2.5 Y 5/1, gray, dry, medium plasticity, mottled brown and orange, no odor or staining	VOCs = 2.5 ppm
27				
28				
29	5	Shale	**SHALE**, 2.5 Y 5/1 gray, dry	VOCs = 0.0 ppm
30				
31				
32				
33				
34		Shale	**SHALE**, gray, dry	Refusal with HSA at 34 ft bgs VOCs = 0.0 ppm
35				
36				
37				
38				
39				
40				
41			EOB @ 41 ft bgs	
42				
43				
44				
45				
46				
47				
48				
49				
50				

Sampler Signature: Katy Mouzakis Date: 4/12/2017

ch2m:	PROJECT NUMBER 683527.01.02	BORING NUMBER MW-16	SHEET # 1 of 2
	SOIL BORING LOG		LOGGER: K. Mouzakis
PROJECT : San Juan River Gas Plant Site Investigation	Date: 4/12/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Northing: 2097583.359 Easting: 2566028.119 TOTAL DEPTH OF BORING: 32 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1–8	8		**Pea Gravel, backfill from hydro-excavation**	VOCs = 0.0 ppm VOCs = 2.2 ppm
9–13	4	CL	**LEAN CLAY** (CL), 2.5 Y 5/2, brown, moist, 10% orange and white mottles	VOCs = 45.3 ppm
14–15	1.5	CL	**LEAN CLAY** (CL), 2.5 Y 6/3, light yellowish brown, stiff, mottled gray and yellow, slight odor	VOCs = 55 ppm
16–18			No Recovery	Refusal with HSA at 15 ft bgs
19–25	0	Sandstone	**SANDSTONE**, 2.5 YR 6/3, weak red, dry, traces of gray shale, slight odor	Drilling with air rotary VOCs = 1.51 ppm

Sampler Signature: Katy Mouzakis Date: **4/12/2017**

ch2m:	PROJECT NUMBER 683527.01.02	BORING NUMBER MW-16	SHEET # 2 of 2
	SOIL BORING LOG		LOGGER: K. Mouzakis
PROJECT : San Juan River Gas Plant Site Investigation	Date: 4/12/17	Drilling Method/Equipment: HSA/CME 75 Drilling Contractor: Cascade Drilling, LP	COORDINATES: Northing: 2097583.359 Easting: 2566028.119 TOTAL DEPTH OF BORING: 32 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
26			**SHALE**, gray, dry, medium plasticity	
27				
28				
29				
30	0	Shale		
31				
32				VOCs = 1.2 ppm
33				
34				
35				
36			**SHALE**, gray, dry, medium plasticity	
37				
38				
39	0	Shale		
40				
41				
42				
43				
44			EOB @ 43 ft bgs	
45				
46				
47				
48				
49				
50				

Sampler Signature: Katy Mouzakis Date: 4/12/2017

ch2m.	PROJECT NUMBER 707471CH.01.02	BORING NUMBER MW-17	SHEET # 1 of 2
	SOIL BORING LOG		LOGGER: A Turkasz
PROJECT : Phase 2 San Juan River Gas Plant Site Investigation	Date: 1/30/2019	Drilling Method/Equipment: TS600 Rotosonic Drilling Contractor: Cascade Drilling	COORDINATES: Northing: 2097677.14 Easting: 2565910.72
			TOTAL DEPTH OF BORING: 26.0 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1–10	0/10	SP	**POORLY GRADED SAND WITH GRAVEL** (SP) - grayish brown, moist to dry, low to non-plastic, fine to coarse grained sand, fine to medium grained subangular gravel, some clay **Soil removed via hydro-excavation**	PID = 36.7 ppm
11–15	5/5	Sandstone Sandstone	**SANDSTONE**, N 6/ gray, moist to dry, fine to medium grained sand, cemented, strong odor **SANDSTONE**, N 6/ gray, moist to dry, low to non-plastic, fine to medium grained sand, brittle, loose, some black staining and strong odor	PID= 936.4 ppm Water at 11 ft bgs PID= 578.6 ppm PID= 251.8 ppm PID= 12.1 ppm
16–20	5/5	Sandstone	**SANDSTONE**, N 6/ gray, moist to dry, fine to medium grained sand, some shale, some orange and black staining, firm, brittle	PID= 5.1 ppm PID= 2.6 ppm PID= 0.8 ppm
21–25	5/5	Sandstone Sandstone	**SANDSTONE**, N 6/ gray, moist to dry, fine to medium grained sand, some shale, some orange and black staining, firm, brittle, medium odor **SANDSTONE**, N 6/ gray, moist to dry, fine grained sand, increased shale, firm, dry, brittle, medium odor	PID= 189.3 ppm PID= 355.7 ppm PID= 85.4 ppm

Sampler Signature: Alex Turkasz Date: 1/30/2019

ch2m:	PROJECT NUMBER 707471CH.01.02	BORING NUMBER MW-17	SHEET # 2 of 2	
	SOIL BORING LOG		LOGGER: A Turkasz	
PROJECT : Phase 2 San Juan River Gas Plant Site Investigation	Date: 1/30/2019	Drilling Method/Equipment: TS600 Rotosonic Drilling Contractor: Cascade Drilling	COORDINATES: Northing: 2097677.14 Easting: 2565910.72	TOTAL DEPTH OF BORING: 26.0 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
26		SS	**SANDSTONE**, N 6/ gray, dry, fine grained sand, little shale, little shale, brittle	PID= 1.7 ppm
27			EOB @ 26.0' bgs	
28				
29				
30				
31				
32				
33				
34				
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Sampler Signature: Alex Turkasz Date: 1/30/2019

ch2m:	PROJECT NUMBER 707471CH.01.02	BORING NUMBER MW-18	SHEET # 1 of 2	
	SOIL BORING LOG		LOGGER: A Turkasz	
PROJECT : Phase 2 San Juan River Gas Plant Site Investigation	Date: 1/28/2019	Drilling Method/Equipment: TS600 Rotosonic Drilling Contractor: Cascade Drilling	COORDINATES: Northing: 2097648.14 Easting: 2566348.33	TOTAL DEPTH OF BORING: 33.0 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1–10	0/10	SP	**POORLY GRADED SAND WITH GRAVEL (SP),** grayish brown, dry, loose, fine to coarse grained sand, fine to medium grained subrounded gravel, trace clay	PID= 0.0 ppm
			Soil removed via hydro-excavation	
11–13	5/5	CL	**SANDY LEAN CLAY** (CL), 2.5 yr 4/4, dusky red, dry, non-plastic, stiff, fine to medium grained sand, trace fine grained subrounded gravel	PID= 0.0 ppm
14		CL	**LEAN CLAY (CL),** 5 YR 3/1, very dark gray, dry, non-plastic, stiff, some very weathered shale	PID= 0.0 ppm
15		Shale	**SHALE,** weathered, 5 yr 3/1, gray, low to non-plastic, orangish red staining, brittle to soft, heavily weathered	PID= 0.0 ppm
16–18	5/5	Shale	**SHALE,** weathered, 5 yr 5/1, gray, low to non-plastic, orangish red staining, brittle to soft, heavily weathered	PID= 0.0 ppm
19–20		Shale	**SHALE**, weathered, 5 yr 3/1 very dark gray, dry, non-plastic, soft, brittle, some fine to medium grained sand, little clay, heavily weathered	PID= 0.0 ppm
21–22	5/5	Shale	**SHALE,** weathered, 5 yr 3/1, very dark gray, dry, low to non-plastic, soft, brittle, some fine to medium grained sand, some clay, heavily weathered	PID= 0.0 ppm
23		Shale	**SHALE, weathered**, 5 YR 3/1, very dark gray, moist, low to non-plastic, soft, brittle, fine to medium grained sand, some clay, heavily weathered	
24–25		Shale	**SHALE,** N 5 / dark gray, dry, non-plastic, solid, brittle, few fine to medium grained sand	PID= 0.0 ppm

Sampler Signature: Alex Turkasz Date: 1/28/2019

ch2m:	PROJECT NUMBER 707471CH.01.02	BORING NUMBER MW-18	SHEET # 2 of 2
	SOIL BORING LOG		LOGGER: A Turkasz
PROJECT : Phase 2 San Juan River Gas Plant Site Investigation	Date: 1/28/2019	Drilling Method/Equipment: TS600 Rotosonic Drilling Contractor: Cascade Drilling	COORDINATES: Northing: 2097648.14 Easting: 2566348.33 TOTAL DEPTH OF BORING: 33.0 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
26	8/8	Shale	**SHALE**, N 5 / dark gray, dry, non-plastic, solid, brittle, few fine to medium grained sand	PID= 0.0 ppm
27		Shale	**SHALE**, N 6 / gray, dry, non-plastic, hard, solid, some fine grained sand, less brittle, some sandstone, little weathering	
28				
29		Sandstone	**SANDSTONE**, N 7 / light gray, dry, solid to loose, predominantly fine to medium grained sand	PID= 0.0 ppm
30				
31				PID= 0.0 ppm
32				*Drilling stopped @ 33' bgs on 1/28/19, No water measured in boring
33				
34			EOB @ 33.0' bgs	
35				*Water level measured at 24' bgs on 1/29/19 @ 0745
36				
37				
38				
39				
40				
41				
42				
43				
44				
45				
46				
47				
48				
49				
50				

Sampler Signature: Alex Turkasz Date: 1/28/2019

ch2m:	PROJECT NUMBER 707471CH.01.02	BORING NUMBER MW-19	SHEET # 1 of 2	
	SOIL BORING LOG		LOGGER: A Turkasz	
PROJECT : Phase 2 San Juan River Gas Plant Site Investigation	Date: 1/29/2019	Drilling Method/Equipment: TS600 Rotosonic Drilling Contractor: Cascade Drilling	COORDINATES: Northing: 2097248.26 Easting: 2566308.19	TOTAL DEPTH OF BORING: 35.0 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1–2	0/10	SC	**CLAYEY SAND** (SC), 2.5 Y 4/4, olive brown, moist to dry, low to non-plastic, fine to coarse grained sand, some fine grained subangular gravel	PID= 0.0 ppm
3–10			**Soil removed via hydro-excavation**	
11–15	5/5	CL	**SANDY LEAN CLAY** (CL), 7.5 YR 4/3, olive brown, dry to moist, low to non-plastic, brittle, trace fine grained subangular gravel, some silt, fine to medium grained sand	PID= 0.0 ppm
16–18	10/10	CL	**SANDY LEAN CLAY** (CL), 7.5 YR 4/3, olive brown, dry to moist, low to non-plastic, brittle, trace fine grained subangular gravel, some silt, fine to medium grained sand	PID= 0.1 ppm
19–20		CL	**SANDY LEAN CLAY** (CL), 10 YR 4/2 dark grayish brown, dry, non-plastic, brittle, orange mottling, fine to medium grained sand	Water level 19' bgs @ 1630 1/29/19 PID= 0.0 ppm
21–23		SP	**POORLY GRADED SAND** (SP), 10 YR 6/2 light brownish gray, dry, non-plastic, predomininantly fine to medium grained, cemented, brittle, heavily weathered	PID= 37.2 ppm
24–25		SP	**POORLY GRADED SAND** (SP), 10 YR 2/2 very dark brown, moist to dry, low to non-plastic, predominantly fine to medium grained sand, strong odor, black staining, cemented, brittle	PID= 152.3 ppm

Sampler Signature: Alex Turkasz Date: **1/29/2019**

ch2m:	PROJECT NUMBER 707471CH.01.02	BORING NUMBER MW-19	SHEET # 2 of 2	
	SOIL BORING LOG		LOGGER: A Turkasz	
PROJECT : Phase 2 San Juan River Gas Plant Site Investigation	Date: 1/29/2019	Drilling Method/Equipment: TS600 Rotosonic Drilling Contractor: Cascade Drilling	COORDINATES: Northing: 2097248.26 Easting: 2566308.19	TOTAL DEPTH OF BORING: 35.0 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
26	5/5	SP	**POORLY GRADED SAND** (SP), 10 YR 4/2, dark greyish brown, dry, low to non-plastic, predominantly fine to medium grained, black staining, strong odor, cemented, brittle	PID= 169.9 ppm
27				
28				
29				
30		CL	**SANDY LEAN CLAY** (CL), 10 YR 2/2, very dark brown, moist, low plasticity, dark gray to back staining, strong odor	PID= 317.6 ppm
31	5/5	CL	**SANDY LEAN CLAY** (CL), 10 YR 2/2, very dark brown, moist, low plasticity, dark gray to back staining, strong odor	
32		Shale	**SHALE,** 5B 4/1, dark bluish gray to black staining, strong odor	PID= 0.4 ppm
33				PID= 0.3 ppm
34		Shale	**SHALE,** N 5/ very dark gray, slightly moist, non-plastic, brittle, some fine to medium grained sand	
35				PID= 1.9 ppm
36			EOB @ 35.0' bgs	
37				
38				
39				1/29/19 Water level measured @1630 at 19' bgs with TD @ 30' bgs (casing at 16'bgs)
40				
41				1/30/19 Water level measured @ 0745 at 28' bgs with TD @35' bgs (casing at 27' bgs)
42				
43				
44				
45				
46				
47				
48				
49				
50				

Sampler Signature: Alex Turkasz Date: **1/29/2019**

ch2m.	PROJECT NUMBER 707471CH.01.02	BORING NUMBER MW-20	SHEET # 1 of 2
	SOIL BORING LOG		LOGGER: A Turkasz
PROJECT : Phase 2 San Juan River Gas Plant Site Investigation	Date: 2/1/2019	Drilling Method/Equipment: TS600 Rotosonic Drilling Contractor: Cascade Drilling	COORDINATES: Northing: 2096772.02 Easting: 2566055.12 TOTAL DEPTH OF BORING: 46.0 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1–2	0/10	SP	**POORLY GRADED SAND WITH GRAVEL** (SP), 2.5 YR 5/3 brown, dry, non-plastic, fine to coarse grained sand, small to large grained subrounded gravel, some large cobbles	PID= 0.0 ppm
3–10			**Soil removed via hydro-excavation**	
11–15	5/5	SP	**POORLY GRADED SAND** (SP), 2.5 Y 6/8, olive yellow, dry, non-plastic, loose, fine to coarse grained sand, some small subangular gravel, trace cementation	PID= 0.0 ppm PID= 0.0 ppm
16–20	5/5	SP	**POORLY GRADED SAND** (SP), 2.5 Y 6/8, olive yellow, dry to moist, non-plastic, loose, fine to coarse grained sand, little clay, some small subangular gravel, trace cementation	PID= 0.0 ppm PID= 0.0 ppm
21–25	5/5	SP	**POORLY GRADED SAND** (SP), 2.5 Y 6/8, olive yellow, dry to moist, non-plastic, loose, fine to coarse grained sand, little clay, some small subangular gravel, trace cementation	PID= 0.0 ppm PID= 0.0 ppm PID= 0.1 ppm

Sampler Signature: Alex Turkasz Date: **2/1/2019**

ch2m

PROJECT NUMBER	BORING NUMBER	SHEET # 2 of 2
707471CH.01.02	MW-20	

SOIL BORING LOG

LOGGER: A Turkasz

PROJECT	Date	Drilling Method/Equipment	COORDINATES	TOTAL DEPTH OF BORING
Phase 2 San Juan River Gas Plant Site Investigation	2/1/2019	Drilling Method/Equipment: TS600 Rotosonic Drilling Contractor: Cascade Drilling	Northing: 2096772.02 Easting: 2566055.12	46.0 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
26–29	5/5	SP	**POORLY GRADED SAND** (SP), 2.5 Y 6/8, olive yellow, dry to moist, non-plastic, loose, fine to coarse grained sand, little clay, some small subangular gravel, trace cementation	PID= 0.0 ppm PID= 0.0 ppm
30		CL	**LEAN CLAY** (CL), 2.5 Y 3/2, very dark grayish brown, dry, non-plastic, orange and black mottling, some fine grained sand, weathered shale	Water appears to be ~30' bgs
31–35	5/5	CL	**LEAN CLAY** (CL), 2.5 Y 3/2, very dark grayish brown, dry, non-plastic, orange and black mottling, some fine grained sand, weathered shale	PID= 0.1 ppm PID= 0.0 ppm
36–38	5/5	SH	**SHALE**, 2.5 Y 4/1, dark gray, dry, orange staining, brittle, heavily weathered, slight odor, partially weathered	* Bedrock @ 35' bgs PID= 22.8 ppm
39–40		SH	**SHALE**, weathered, 2.5 Y 6/1, gray, dry, brittle, little dry clay	PID= 0.4 ppm
41–44	6/6	SH	**SHALE**, weathered, 2.5 Y 6/1, gray, dry, brittle, little dry clay	PID= 0.0 ppm PID= 0.9 ppm
45–46		SH	**SHALE**, 2.5 Y 2.5/1 black, dry, firm, some odor	PID= 57.9 ppm PID= 0.6 ppm
47–50			EOB @ 46.0' bgs	

Sampler Signature: Alex Turkasz Date: **2/1/2019**

ch2m.	PROJECT NUMBER 707471CH.01.02	BORING NUMBER MW-21	SHEET # 1 of 2
	SOIL BORING LOG		LOGGER: A Turkasz
PROJECT : Phase 2 San Juan River Gas Plant Site Investigation	Date: 1/31/2019	Drilling Method/Equipment: TS600 Rotosonic Drilling Contractor: Cascade Drilling	COORDINATES: Northing: 2097302.39 Easting: 2565917.80 TOTAL DEPTH OF BORING: 40.0 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1–2		SC	**CLAYEY SAND (SC),** grayish brown, dry, low to non-plastic, fine to coarse grained sand, little subangular gravel	PID= 0.1 ppm
3–10	0/10		Soil removed via hydro-excavation	2
11–12	5/5	CL	**LEAN CLAY** (CL), 2.5 Y 5/3, olive brown, dry, non-plastic, stiff, crumbles, little fine grained sand, orange and gray mottling, strong odor	PID= 387.5 ppm
13–14		CL	**LEAN CLAY** (CL), 5 Y 2.5/1, black, dry to moist, non-plastic, crumbles, little fine grained sand and silt, black staining, strong odor	PID= 728.7 ppm
15		CL	**LEAN CLAY** (CL), 2.5 Y 4/2, dark grayish brown, dry, non-plastic, little fine grained sand, orange mottling, strong odor	
16–18	5/5	CL	**LEAN CLAY** (CL), 2.5 Y 4/2, dark grayish brown, dry, non-plastic, little fine grained sand, orange mottling, strong odor	PID= 485.3 ppm PID= 294.4 ppm
19–20		CL	**LEAN CLAY WITH SAND** (CL), 5 Y 2.5/1, black, moist, non-plastic, trace shale fragments, black staining, strong odor	PID= 1006.5 ppm
21–24	10/10	CL	**LEAN CLAY WITH SAND** (CL), 2.5 Y 4/2, dark grayish brown, dry to moist, non-plastic, orange mottling, strong odor	PID= 194.6 ppm PID= 309.4 ppm Water found @ 24' bgs
25		CL	**LEAN CLAY WITH SAND** (CL), 2.5 Y 5/2, grayish brown, dry, non-plastic, stiff, trace shale, odor	PID= 101.9 ppm

Sampler Signature: Alex Turkasz Date: **1/31/2019**

ch2m.	PROJECT NUMBER 707471CH.01.02	BORING NUMBER MW-21	SHEET # 2 of 2
	SOIL BORING LOG		LOGGER: A Turkasz
PROJECT : Phase 2 San Juan River Gas Plant Site Investigation	Date: 1/31/2019	Drilling Method/Equipment: TS600 Rotosonic Drilling Contractor: Cascade Drilling	COORDINATES: Northing: 2097302.39 Easting: 2565917.80 TOTAL DEPTH OF BORING: 40.0 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
26–28	10/10	CL	**LEAN CLAY WITH SAND** (CL), 2.5 Y 5/2, grayish brown, moist, non-plastic, stiff, trace shale, some weathered shale, odor	PID= 614.1 ppm
29–30		Shale	**SHALE**, weathered, 5 Y 2.5/1, black, moist, non-plastic, brittle, trace fine grained sand	PID= 109.4 ppm
31–36	10/10	Shale	**SANDY SHALE**, weathered, 2.5 Y 4/1, dark gray, dry, non-plastic, stiff to brittle, fine grained sand, interbedded sand and shale	PID= 67.4 ppm PID= 10.9 ppm PID= 0.9 ppm
37–38		Shale	**SHALE**, N 4/ dark gray, dry, stiff, some fine grained sand	PID= 0.2 ppm
39–40		Shale	**SHALE**, N 4/ dark gray, dry, stiff, some fine grained sand	
41–50			EOB @ 46.0' bgs	

Sampler Signature: Alex Turkasz Date: **1/31/2019**

ch2m.	PROJECT NUMBER 707471CH.01.02	BORING NUMBER MW-22	SHEET # 1 of 2
	SOIL BORING LOG		LOGGER: A Turkasz
PROJECT : Phase 2 San Juan River Gas Plant Site Investigation	Date: 1/31/2019	Drilling Method/Equipment: TS600 Rotosonic Drilling Contractor: Cascade Drilling	COORDINATES: Northing: 2097377.85 Easting: 2565807.70
			TOTAL DEPTH OF BORING: 35.0 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1–2	0/5	SC	**CLAYEY SAND** (SC), 2.5 Y 5/6, light olive brown, dry, low to non-plastic, fine to coarse grained sand, some small subangular gravel	PID= 0.0 ppm
3–5			**Soil removed via hydro-excavation**	
6–10	5/5	CL	**SANDY LEAN CLAY** (CL), 2.5 Y 5/2, grayish brown, dry, non-plastic, fine to coarse grained sand, trace small subrounded gravel, black staining, strong odor	PID= 464.6 ppm PID= 501.3 ppm
11–13	10/10	CL	**SANDY LEAN CLAY** (CL), 2.5 Y 3/3, dark olive brown, dry, non-plastic, firm to brittle, fine to medium grained sand, black staining, strong odor	PID= 588.1 ppm
14–16		SC	**CLAYEY SAND** (SC), 2.5 Y 3/1, very dark gray, moist to dry, non-plastic, fine to medium grained sand, black staining, strong odor, brittle	PID= 974.9 ppm PID= 679.0 ppm
17–19		SC	**CLAYEY SAND** (SC), 2.5 Y 3/1, very dark gray, moist to dry, non-plastic, fine to medium grained sand, black staining, strong odor, brittle, some weathered shale	PID= 133.3 ppm * Bedrock @ 19' bgs
20		Sandstone	**SANDSTONE**, 2.5 Y 5/1, gray, dry, firm, non-plastic, fine to medium grained sand, little black staining	PID= 62.2 ppm
21–25	5/5	Sandstone	**SANDSTONE**, 2.5 Y 5/1, gray, dry, firm, non-plastic, fine to medium grained sand, little black staining	PID= 16.3 ppm PID= 29.4 ppm

Sampler Signature: Alex Turkasz Date: 1/31/2019

ch2m.	PROJECT NUMBER 707471CH.01.02	BORING NUMBER MW-22	SHEET # 2 of 2	
	SOIL BORING LOG		LOGGER: A Turkasz	
PROJECT : Phase 2 San Juan River Gas Plant Site Investigation	Date: 1/31/2019	Drilling Method/Equipment: TS600 Rotosonic Drilling Contractor: Cascade Drilling	COORDINATES: Northing: 2097377.85 Easting: 2565807.70	TOTAL DEPTH OF BORING: 35.0 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
26–28	5/5	Sandstone	**SANDSTONE**, 2.5 Y 5/1, gray, dry, non-plastic, firm, fine to medium grained sand, little black staining	PID= 1.2 ppm
28–30		Shale	**SHALE**, 5B 6/1, bluish gray, dry, brittle, little fine grained sand	PID= 0.1 ppm
30–35	5/5	Shale	**SHALE**, 5B 6/1, bluish gray, dry, brittle, little fine grained sand	PID= 0.0 ppm
35–50			EOB @ 35.0' bgs	

Sampler Signature: Alex Turkasz Date: 1/31/2019

ch2m:	PROJECT NUMBER 707471CH.01.02	BORING NUMBER MW-23	SHEET # 1 of 3
	SOIL BORING LOG		LOGGER: A Turkasz
PROJECT : Phase 2 San Juan River Gas Plant Site Investigation	Date: 2/2/2019	Drilling Method/Equipment: TS600 Rotosonic Drilling Contractor: Cascade Drilling	COORDINATES: Northing: 2097263.98 Easting: 2565501.68 TOTAL DEPTH OF BORING: 56.0 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
1–2		SP	**POORLY GRADED SAND WITH GRAVEL (SP),** 7.5 YR 5/3, brown, dry, non-plastic, fine to coarse grained sand, small to large subrounded gravel, some large cobbles	PID= 0.0 ppm
3–10	0/10		**Soil removed via hydro-excavation**	
11–15	5/5	CL	**LEAN CLAY** (CL), 2.5 Y 6/2 light brownish gray, dry, non-plastic, medium stiff to stiff, orange mottling, trace fine grained sand	PID= 0.0 ppm PID= 0.1 ppm
16–17	5/5	CL	**SANDY LEAN CLAY** (CL), 2.5 Y 6/1 gray, dry to moist, non-plastic, firm to loose, some orange mottling, fine grained sand	PID= 0.0 ppm
18–20		CL	**LEAN CLAY** (CL), 2.5 Y 5/6 light olive brown, moist, non-plastic, trace dark brown staining, orange mottling, trace fine grained sand	PID= 0.0 ppm PID= 0.0 ppm
21–23	5/5	CL	**LEAN CLAY** (CL), 2.5 Y 5/6 light olive brown, moist, non-plastic, medium stiff, trace dark brown staining, orange mottling, trace fine grained sand	PID= 0.1 ppm
24–25		CL	**LEAN CLAY** (CL), 2.5 Y 5/6 light olive brown, moist to dry, non-plastic, medium stiff to stiff, trace dark brown staining, orange mottling, trace fine grained sand	PID= 0.0 ppm

Sampler Signature: Alex Turkasz Date: **2/2/2019**

ch2m:	PROJECT NUMBER 707471CH.01.02	BORING NUMBER MW-23	SHEET # 2 of 3
	SOIL BORING LOG		LOGGER: A Turkasz
PROJECT : Phase 2 San Juan River Gas Plant Site Investigation	Date: 2/2/2019	Drilling Method/Equipment: TS600 Rotosonic Drilling Contractor: Cascade Drilling	COORDINATES: Northing: 2097263.98 Easting: 2565501.68 TOTAL DEPTH OF BORING: 56.0 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
26	5/5	CL	**LEAN CLAY** (CL), 2.5 Y 5/6, light olive brown, moist to dry, non-plastic, medium stiff to stiff, trace dark brown staining, orange mottling, some fine grained sand	PID= 0.0 ppm
27				
28		SC	**CLAYEY SAND** (SC), 2.5 Y 7/2, light gray, dry to moist, non to low plasticity, medium dense to dense, predominantly fine grained sand, some cementation	
29				PID= 0.0 ppm
30				
31	5/5	SC	**CLAYEY SAND** (SC), 2.5 Y 7/2, light gray, dry to moist, non to low plasticity, medium dense to dense, predominantly fine grained sand, some cementation, heavy orange mottling	PID= 0.0 ppm
32				PID= 0.1 ppm
33				
34				PID= 0.2 ppm
35		CL	**LEAN CLAY** (CL), 2.5 Y 5/2, grayish brown, dry, non-plastic, stiff, some very fine grained sand and heavily weathered shale, black staining, orange mottling	
36	5/5	CL	**LEAN CLAY** (CL), 2.5 Y 5/2, grayish brown, dry, non-plastic, stiff, some very fine grained sand and heavily weathered shale, black staining, orange mottling	PID= 0.1 ppm
37				
38				
39				PID= 0.1 ppm
40				Water at 40' bgs
41	5/5	CL	**LEAN CLAY** (CL), 2.5 Y 5/2, grayish brown, dry, non-plastic, stiff, some very fine grained sand and heavily weathered shale, black staining, orange mottling	PID= 0.1 ppm
42		Shale	**SHALE**, 2.5 Y 2.5/1, black, dry, non-plastic, medium stiff to stiff, some clay, trace very fine grained sand, heavily weathered	Bedrock at 41' bgs
43				PID= 0.0 ppm
44				
45				
46	10/10	Shale	**SHALE**, 2.5 Y 2.5/1, black, dry, non-plastic, medium stiff to stiff, some clay, trace very fine grained sand, heavily weathered	PID= 0.0 ppm
47				
48				PID= 0.0 ppm
49				
50				PID= 0.0 ppm

Sampler Signature: Alex Turkasz Date: 2/2/2019

ch2m:	PROJECT NUMBER 707471CH.01.02	BORING NUMBER MW-23	SHEET # 3 of 3
	SOIL BORING LOG		LOGGER: A Turkasz
PROJECT : Phase 2 San Juan River Gas Plant Site Investigation	Date: 2/2/2019	Drilling Method/Equipment: TS600 Rotosonic Drilling Contractor: Cascade Drilling	COORDINATES: Northing: 2097263.98 Easting: 2565501.68 TOTAL DEPTH OF BORING: 56.0 feet

DEPTH BELOW SURFACE (FT)	RECOVERY (FT)	USCS CODE	SOIL DESCRIPTION	COMMENTS/NOTES, PID RESULTS, SAMPLE COLLECTION (Date, Time, Sample ID)
51	10/10	Shale	**SHALE**, 2.5 Y 2.5/1, black, dry, non-plastic, medium stiff to stiff, some clay, trace very fine grained sand, heavily weathered	PID= 0.0 ppm
52				
53				PID= 0.0 ppm
54				
55				
56	1/1	Shale	**SHALE**, 2.5 Y 2.5/1, black, dry, non-plastic, medium stiff to stiff, some clay, trace very fine grained sand, heavily weathered	PID= 0.0 ppm
57			EOB @ 56.0' bgs	
58				
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Sampler Signature: Alex Turkasz Date: 2/2/2019

PROJECT NUMBER	WELL NUMBER	
683593.01.05	MW-11	SHEET 1 OF 1

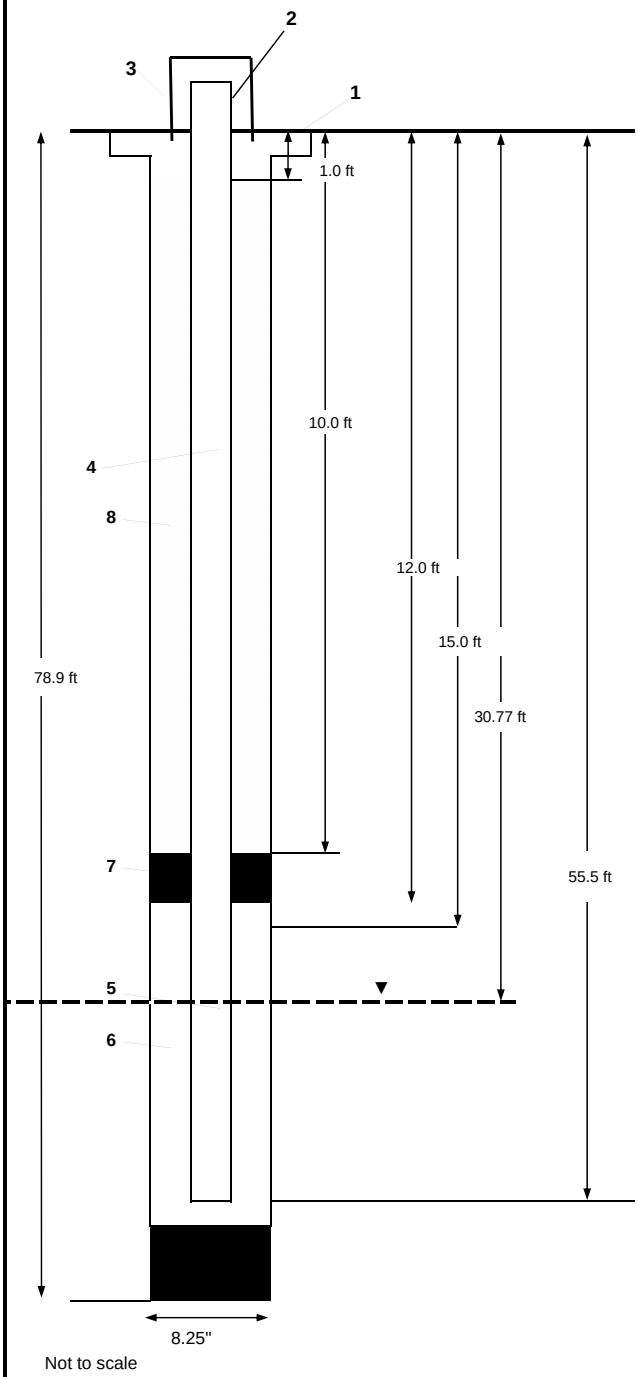
WELL COMPLETION DIAGRAM

PROJECT : San Juan River Gas Plant Site Investigation LOCATION : Kirtland, NM

DRILLING CONTRACTOR : Cascade Drilling COORDINATES : 2,566,073.24 ft E. 2,096,943.59 ft N

DRILLING METHOD AND EQUIPMENT : CME 75 Hollow Stem Auger Rig with Air Rotary DRILLER: Gary Whitley

WATER LEVEL: 30.77 ft btoc START : 4/17/17 1400 END : 4/17/17 1740



1-	Ground elevation at well	5,287.87
2-	Top of PVC casing elevation	5,290.46
	a) protective cover elevation	5,290.92
3-	Wellhead protection cover type	5-ft x 8-in diameter steel casing
	a) weep hole?	N/A
	b) concrete pad dimensions	3ft x 3 ft x 6 in
4-	Dia./type of well casing	4" schedule 40 PVC, flush thread
5-	Type/slot size of screen	4" schedule 40 PVC, 0.010 " mil-slot flush thread, bottom cap
6-	Type screen filter	10/20 Colorado Silica Sand
7-	Type of seal	3/8-in hydrated bentonite chips
8-	Type of seal	Grout with 3% bentonite powder
9-	Cement	Type I/II Portland Cement
	Development method	swab and bail dry
	Estimated purge volume	40 gallons
	Development time	30 minutes

Comments: 9 bags of bentonite chips from 55.5 to 79 ft bgs

PROJECT NUMBER	WELL NUMBER	
683593.01.05	MW-12	SHEET 1 OF 1

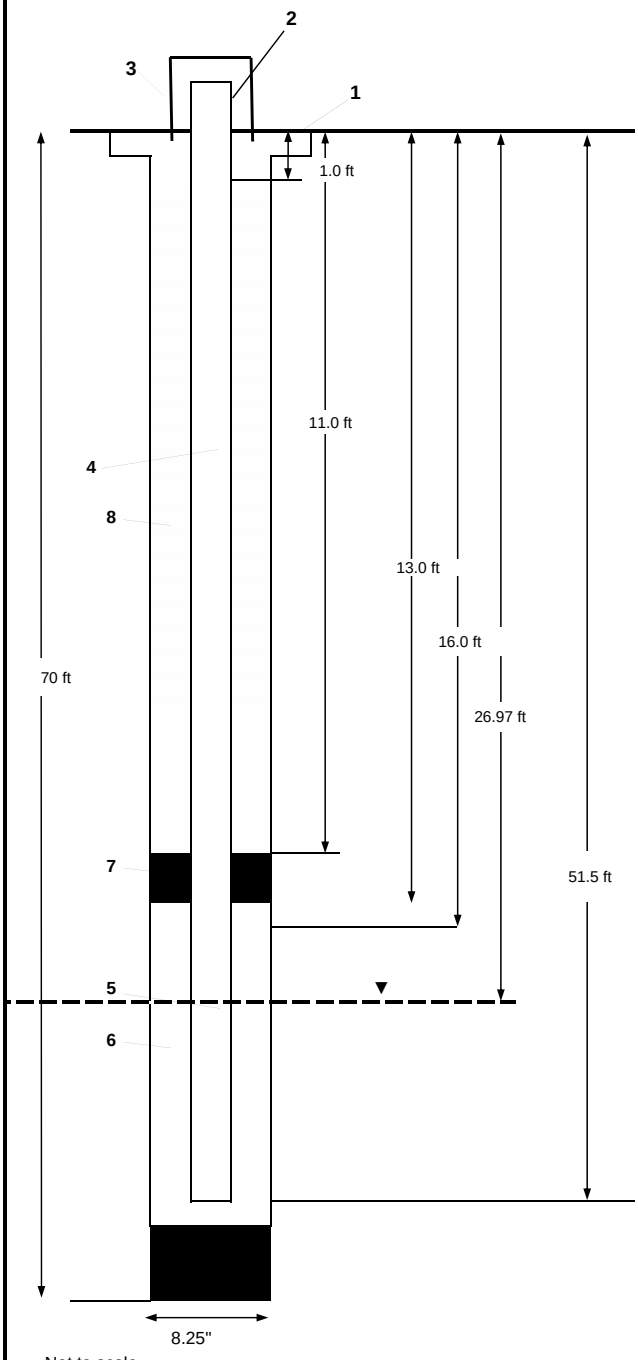
WELL COMPLETION DIAGRAM

PROJECT : San Juan River Gas Plant Site Investigation LOCATION : Kirtland, NM

DRILLING CONTRACTOR : Cascade Drilling COORDINATES : 2,566,020.96 ft E 2,097,152.54 ft N

DRILLING METHOD AND EQUIPMENT : CME 75 Hollow Stem Auger Rig with Air Rotary DRILLER: Gary Whitley

WATER LEVEL: 26.97 ft btoc START : 4/15/17 1300 END : 4/15/17 1530



Not to scale

1-	Ground elevation at well	5,280.45
2-	Top of PVC casing elevation	5,282.80
	a) protective cover elevation	5,283.37
3-	Wellhead protection cover type	5-ft x 8-in diameter steel casing
	a) weep hole?	N/A
	b) concrete pad dimensions	3ft x 3 ft x 6 in
4-	Dia./type of well casing	4" schedule 40 PVC, flush thread
5-	Type/slot size of screen	4" schedule 40 PVC, 0.010 " mil-slot flush thread, bottom cap
6-	Type screen filter	10/20 Colorado Silica Sand
7-	Type of seal	3/8-in hydrated bentonite chips
8-	Type of seal	Grout with 3% bentonite powder
9-	Cement	Type I/II Portland Cement
	Development method	swab and bail dry
	Estimated purge volume	80 gallons
	Development time	25 minutes

Comments: 10 bags of bentonite chips from 52 to 70 ft bgs

PROJECT NUMBER	WELL NUMBER	
683593.01.05	MW-13	SHEET 1 OF 1

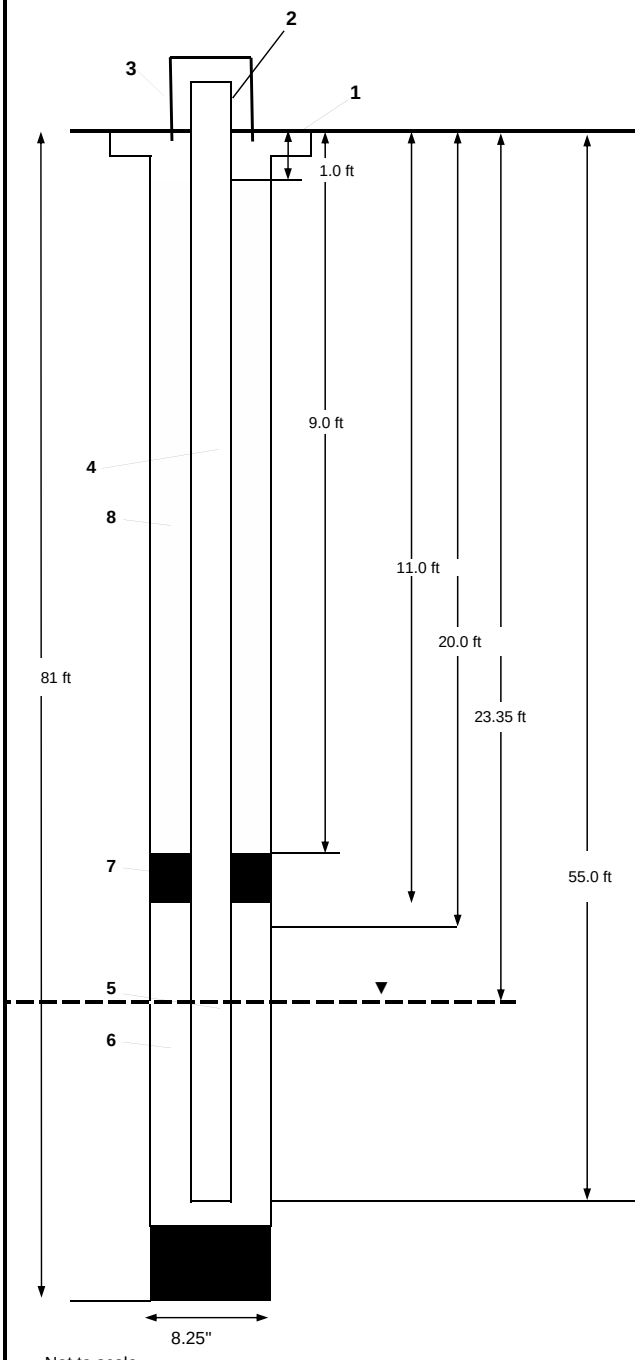
WELL COMPLETION DIAGRAM

PROJECT : San Juan River Gas Plant Site Investigation LOCATION : Kirtland, NM

DRILLING CONTRACTOR : Cascade Drilling COORDINATES : 2,566,090.70 ft E 2,097,273.50 ft N

DRILLING METHOD AND EQUIPMENT : CME 75 Hollow Stem Auger Rig with Air Rotary DRILLER: Gary Whitley

WATER LEVEL: 23.35 ft btoc START : 4/18/17 1325 END : 4/18/17 1635



Not to scale

1-	Ground elevation at well	5,277.01
2-	Top of PVC casing elevation	5,279.31
	a) protective cover elevation	5,279.92
3-	Wellhead protection cover type	5-ft x 8-in diameter steel casing
	a) weep hole?	N/A
	b) concrete pad dimensions	3ft x 3 ft x 6 in
4-	Dia./type of well casing	4" schedule 40 PVC, flush thread
5-	Type/slot size of screen	4" schedule 40 PVC, 0.010 " mil-slot flush thread, bottom cap
6-	Type screen filter	10/20 Colorado Silica Sand
7-	Type of seal	3/8-in hydrated bentonite chips
8-	Type of seal	Grout with 3% bentonite powder
9-	Cement	Type I/II Portland Cement
	Development method	swab and bail dry
	Estimated purge volume	42 gallons
	Development time	40 minutes

Comments: 8.5 bags of bentonite chips from 56 to 81 ft bgs

PROJECT NUMBER	WELL NUMBER	
683593.01.05	MW-14	SHEET 1 OF 1

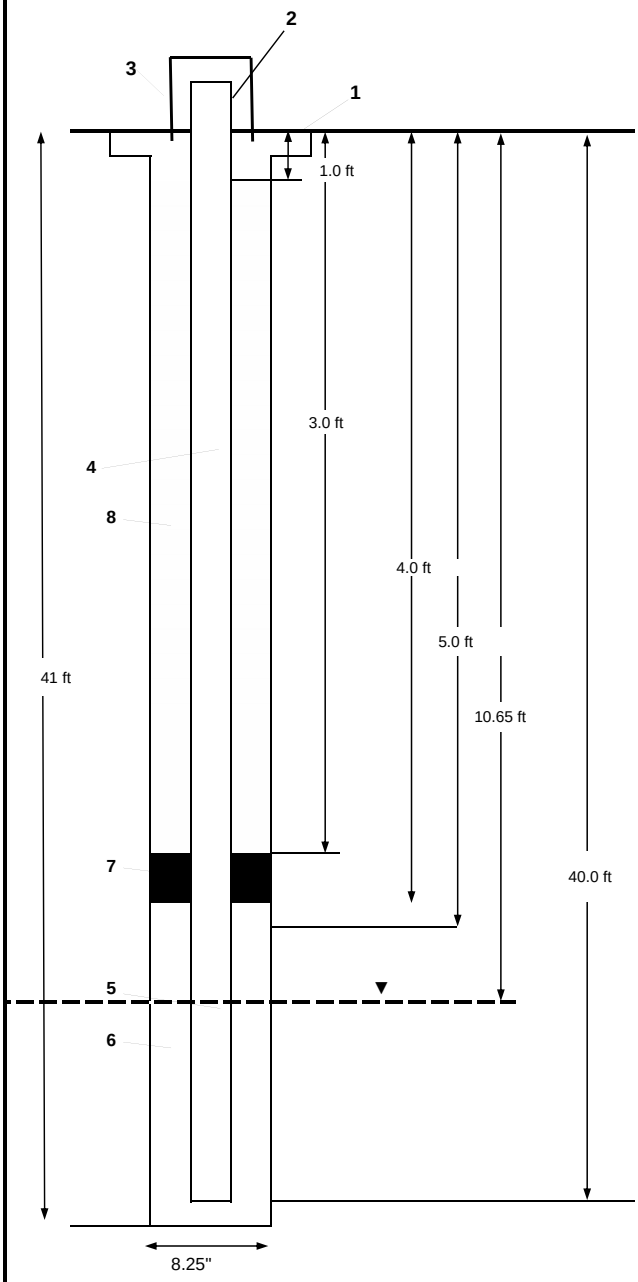
WELL COMPLETION DIAGRAM

PROJECT : San Juan River Gas Plant Site Investigation LOCATION : Kirtland, NM

DRILLING CONTRACTOR : Cascade Drilling COORDINATES : 2,566,294.33 ft E 2,097,360.26 ft N

DRILLING METHOD AND EQUIPMENT : CME 75 Hollow Stem Auger Rig with Air Rotary DRILLER: Gary Whitley

WATER LEVEL: 10.65 ft btoc START : 4/15/17 1300 END : 4/15/17 1530



Not to scale

1-	Ground elevation at well	5,268.35
2-	Top of PVC casing elevation	5,270.58
	a) protective cover elevation	5,271.21
3-	Wellhead protection cover type	5-ft x 8-in diameter steel casing
	a) weep hole?	N/A
	b) concrete pad dimensions	3ft x 3 ft x 6 in
4-	Dia./type of well casing	4" schedule 40 PVC, flush thread
5-	Type/slot size of screen	4" schedule 40 PVC, 0.010 " mil-slot flush thread, bottom cap
6-	Type screen filter	10/20 Colorado Silica Sand
7-	Type of seal	3/8-in hydrated bentonite chips
8-	Type of seal	Grout with 3% bentonite powder
9-	Cement	Type I/II Portland Cement
	Development method	swab and bail dry
	Estimated purge volume	53 gallons
	Development time	40 minutes

Comments:

PROJECT NUMBER	WELL NUMBER	
683593.01.05	MW-15	SHEET 1 OF 1

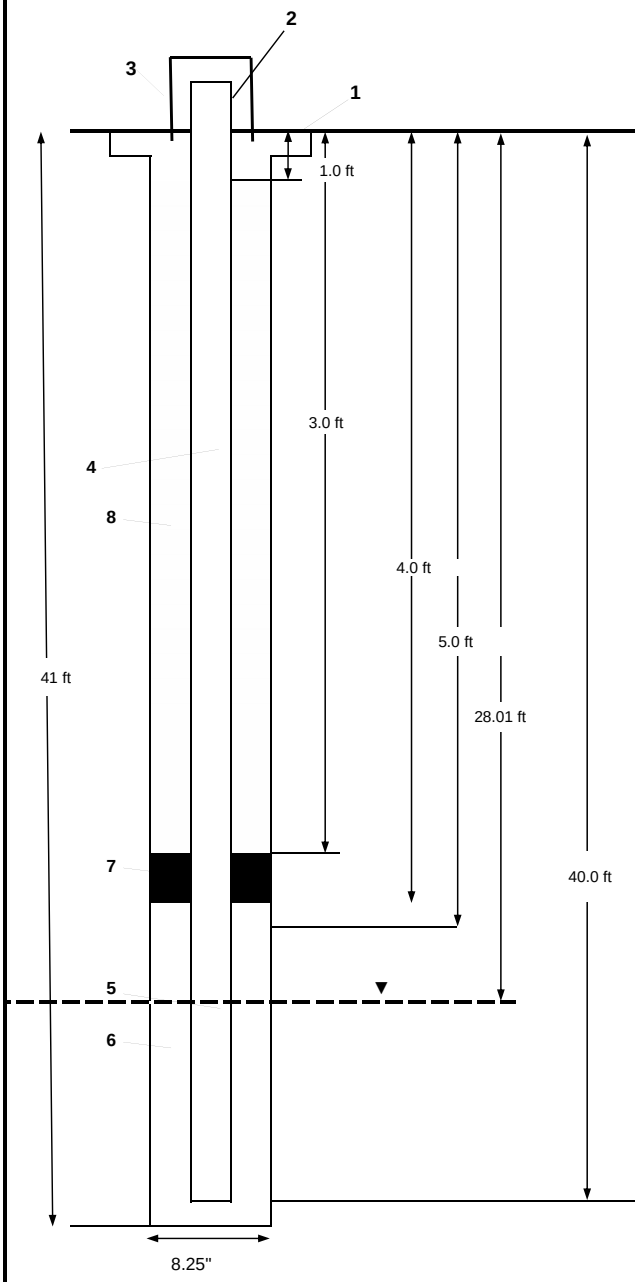
WELL COMPLETION DIAGRAM

PROJECT : San Juan River Gas Plant Site Investigation LOCATION : Kirtland, NM

DRILLING CONTRACTOR : Cascade Drilling COORDINATES : 2,566,009.70 ft E 2,097,443.26 ft N

DRILLING METHOD AND EQUIPMENT : CME 75 Hollow Stem Auger Rig with Air Rotary DRILLER: Gary Whitley

WATER LEVEL: 28.01 START : 4/14/17 1004 END : 4/14/17 1131



Not to scale

1-	Ground elevation at well	5,271.07
2-	Top of PVC casing elevation	5,273.45
	a) protective cover elevation	5,273.99
3-	Wellhead protection cover type	5-ft x 8-in diameter steel casing
	a) weep hole?	N/A
	b) concrete pad dimensions	3ft x 3 ft x 6 in
4-	Dia./type of well casing	4" schedule 40 PVC, flush thread
5-	Type/slot size of screen	4" schedule 40 PVC, 0.010 " mil-slot flush thread, bottom cap
6-	Type screen filter	10/20 Colorado Silica Sand
7-	Type of seal	3/8-in hydrated bentonite chips
8-	Type of seal	Grout with 3% bentonite powder
9-	Cement	Type I/II Portland Cement
	Development method	swab and bail dry
	Estimated purge volume	18 gallons
	Development time	25 minutes

Comments:

PROJECT NUMBER	WELL NUMBER	
683593.01.05	MW-16	SHEET 1 OF 1

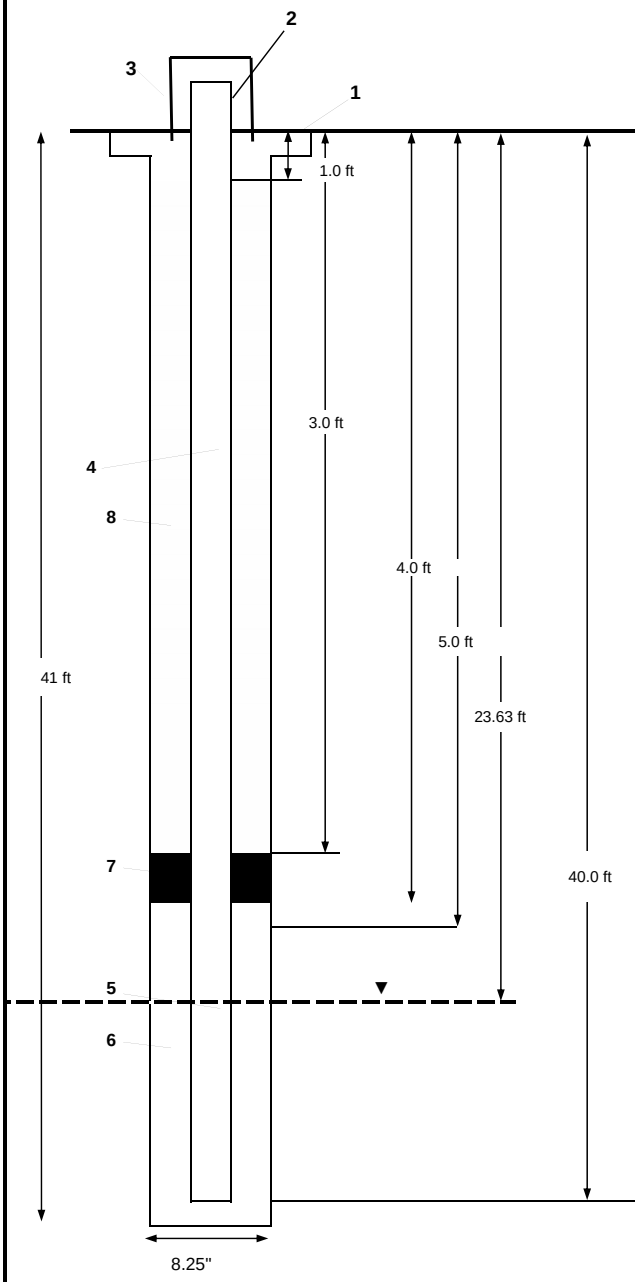
WELL COMPLETION DIAGRAM

PROJECT : San Juan River Gas Plant Site Investigation LOCATION : Kirtland, NM

DRILLING CONTRACTOR : Cascade Drilling COORDINATES : 2,566,028.25 ft E 2,097,518.89 ft N

DRILLING METHOD AND EQUIPMENT : CME 75 Hollow Stem Auger Rig with Air Rotary DRILLER: Gary Whitley

WATER LEVEL: 23.63 ft btoc START : 4/14/17 1556 END : 4/14/17 1720



Not to scale

1-	Ground elevation at well	5,262.91
2-	Top of PVC casing elevation	5,265.34
	a) protective cover elevation	5,263.42
3-	Wellhead protection cover type	5-ft x 8-in diameter steel casing
	a) weep hole?	N/A
	b) concrete pad dimensions	3ft x 3 ft x 6 in
4-	Dia./type of well casing	4" schedule 40 PVC, flush thread
5-	Type/slot size of screen	4" schedule 40 PVC, 0.010 " mil-slot flush thread, bottom cap
6-	Type screen filter	10/20 Colorado Silica Sand
7-	Type of seal	3/8-in hydrated bentonite chips
8-	Type of seal	Grout with 3% bentonite powder
9-	Cement	Type I/II Portland Cement
	Development method	swab and bail dry
	Estimated purge volume	23 gallons
	Development time	25 minutes

Comments:

PROJECT NUMBER	WELL NUMBER	
707471CH.01.02	MW-17	SHEET 1 OF 1

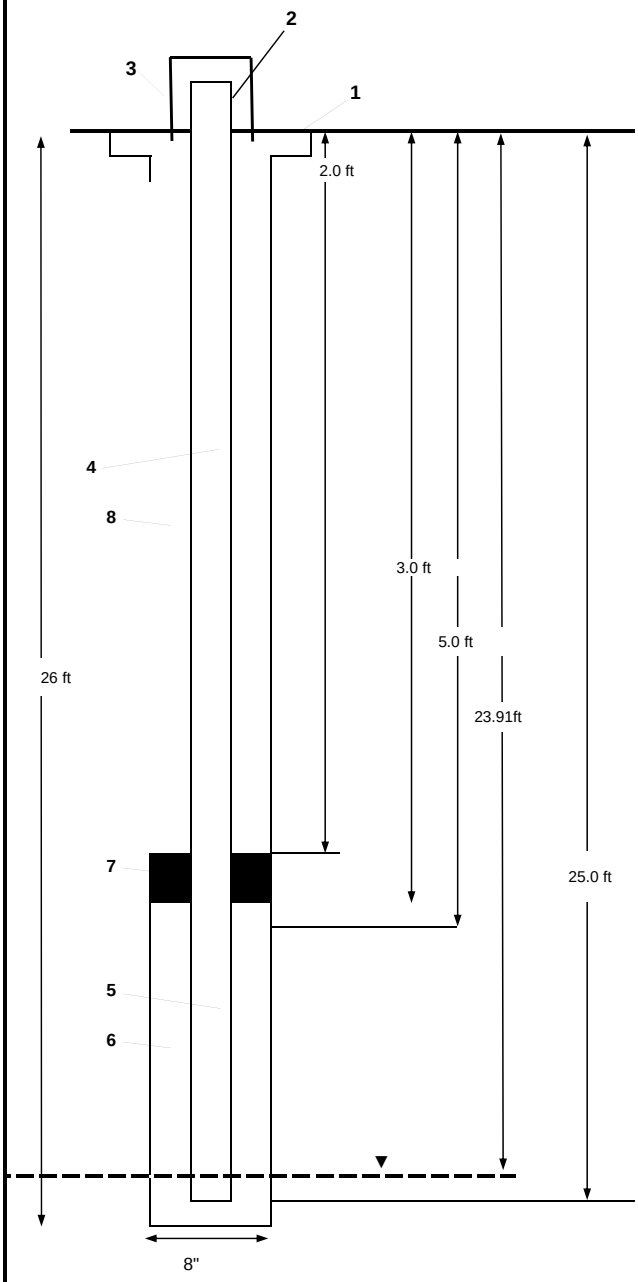
WELL COMPLETION DIAGRAM

PROJECT : San Juan River Gas Plant Site Investigation LOCATION : Kirtland, NM

DRILLING CONTRACTOR : Cascade Drilling COORDINATES : 2,565,911.84 ft E 2,097,678.93 ft N

DRILLING METHOD AND EQUIPMENT : Rotosonic DRILLER: Brigham Bradford

WATER LEVEL: 23.91 ft btoc START : 1/30/2019 END : 2/5/2019



Not to scale

1-	Ground elevation at well	5,260.57
2-	Top of PVC casing elevation	5,263.95
	a) protective cover elevation	5,264.22
3-	Wellhead protection cover type	5-ft x 8-in diameter steel casing
	a) weep hole?	N/A
	b) concrete pad dimensions	3ft x 3 ft x 6 in
4-	Dia./type of well casing	4" schedule 40 PVC, flush thread
5-	Type/slot size of screen	4" schedule 40 PVC, 0.010 " mil-slot flush thread, bottom cap
6-	Type screen filter	10/20 Colorado Silica Sand
7-	Type of seal	3/8-in hydrated bentonite chips
8-	Type of seal	High strength concrete
9-	Cement	High strength concrete
	Development method	swab and bail dry
	Estimated purge volume	8 gallons
	Development time	

Comments: 4 bollards placed around the well

PROJECT NUMBER	WELL NUMBER	
707471CH.01.02	MW-18	SHEET 1 OF 1

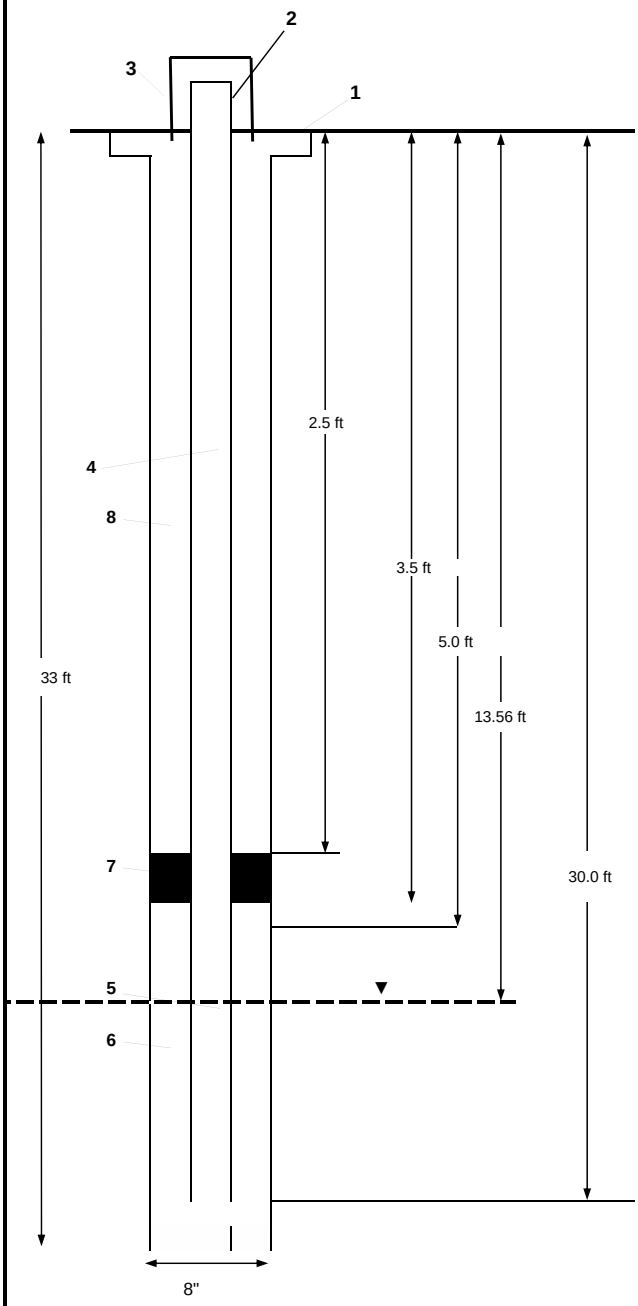
WELL COMPLETION DIAGRAM

PROJECT : San Juan River Gas Plant Site Investigation LOCATION : Kirtland, NM

DRILLING CONTRACTOR : Cascade Drilling COORDINATES : 2,566,347.65 ft E 2,097,647.91 ft N

DRILLING METHOD AND EQUIPMENT : Rotosonic DRILLER: Brigham Bradford

WATER LEVEL: 13.56 START : 1/28/2019 END : 2/6/2019



Not to scale

1-	Ground elevation at well	5,265.85
2-	Top of PVC casing elevation	5,269.08
	a) protective cover elevation	5,269.30
3-	Wellhead protection cover type	5-ft x 8-in diameter steel casing
	a) weep hole?	N/A
	b) concrete pad dimensions	3ft x 3 ft x 6 in
4-	Dia./type of well casing	4" schedule 40 PVC, flush thread
5-	Type/slot size of screen	4" schedule 40 PVC, 0.010 " mil-slot flush thread, bottom cap
6-	Type screen filter	10/20 Colorado Silica Sand
7-	Type of seal	3/8-in hydrated bentonite chips
8-	Type of seal	High strength concrete
9-	Cement	High strength concrete
	Development method	swab and bail and pump dry
	Estimated purge volume	
	Development time	

Comments: 4 bollards placed around well
Borehole drilled to 33 ft bgs. Backfilled with bentonite from 31 - 33 ft bgs

PROJECT NUMBER	WELL NUMBER	
707471CH.01.02	MW-19	SHEET 1 OF 1

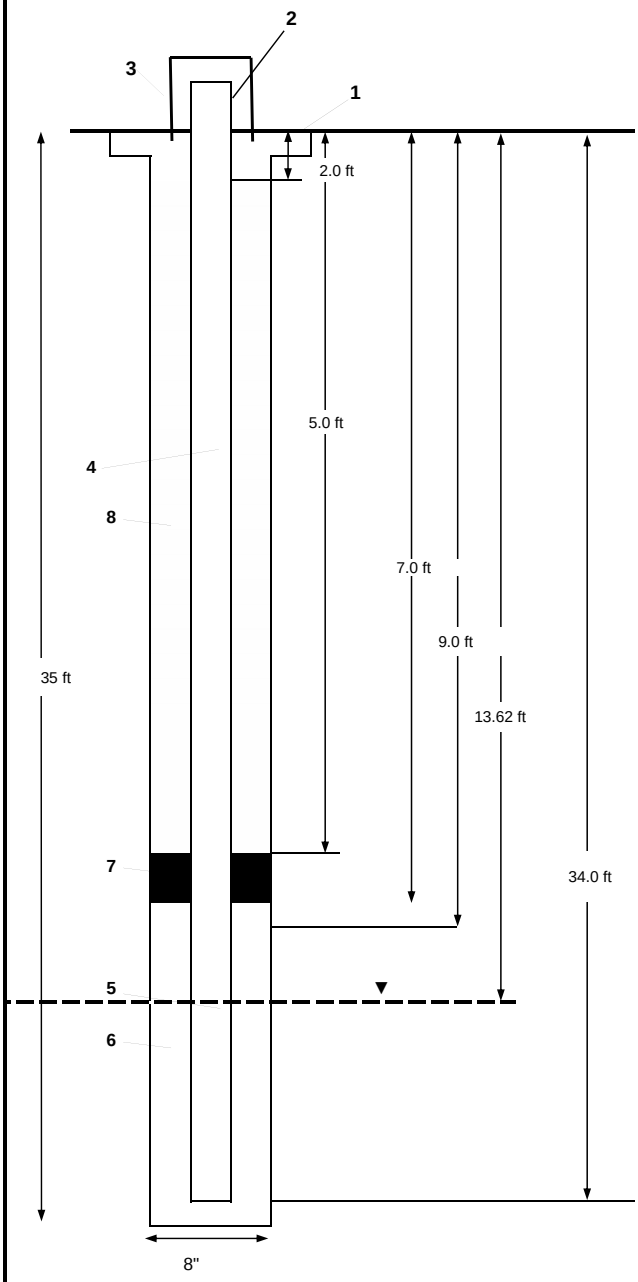
WELL COMPLETION DIAGRAM

PROJECT : San Juan River Gas Plant Site Investigation LOCATION : Kirtland, NM

DRILLING CONTRACTOR : Cascade Drilling COORDINATES : 2,566,308.83 ft E 2,097,248.26 ft N

DRILLING METHOD AND EQUIPMENT : Rotosonic DRILLER: Gary Whitley

WATER LEVEL: 13.62 ft btoc START : 1/29/2019 END : 2/5/2019



Not to scale

1-	Ground elevation at well	5,275.42
2-	Top of PVC casing elevation	5,278.24
	a) protective cover elevation	5,278.49
3-	Wellhead protection cover type	5-ft x 8-in diameter steel casing
	a) weep hole?	N/A
	b) concrete pad dimensions	3ft x 3 ft x 6 in
4-	Dia./type of well casing	4" schedule 40 PVC, flush thread
5-	Type/slot size of screen	4" schedule 40 PVC, 0.010 " mil-slot flush thread, bottom cap
6-	Type screen filter	10/20 Colorado Silica Sand
7-	Type of seal	3/8-in hydrated bentonite chips
8-	Type of seal	Grout with 3% bentonite powder
9-	Cement	High strength concrete
	Development method	swab and bail and pump
	Estimated purge volume	90 gallons
	Development time	

Comments: 4 bollards placed around well
Development water <NTU

PROJECT NUMBER	WELL NUMBER	
707471CH.01.02	MW-20	SHEET 1 OF 1

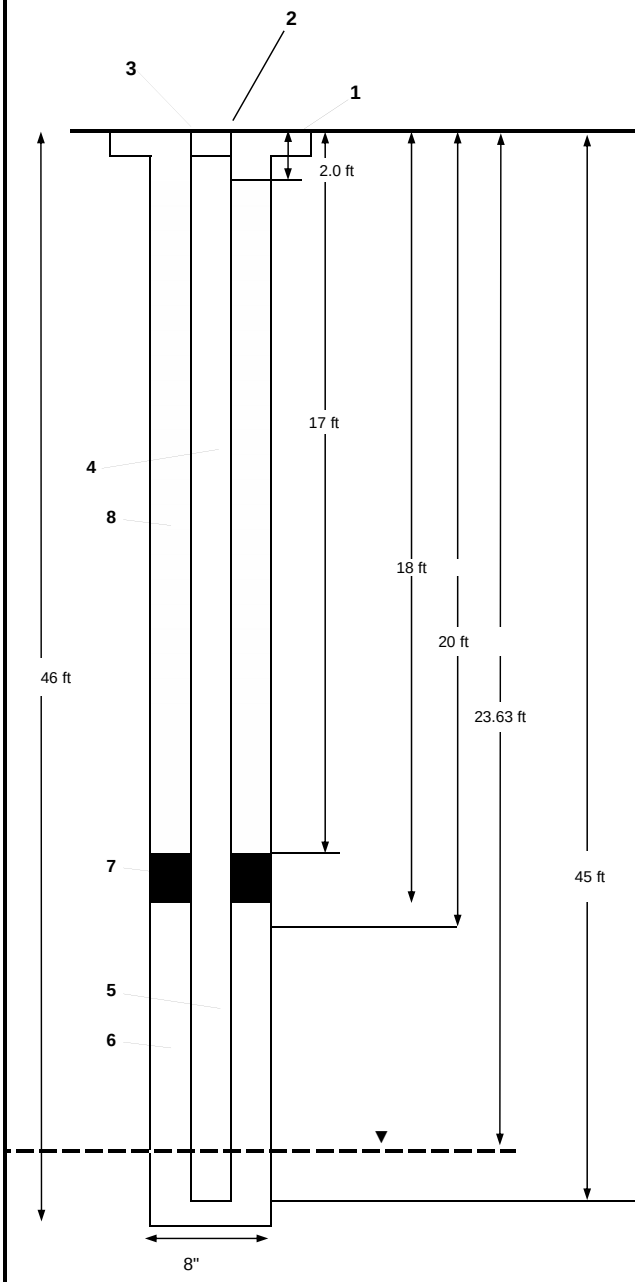
WELL COMPLETION DIAGRAM

PROJECT : San Juan River Gas Plant Site Investigation LOCATION : Kirtland, NM

DRILLING CONTRACTOR : Cascade Drilling COORDINATES : 2,566,055.12 ft E 2,096,772.12 ft N

DRILLING METHOD AND EQUIPMENT : Rotosonic DRILLER: Brigham Bradford

WATER LEVEL: 42.92 ft bgs START : 2/1/2019 END : 2/5/2019



Not to scale

1-	Ground elevation at well	5,292.57
2-	Top of PVC casing elevation	5,292.23
	a) protective cover elevation	5,292.52
3-	Wellhead protection cover type	12-inch ground vault
	a) weep hole?	N/A
	b) concrete pad dimensions	3ft x 3 ft x 6 in
4-	Dia./type of well casing	4" schedule 40 PVC, flush thread
5-	Type/slot size of screen	4" schedule 40 PVC, 0.010 " mil-slot flush thread, bottom cap
6-	Type screen filter	10/20 Colorado Silica Sand
7-	Type of seal	3/8-in hydrated bentonite chips
8-	Type of seal	Grout with 3% bentonite powder
9-	Cement	High strength concrete
	Development method	swab and bail dry
	Estimated purge volume	2 gallons
	Development time	

Comments:

PROJECT NUMBER	WELL NUMBER	
707471CH.01.02	MW-21	SHEET 1 OF 1

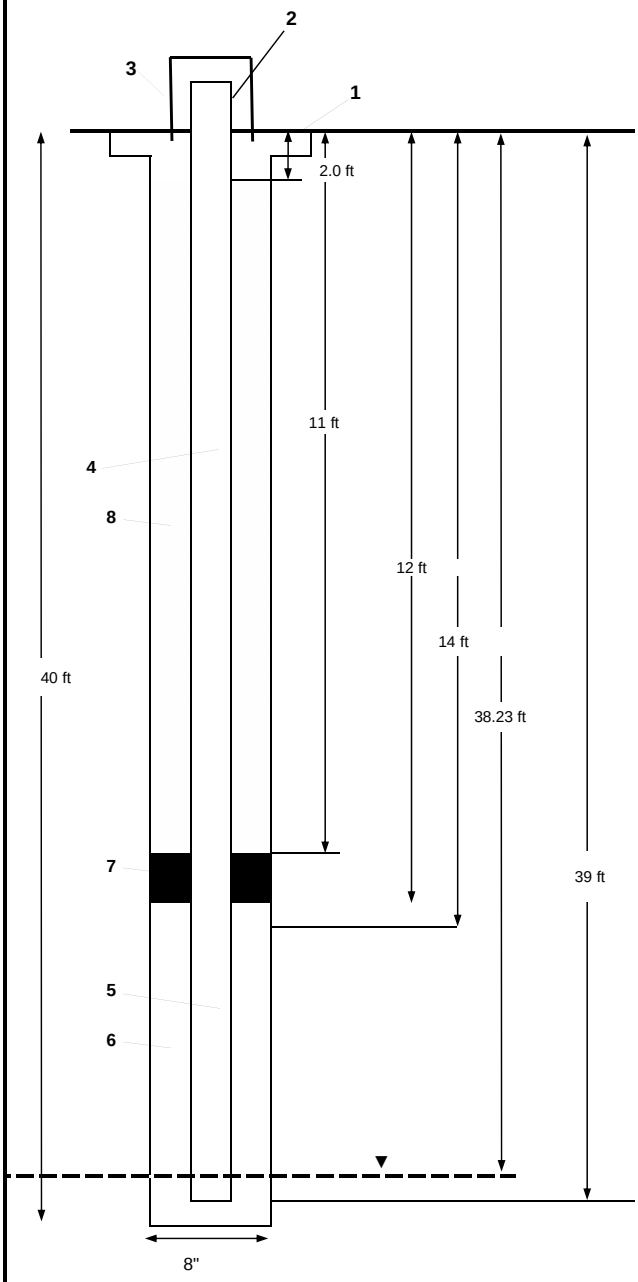
WELL COMPLETION DIAGRAM

PROJECT : San Juan River Gas Plant Site Investigation LOCATION : Kirtland, NM

DRILLING CONTRACTOR : Cascade Drilling COORDINATES : 2,565,917.8 ft E 2,097,302.39 ft N

DRILLING METHOD AND EQUIPMENT : Rotosonic DRILLER: Brigham Bradford

WATER LEVEL: 38.23 ft bgs START : 1/31/2019 END : 2/5/2019



Not to scale

1-	Ground elevation at well	5,272.94
2-	Top of PVC casing elevation	5,276.06
	a) protective cover elevation	5,276.29
3-	Wellhead protection cover type	5-ft x 8-in diameter steel casing
	a) weep hole?	N/A
	b) concrete pad dimensions	3ft x 3 ft x 6 in
4-	Dia./type of well casing	4" schedule 40 PVC, flush thread
5-	Type/slot size of screen	4" schedule 40 PVC, 0.010 " mil-slot flush thread, bottom cap
6-	Type screen filter	10/20 Colorado Silica Sand
7-	Type of seal	3/8-in hydrated bentonite chips
8-	Type of seal	Grout with 3% bentonite powder
9-	Cement	Type I/II Portland Cement
	Development method	swab and bail dry
	Estimated purge volume	5 gallons
	Development time	25 minutes

Comments: 4 bollards placed around well

PROJECT NUMBER	WELL NUMBER	
707471CH.01.02	MW-22	SHEET 1 OF 1

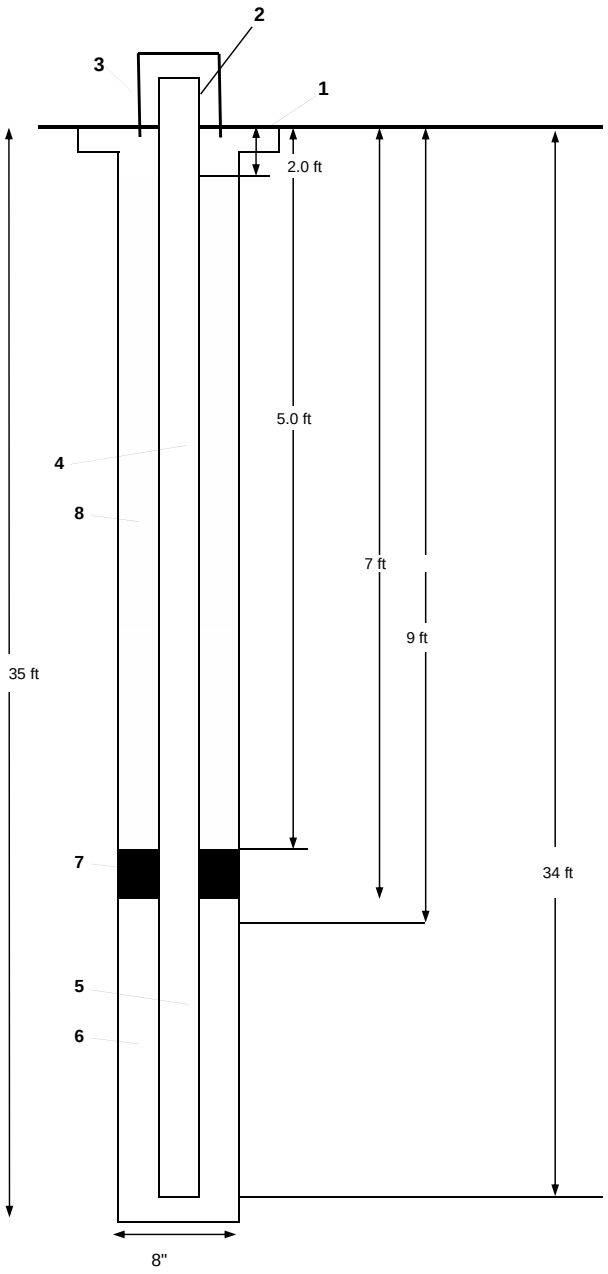
WELL COMPLETION DIAGRAM

PROJECT : San Juan River Gas Plant Site Investigation LOCATION : Kirtland, NM

DRILLING CONTRACTOR : Cascade Drilling COORDINATES : 2,565,807.56 ft E 2,097,378.21 ft N

DRILLING METHOD AND EQUIPMENT : Rotosonic DRILLER: Brigham Bradford

WATER LEVEL: No water START : 2/1/2019 END : 2/5/2019



Not to scale

1-	Ground elevation at well	5,266.07
2-	Top of PVC casing elevation	5,269.13
	a) protective cover elevation	5,269.38
3-	Wellhead protection cover type	5-ft x 8-in diameter steel casing
	a) weep hole?	N/A
	b) concrete pad dimensions	3ft x 3 ft x 6 in
4-	Dia./type of well casing	4" schedule 40 PVC, flush thread
5-	Type/slot size of screen	4" schedule 40 PVC, 0.010 " mil-slot flush thread, bottom cap
6-	Type screen filter	10/20 Colorado Silica Sand
7-	Type of seal	3/8-in hydrated bentonite chips
8-	Type of seal	Grout with 3% bentonite powder
9-	Cement	Type I/II Portland Cement
	Development method	Not applicable
	Estimated purge volume	no water
	Development time	

Comments: 4 bollards placed around well

PROJECT NUMBER	WELL NUMBER	
707471CH.01.02	MW-23	SHEET 1 OF 1

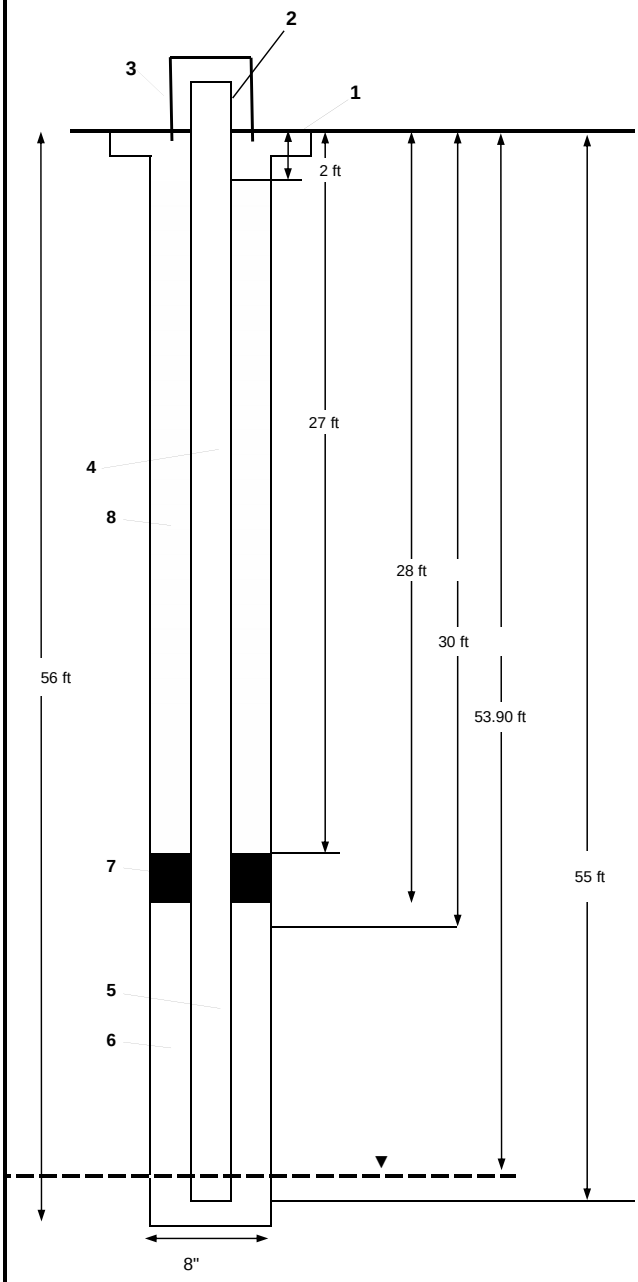
WELL COMPLETION DIAGRAM

PROJECT : San Juan River Gas Plant Site Investigation LOCATION : Kirtland, NM

DRILLING CONTRACTOR : Cascade Drilling COORDINATES : 2,565,503.58 ft E 2,097,264.42 ft N

DRILLING METHOD AND EQUIPMENT : Rotosonic DRILLER: Brigham Bradford

WATER LEVEL: 53.90 ft bgs START : 2/2/2019 END : 2/5/2019



Not to scale

1-	Ground elevation at well	5,284.61
2-	Top of PVC casing elevation	5,287.86
	a) protective cover elevation	5,288.00
3-	Wellhead protection cover type	5-ft x 8-in diameter steel casing
	a) weep hole?	N/A
	b) concrete pad dimensions	3ft x 3 ft x 6 in
4-	Dia./type of well casing	4" schedule 40 PVC, flush thread
5-	Type/slot size of screen	4" schedule 40 PVC, 0.010 " mil-slot flush thread, bottom cap
6-	Type screen filter	10/20 Colorado Silica Sand
7-	Type of seal	3/8-in hydrated bentonite chips
8-	Type of seal	Grout with 3% bentonite powder
9-	Cement	Type I/II Portland Cement
	Development method	swab and bail dry
	Estimated purge volume	5 gallons
	Development time	30 minutes

Comments: 4 bollards placed around well

Appendix C
Investigation-Derived Waste Disposal Paperwork

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	1		001

5. Generator's Name and Mailing Address: El Paso Natural Gas Company, LLC
10014 Louisiana St. Ste. 9561
Houston, TX 77002
Generator's Phone: (713) 420-3475 ATTN Joe Wiley

Generator's Site Address (if different than mailing address):

6. Transporter 1 Company Name: Riley Industrial Services (505) 327-4947
U.S. EPA ID Number:

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: Envirotech Inc. Soil Remediation Facility
#43 Road 7175, South of Bloomfield, NM
87413
Facility's Phone: (505) 632-0615
U.S. EPA ID Number:

GENERATOR

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1.	Nonhazardous Soil/Water Mix Truck #18079	30/5	BBL		
2.					
3.					
4.					

13. Special Handling Instructions and Additional Information

KM - San Juan River Gas Plant

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: On Behalf of El Paso Natural Gas Company, LLC Luke Hill/CH2M
Signature: Luke Hill
Month: 11 Day: 28 Year: 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Signature: Month: Day: Year:

Transporter 2 Printed/Typed Name: Signature: Month: Day: Year:

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number:

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) Month: Day: Year:

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Dave Clark
Signature: Dave
Month: 11 Day: 28 Year: 16

169-BLS-C 6 10497 (Rev. 9/09)

DESIGNATED FACILITY TO GENERATOR

Page 1564 of 1581

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
				002

GENERATOR

5. Generator's Name and Mailing Address: El Paso Natural Gas Company, LLC
10014 Louisiana St. Ste. 9561
Houston, TX 77002

Generator's Site Address (if different than mailing address)

Generator's Phone: (713) 420-3475 ATTN Joe Wiley

6. Transporter 1 Company Name: Riley Industrial Services (505) 327-4947 — U.S. EPA ID Number

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address: Envirotech Inc. Soil Remediation Facility
#43 Road 7175, South of Bloomfield, NM
87413 — U.S. EPA ID Number

Facility's Phone: (505) 632-0615

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Nonhazardous Soil/Water Mix Truck #18084	30/5	BBL			
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information

KM - San Juan River Gas Plant

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: On Behalf of El Paso Natural Gas Company, LLC — Luke Hill/CH2M — Signature: Luke Hill — Month: 11 — Day: 28 — Year: 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name — Signature — Month — Day — Year

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month — Day — Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: DAVE MANCE — Signature — Month: 11 — Day: 28 — Year: 16

69-BLS-C 6 10497 (Rev. 9/09)

TRANSPORTER #2

Received by OCD: 11/13/2025 11:14:36 AM

Released to Imaging: 11/14/2025 9:30:04 AM

Page 1565 of 1581

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
				003

5. Generator's Name and Mailing Address: El Paso Natural Gas Company, LLC
10014 Louisiana St. Ste. 9561
Houston, TX 77002
Generator's Phone: (713) 420-3475 ATTN Joe Wiley

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: Riley Industrial Services (505) 327-4947

U.S. EPA ID Number

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address: Envirotech Inc. Soil Remediation Facility
#43 Road 7175, South of Bloomfield, NM
87413
Facility's Phone: (505) 632-0615

U.S. EPA ID Number

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Nonhazardous Soil/Water Mix Truck # 18079	20/5	BBI			
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information

KM- San Juan River Gas Plant

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: On Behalf of El Paso Natural Gas Company, LLC Luke Hill/CH2M | Signature: Luke Hill | Month: 11 | Day: 29 | Year: 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name | Signature | Month | Day | Year

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) | U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) | Month | Day | Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: DAVE LANE | Signature | Month: 11 | Day: 29 | Year: 16

169-BLS-C 6 10497 (Rev. 9/09)

DESIGNATED FACILITY TO GENERATOR

Received by OCD: 11/13/2025 11:14:36 AM

Released to Imaging: 11/14/2025 9:30:04 AM

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NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
			004

5. Generator's Name and Mailing Address: El Paso Natural Gas Company, LLC
10014 Louisiana St. Ste. 9561
Houston, TX 77002

Generator's Site Address (if different than mailing address):

Generator's Phone: (713) 420-3475 ATTN Joe Wiley

6. Transporter 1 Company Name: Riley Industrial Services (505) 327-4947 — U.S. EPA ID Number:

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: Envirotech Inc. Soil Remediation Facility
#43 Road 7175, South of Bloomfield, NM 87413 — U.S. EPA ID Number:

Facility's Phone: (505) 632-0615

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Nonhazardous Soil/Water Mix 17033 Truck #~~18024~~	20/5	BBL			
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information

KM - San Juan River Gas Plant

GENERATOR

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: On Behalf of El Paso Natural Gas Company, LLC Luke Hill/CH2M — Signature: Luke Hill — Month: 11 Day: 29 Year: 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name — Signature — Month — Day — Year

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month — Day — Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: DAVE Ianka — Signature — Month: 11 Day: 29 Year: 16

69-BLS-C 6 10497 (Rev. 9/09)

TRANSPORTER #2

Received by OCD: 11/13/2025 11:14:36 AM
Released to Imaging: 11/14/2025 9:30:04 AM

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NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
			005

5. Generator's Name and Mailing Address: El Paso Natural Gas Company, LLC
10014 Louisiana St. Ste. 9561
Houston, TX 77002

Generator's Site Address (if different than mailing address)

Generator's Phone: (713) 420-3475 ATTN Joe Wiley

6. Transporter 1 Company Name: Riley Industrial Services (505) 327-4947 — U.S. EPA ID Number:

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: Envirotech Inc. Soil Remediation Facility
#43 Road 7175, South of Bloomfield, NM
87413 — U.S. EPA ID Number:

Facility's Phone: (505) 632-0615

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Nonhazardous Soil/Water Mix Truck # 17033	40/5	BBL			
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information

KM - San Juan River Gas Plant

GENERATOR

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: On Behalf of El Paso Natural Gas Company, LLC Luke Hill/CH2M — Signature: Luke Hill — Month: 11 Day: 30 Year: 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name — Signature — Month — Day — Year

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month — Day — Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: DAVE IANNE — Signature — Month: 11 Day: 30 Year: 16

169-BLS-C 6 10497 (Rev. 9/09)

DESIGNATED FACILITY TO GENERATOR

Received by OCD: 11/13/2025 11:14:36 AM

Released to Imaging: 11/14/2025 9:30:04 AM

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
El Paso Natural Gas Company, LLC., 1001 Louisiana Street, Suite 9561, Houston, TX, 77002, Attn.: Joseph Wiley

2. Originating Site:
San Juan River Gas Plant

3. Location of Material (Street Address, City, State or ULSTR):
99 County Road 6500, Kirtland, New Mexico, 87417

4. Source and Description of Waste:
Soil from the installation of environmental investigation boreholes and monitoring wells at the site. The boreholes and monitoring wells were completed at the San Juan River Gas Plant to investigate historical (pre-1992) releases to the environment. The investigation is of releases of condensate and natural gas liquids associated with natural gas processing. Soil samples were sent to an analytical laboratory for waste characteristic analyses and the laboratory data are attached.

Estimated Volume 25 yd^3/bbls Known Volume (to be entered by the operator at the end of the haul) _____ yd^3 / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Joseph Wiley, representative or authorized agent for El Paso Natural Gas Company, LLC do hereby
PRINT & SIGN NAME COMPANY NAME
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Joseph Wiley, representative for El Paso Natural Gas Company, LLC authorize Envirotech to
Generator Signature
complete the required testing/sign the Generator Waste Testing Certification.

I, _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

6. Transporter:
Riley Industrial Services, Inc.

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Envirotech Inc. Soil Remediation Facility Permit # NM-01-0011
Address of Facility: #43 Road 7175, South of Bloomfield, NM
Method of Treatment and/or Disposal:

☒ Evaporation ☒ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: John Volkerding TITLE: Gen Mgr/VP DATE: 6/29/17

SIGNATURE: _____ TELEPHONE NO.: 505-334-3013
Surface Waste Management Facility Authorized Agent

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 1

2. Page 1 of 1

3. Generator's Name and Mailing Address El Paso Natural Gas Company, LLC
10014 Louisiana St. Ste 9561
Houston, TX 77002

4. Generator's Phone (713) 420-3475 ATTN Joe Wiley

5. Transporter 1 Company Name: M+R Trucking (505) 326-5541

6. US EPA ID Number

A. State Transporter's ID

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
Basin Disposal Inc.
200 Montana, Bloomfield, NM 87413
(505) 632-8936

10. US EPA ID Number

E. State Facility's ID

F. Facility's Phone

11. WASTE DESCRIPTION	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. Decontamination/Purge Water (Nonhazardous) Truck #33646			40 bbls	
b.				
c.				
d.				

G. Additional Descriptions for Materials Listed Above

H. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
KM - San Juan River Gas Plant

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.
On Behalf of El Paso Natural Gas Company, LLC

Printed/Typed Name: Luke Hill/CH2M | Signature: Luke Hill | Date: Month 7 Day 6 Year 17

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Ricky Smith m:e #33646 | Signature | Date: Month 7 Day 6 Year 17

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19

Printed/Typed Name | Signature | Date: Month Day Year

NON-HAZARDOUS WASTE

F-14 © 2002 LABELMASTER® (800) 621-5808 www.labelmaster.com
PRINTED ON RECYCLED PAPER USING SOYBEAN INK PRINTED WITH SOY INK

Rev. 3/95

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 1

2. Page 1 of 1

3. Generator's Name and Mailing Address: El Paso Natural Gas Company, LLC
10014 Louisiana St. Ste. 9561
Houston, TX 77002

4. Generator's Phone (713) 420 - 3475 ATTN Joe Wiley

5. Transporter 1 Company Name: M + R Trucking (505) 326-5541

6. US EPA ID Number

A. State Transporter's ID

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address: Envirotech Inc. Soil Remediation Facility
#43 Road 7175, South of Bloomfield, NM
87413 (505) 632-0615

10. US EPA ID Number

E. State Facility's ID

F. Facility's Phone

11. WASTE DESCRIPTION	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. Nonhazardous Soil Cuttings Truck #1005	1	Roll off Box	14 yds	14
b.				
c.				
d.				

G. Additional Descriptions for Materials Listed Above

H. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

KM - San Juan River Gas Plant

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

On Behalf of El Paso Natural Gas Company, LLC

Printed/Typed Name	Signature	Date (Month / Day / Year)
Luke Hill / CH2M	Luke Hill	7 / 6 / 17

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month / Day / Year)
Shawn Espinoza		7 / 6 / 17

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month / Day / Year)
		/ /

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date (Month / Day / Year)
Gary Robinson	Gary Robinson	7 / 6 / 17

NON-HAZARDOUS WASTE — GENERATOR — TRANSPORTER — FACILITY

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Rev. 3/95

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 2

2. Page 1 of 1

3. Generator's Name and Mailing Address: El Paso Natural Gas Company, LLC
10014 Louisiana St. Ste. 9561
Houston, TX 77002

4. Generator's Phone (713) 420-3475 ATTN Joe Wiley

5. Transporter 1 Company Name: M & R Trucking (505) 326-5541

6. US EPA ID Number

A. State Transporter's ID

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address: Envirotech Inc. Soil Remediation Facility
#43 Road 7175, South of Bloomfield, NM
87413 (505) 632-0615

10. US EPA ID Number

E. State Facility's ID

F. Facility's Phone

11. WASTE DESCRIPTION	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. Nonhazardous Soil Cuttings Truck # 1005		Roll off Box	14	14.
b.				
c.				
d.				

GENERATOR

G. Additional Descriptions for Materials Listed Above

H. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

KM - San Juan River Gas Plant

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.
On Behalf of El Paso Natural Gas Company, LLC

Printed/Typed Name	Signature	Date (Month Day Year)
Luke Hill / CH2M	Luke Hill	7 6 17

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)
Shawn Espinoza		7 6 17

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month Day Year)

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date (Month Day Year)
Gary Robinson	Gary Robinson	7 6 17

NON-HAZARDOUS WASTE

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Rev. 3/95

BASIN DISPOSAL

30 Years of Environmental Health and Safety Excellence

200 Montana, Bloomfield, NM 87413

505-632-8936 or 505-334-3013

OPEN 24 Hours per Day

NO. 777223

NMOCD PERMIT: NM -001-0005

Oil Field Waste Document, Form C138

INVOICE:

DATE 10/16/25

GENERATOR: Ellis

HAULING CO. Jacobs Crane

ORDERED BY: Joseph Copley

DEL. TKT#.

BILL TO: Jacobs Crane

DRIVER: Vincent T

(Print Full Name)

CODES:

WASTE DESCRIPTION: ☒ Exempt Oilfield Waste ☐ Produced Water ☐ Drilling/Completion Fluids

STATE: ☒ NM ☐ CO ☐ AZ ☐ UT

TREATMENT/DISPOSAL METHODS: ☒ EVAPORATION ☒ INJECTION ☒ TREATING PLANT

NO.	TRUCK	LOCATION(S)	VOLUME	COST	H2S	COST	TOTAL	TIME
1		Ellis Gas Plant		20			20 d	
2		Sec 7 T 24 R 37E Gas Plant	1					10:15
3								
4								
5								

BASIN DISPOSAL

30 Years of Environmental Health and Safety Excellence

200 Montana, Bloomfield, NM 87413

505-632-8936 or 505-334-3013

OPEN 24 Hours per Day

NO. 761150

NMOCD PERMIT: NM -001-0005

Oil Field Waste Document, Form C138

INVOICE:

DATE

GENERATOR:

HAULING CO.

ORDERED BY:

DEL. TKT#.

BILL TO:

DRIVER:

(Print Full Name)

CODES:

WASTE DESCRIPTION: ☒ Exempt Oilfield Waste ☐ Produced Water ☐ Drilling/Completion Fluids

STATE: ☐ NM ☐ CO ☐ AZ ☐ UT

TREATMENT/DISPOSAL METHODS: ☒ EVAPORATION ☒ INJECTION ☒ TREATING PLANT

NO.	TRUCK	LOCATION(S)	VOLUME	COST	H2S	COST	TOTAL	TIME
1								
2								
3								
4								
5								

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
El Paso Natural Gas Company, LLC., 1001 Louisiana Street, Room 757A, Houston, TX, 77002, Attn.: Joseph Wiley

2. Originating Site:
San Juan River Gas Plant

3. Location of Material (Street Address, City, State or ULSTR):
99 County Road 6500, Kirtland, New Mexico, 87417

4. Source and Description of Waste:
Soil and water mixture (mud) from hydroexcavated boreholes that are 10 ft. deep. The boreholes are being completed for utility avoidance purposes prior to drilling soil borings and monitoring wells at the San Juan River Gas Plant to investigate historical (pre-1992) hydrocarbon releases to the environment.

Estimated Volume 50 bbls Known Volume (to be entered by the operator at the end of the haul) _____ yd^3 / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Joseph Wiley, representative or authorized agent for El Paso Natural Gas Company, LLC do hereby
PRINT & SIGN NAME — COMPANY NAME
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for El Paso Natural Gas Company, LLC authorize Envirotech to
Generator Signature
complete the required testing/sign the Generator Waste Testing Certification.

I, _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:
Badger Daylighting, Inc.

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Envirotech Inc. Soil Remediation Facility Permit # NM-01-0011

Address of Facility: #43 Road 7175, South of Bloomfield, NM

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☐ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: _____ TITLE: _____ DATE: _____

SIGNATURE: _____ TELEPHONE NO.: _____
Surface Waste Management Facility Authorized Agent

BADGER DAYLIGHTING™

BILL OF LADING

BDG 053752

Ticket Number: _____

Generator

Material Description: Mud & Fluid Produced Water

Load Count: ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Name:
Street Address:
City, Province or State:
Postal or Zip:
Phone No:

Material Type:
- ☐ Soil/Solids
- ☐ Water
- ☐ Both

Excavation Area Coordinates:

Lat: _____ Long: _____

LSD (CN Optional): _____

Generator or Authorized Representative Certification:
This is to certify that the above named materials are properly characterized and that the transporter is authorized to use the named disposition site.

Authorized Signature: _____ (Signature) Print Name: Alecra Trussell (Name/Company Name) Date: _____ (Date Shipped)

Transporter

Name: Badger Daylighting Badger Area: Farmington

Street Address:
City, Province or State:
Postal or Zip:
Phone No:

Authorized Signature: _____ (Signature) Print Name: Austin Keller (Name/Company Name) Date: 1-28-19 (Date Shipped)

Disposition Facility

Name:
Street Address:
City, Province or State:
Postal or Zip:
Phone No:

Quantity/Units - Daily Total: 20 BBLS (Full Load Equivalents)

Disposition Area Coordinates

Lat: _____ Long: _____

LSD (CN Optional): _____

Authorized Signature: _____ (Signature) Print Name: Gary Robinson Enviro-tech (Name/Company Name) Date: 1-28-19 (Date Shipped)

*Note: For unsupervised unloading areas write "N/A" in the signature spot for the disposition site authorized signer.

Released to Imaging: 11/14/2025 9:30:04 AM

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

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1. Generator Name and Address:
El Paso Natural Gas Company, LLC
1001 Louisiana Street, Room 757A, Houston, TX 77002, Attn: Joseph Wiley

2. Originating Site:
San Juan River Gas Plant

3. Location of Material (Street Address, City, State or ULSTR):
99 County Road 6500, Kirtland, NM 87417

4. Source and Description of Waste:

Water derived from monitoring well sampling and equipment decontamination.

Estimated Volume 1 yd^3 / (bbls) Known Volume (to be entered by the operator at the end of the haul) yd^3 / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Joseph Wiley, representative or authorized agent for El Paso Natural Gas Company, LLC do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:
Jacobs

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Basin Disposal, Permit # NM-01-005

Address of Facility: 200 Montana, Bloomfield, NM

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☐ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: JOHN VOLKERDING TITLE: Con Mgr DATE: 4/12/19

SIGNATURE: _____ TELEPHONE NO.: _____

Surface Waste Management Facility Authorized Agent

WASTE MANAGEMENT

WM of NM - San Juan County
78 County Road 3140
Aztec, NM, 87410

Original
Ticket# 2010837
Ph: (505) 386-5005

Customer Name MRTRUCKING M & R TRUCKING
Ticket Date 04/15/2019
Payment Type Credit Account
Manual Ticket#
Route
Hauling Ticket#
Destination
PO#

Carrier MRTRUC M & R TRUCKING
Vehicle# 1006
Container
Driver
Check#
Billing# 00000173
Grid

Volume

Aztec

	Time	Scale	Operator	Inbound		
In	04/15/2019 12:02:17	Inbound 301	lkirkpal		Gross	41920 lb
Out	04/15/2019 12:23:33	Outbound 302	vickyq		Tare	39200 lb
					Net	2720 lb
					Tons	1.36

Comments

Product		LDX	Qty	UOM	Rate	Tax	Amount	Origin
1	CDT-C&D-Tons	100	1.36	Tons	34.90	3.11	$47.46	SANJ

Total Tax $3.11
Total Ticket $50.57

Driver's Signature

1066
tkt # 227461

WASTE MANAGEMENT

WM of NM - San Juan County
78 County Road 3140
Aztec, NM, 87410

Original
Ticket# 2010868

Ph: (505) 386-5005

Customer Name	MRTRUCKING M & R TRUCKING	Carrier	MRTRUC M & R TRUCKING
Ticket Date	04/15/2019	Vehicle#	1006
Payment Type	Credit Account	Container	
Manual Ticket#		Driver	
Route		Check#	
Hauling Ticket#		Billing#	0000173
Destination		Grid	
PO#			

Volume

	Time	Scale	Operator	Inbound		
In	04/15/2019 13:27:13	Inbound 301	1kirkpal		Gross	41800 lb
Out	04/15/2019 13:50:36	Outbound 302	vickyq		Tare	39000 lb
					Net	2800 lb
					Tons	1.40

Comments

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	CDT-C&D-Tons	100	1.40	Tons	34.90	3.21	$48.86	SANJ

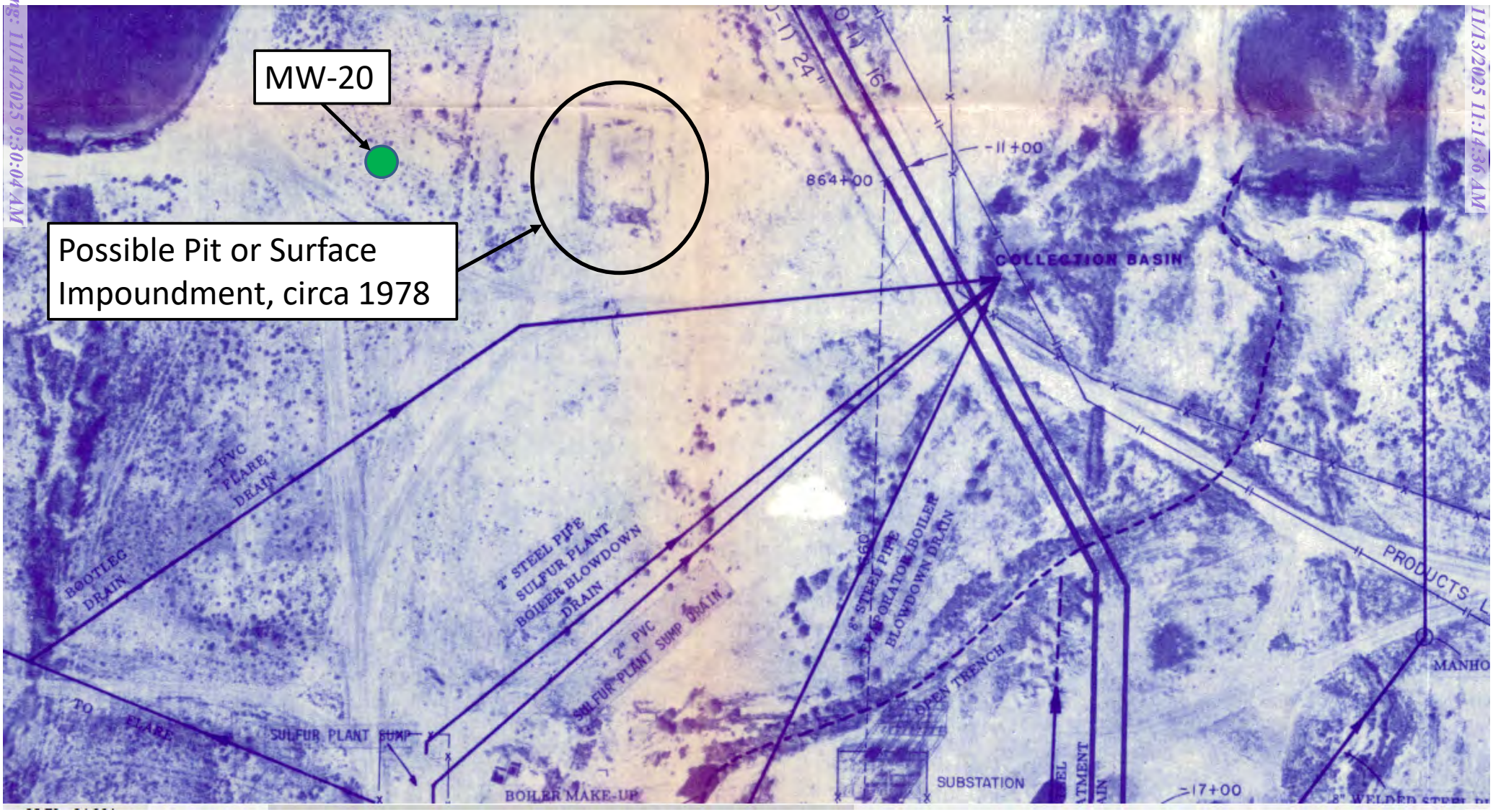
Total Tax	$3.21
Total Ticket	$52.07

Driver's Signature

1064
HH# 26861

Appendix E
Possible Pit or Surface Impoundment Near MW-20, circa 1978

Released to Imaging: 11/14/2025 9:30:04 AM
Received by OCD: 11/13/2025 11:14:36 AM



Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 526154

CONDITIONS

Operator: El Paso Natural Gas Company, L.L.C 1001 Louisiana Street Houston, TX 77002	OGRID: 7046
	Action Number: 526154
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
shanna.smith	Accepted for record only.	11/14/2025