3R-1027

Soil "Final" C-141
&
Initial Ground Water Investigation

Date: 1/26/2016

OIL CONS. DIV DIST. 3

NOV 30 2015

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office to accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

Soil only

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company **Burlington Resources Oil & Gas Company**	Contact **Lindsay Dumas**
Address 3401 East 30th St, Farmington, NM	Telephone No.(505) 599-4089
Facility Name: **San Juan 28-6 79**	Facility Type: **Gas**

Surface Owner: Fee	Mineral Owner **SF-079363**	API No.**3003907110**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
M	**11**	**27N**	**6W**	**1180'**	**FSL**	**1090'**	**FWL**	**Rio Arriba**

Latitude 36.58613 Longitude -107.4410

NATURE OF RELEASE

Type of Release **Natural Gas and Hydrocarbon**	Volume of Release **Unknown**	Volume Recovered **285 cyds**
Source of Release **Flowline to meter run**	Date and Hour of Occurrence **Unknown**	Date and Hour of Discovery **3/26/2015**
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? **Jim Griswold, Glenn VonGonten, Cory Smith, and Brandon Powell**	
By Whom? **Lindsay Dumas**	Date and Hour **3/26/2015 at 4:49pm**	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. **Unknown**	

If a Watercourse was Impacted, Describe Fully.*
Contaminated groundwater was encountered during pipeline excavation.

Describe Cause of Problem and Remedial Action Taken.*
A flowline from the San Juan 28-6 #79 to the meter run, across the Carrizo Wash, was found to have two holes. Actual excavation is at 36.586122, -107.441047 and on Fee surface. Contaminated groundwater was encountered during the pipeline excavation.

Describe Area Affected and Cleanup Action Taken.*
COP removed all contaminated soil from excavation sidewalls (see final excavation report), and confirmed groundwater contamination. Excavation was 30' x 32' x 8' Deep. Approximately 285 c/yds of soil was transported to IEI Land Farm. Analytical results were below the regulatory standards – no further action required. The soil sampling report is attached for review. No further soil remediation is required. Groundwater remediation has been turned over to COPC corporate remediation group.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:	OIL CONSERVATION DIVISION Approved by Environmental Specialist:
Printed Name: **Lisa Hunter**	
Title: **Field Environmental Specialist**	Approval Date: 1/26/16 Expiration Date:
E-mail Address: **Lisa.Hunter**@conocophillips.com	Conditions of Approval: Additional Groundwater Remediation Required Attached ☐
Date: 11/23/2015 Phone: (505) 258-1607	

* Attach Additional Sheets If Necessary

#NCS 1512029966 Contact SANTA FE Glenn von Gotten 3RP-1027

96

August 24, 2015

Lindsay Dumas
ConocoPhillips
San Juan Business Unit
(505) 599-4089

Via electronic mail to:
SJBUE-Team@ConocoPhillips.com

RE: Final Excavation Report
San Juan 28-6 #79
Rio Arriba County, New Mexico

Dear Ms. Dumas:

On April 2 and April 7, 2015, Animas Environmental Services, LLC (AES) completed an environmental clearance of the final excavation limits at the ConocoPhillips (COPC) San Juan 28-6 #79 well tie pipeline, located in Rio Arriba County, New Mexico. The release was associated with a reduction in line pressure. The final excavation was completed by COPC contractors while AES was at the location on April 7, 2015.

1.0 Site Information

1.1 Location

Site Name – San Juan 28-6 #79 Well Tie Pipeline
Location – NW¼ SW¼, Section 11, T27N, R6W, Rio Arriba County, New Mexico
Release Location Latitude/Longitude – N36.58613 and W107.44110, respectively
Land Jurisdiction – Bureau of Land Management
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, April 2015

1.2 NMOCD Ranking

In accordance with New Mexico Oil Conservation Division (NMOCD) release protocols, action levels were established per NMOCD *Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993) prior to site work. The release was given a ranking score of 40 based on the following factors:

604 W. Piñon St.
Farmington, NM 87401
505-564-2281

1911 Main, Ste 280
Durango, CO 81301
970-403-3084

www.animasenvironmental.com

- **Depth to Groundwater:** During field sampling activities, AES determined depth to groundwater was at approximately 5 feet below ground (bgs). (20 points)
- **Wellhead Protection Area:** The release location is not within a wellhead protection area. (0 points)
- **Distance to Surface Water Body:** The release occurred in the main channel of Carrizo Wash. (20 points)

1.3 Assessment

AES was initially contacted by Lindsay Dumas of COPC on February 9, 2015, and on April 2 and April 7, 2015, Dylan Davis of AES completed excavation field work. Field sampling activities included collection of seven confirmation composite soil samples from the walls of the excavation. The area of the final excavation measured approximately 30 feet by 32 feet by 8 feet deep. Sample locations and final excavation extents are presented on Figure 2.

2.0 Soil Sampling

Seven composite samples (SC-1 through SC-7) were collected during the assessment. All soil samples were field screened for volatile organic compounds (VOCs) and total petroleum hydrocarbons (TPH). All samples collected during the excavation clearance were also submitted for confirmation laboratory analysis.

2.1 Field Sampling

2.1.1 Volatile Organic Compounds

Field screening for VOC vapors was conducted with a photo-ionization detector (PID) organic vapor meter (OVM). Before beginning field screening, the PID-OVM was first calibrated with 100 parts per million (ppm) isobutylene gas.

2.1.2 Total Petroleum Hydrocarbons

Field TPH samples were analyzed per U.S. Environmental Protection Agency (USEPA) Method 418.1 using a Buck Scientific Model HC-404 Total Hydrocarbon Analyzer Infrared Spectrometer (Buck). A 3-point calibration was completed prior to conducting soil analyses. Field analytical protocol followed AES's *Standard Operating Procedure: Field Analysis Total Petroleum Hydrocarbons per EPA Method 418.1*.

2.2 Laboratory Analyses

The soil samples collected for laboratory analysis were placed into new, clean, laboratory-supplied containers, which were then labeled, placed on ice, and logged onto

a sample chain of custody record. Samples were maintained on ice until delivery to the analytical laboratory, Hall Environmental Analysis Laboratory (Hall) in Albuquerque, New Mexico. All soil samples were laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per USEPA Method 8021B; and
- TPH for gasoline range organics (GRO), diesel range organics (DRO), and motor oil range organics (MRO) per USEPA Method 8015D.

2.3 *Field and Laboratory Analytical Results*

On April 2 and April 7, 2015, final excavation field screening results for VOCs via OVM ranged from 0.2 ppm in SC-6 up to 41.9 ppm in SC-2. Field TPH concentrations ranged from less than 20.0 mg/kg in SC-2, SC-3, and SC-5 through SC-7 up to 20.6 mg/kg in SC-1. Results are included below in Table 1 and on Figure 3. The AES Field Sampling Reports are attached.

Table 1. Soil Field VOCs and TPH Results
San Juan 28-6 #79 Final Excavation, April 2015

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	TPH 418.1 (mg/kg)
*NMOCD Action Level**			*100*	*100*
SC-1	4/2/15	1 to 8	0.9	20.6
SC-2	4/2/15	1 to 8	41.9	<20.0
SC-3	4/2/15	1 to 8	3.8	<20.0
SC-4	4/2/15	1 to 8	2.8	22.0
SC-5	4/7/15	1 to 8	1.7	<20.0
SC-6	4/7/15	1 to 8	0.2	<20.0
SC-7	4/7/15	1 to 8	0.8	<20.0

*Action level determined by the NMOCD ranking score per *NMOCD Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993)

Laboratory analyses for SC-1 through SC-7 were used to confirm field sampling results from the final excavation. Benzene and total BTEX concentrations were reported below laboratory detection limits in all samples. TPH concentrations as GRO/DRO/MRO were reported below laboratory detection limits in all samples except SC-5 which was reported at 53 mg/kg. Results are presented in Table 2 and on Figure 2. The laboratory analytical reports are attached.

Table 2. Laboratory Analytical Results – Benzene, Total BTEX, and TPH
San Juan 28-6 #79 Final Excavation, April 2015

Sample ID	Date Sampled	Sample Depth (ft bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)
*NMOCD Action Level**			*10*	*50*		*100*	
SC-1	4/2/15	1 to 8	<0.040	<0.199	<4.0	<9.8	<49
SC-2	4/2/15	1 to 8	<0.039	<0.194	<3.9	<10	<50
SC-3	4/2/15	1 to 8	<0.037	<0.186	<3.7	<10	<50
SC-4	4/2/15	1 to 8	<0.038	<0.190	<3.8	<9.9	<49
SC-5	4/7/15	1 to 8	<0.036	<0.180	<3.6	<10	53
SC-6	4/7/15	1 to 8	<0.035	<0.175	<3.5	<10	<50
SC-7	4/7/15	1 to 8	<0.035	<0.174	<3.5	<9.9	<49

*Action level determined by the NMOCD ranking score per *NMOCD Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993)

3.0 Conclusions and Recommendations

On April 2 and 7, 2015, AES completed final clearance of the excavation area associated with petroleum contaminated soils at the San Juan 28-6 #79. Action levels for releases are determined by the NMOCD ranking score per *NMOCD Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993), and the site was assigned a rank of 40.

Field sampling results of the excavation extents showed that VOC concentrations were below applicable NMOCD action levels for the final walls of the excavation. Field TPH concentrations were also below the applicable NMOCD action level of 100 mg/kg. Laboratory analytical results from April 2 and April 7, 2015, reported benzene, total BTEX, and TPH (as GRO/DRO/MRO) concentrations in all samples below NMOCD action levels.

Based on final field sampling and laboratory analytical results of the excavation of petroleum contaminated soils at the San Juan 28-6 #79, VOC, benzene, total BTEX, and TPH concentrations were below applicable NMOCD action levels for each of the sidewalls of the excavation. No further work is recommended.

If you have any questions about this report or site conditions, please do not hesitate to contact Emilee Skyles at (505) 564-2281.

Sincerely,

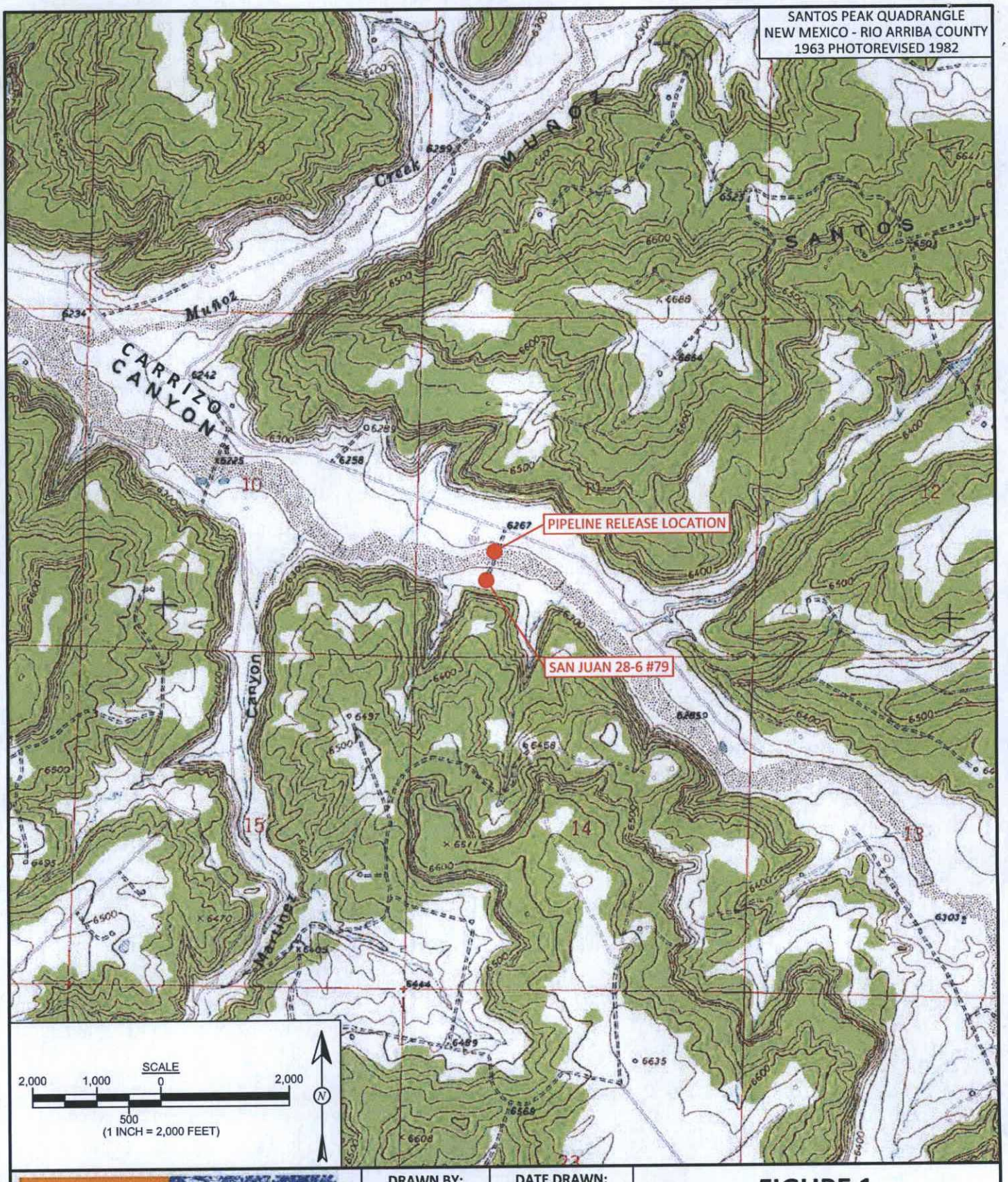
David J. Reese
Environmental Scientist

Elizabeth McNally, PE

Attachments:

Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, Final Excavation Sample Locations and Results April 2015
AES Field Sampling Report 040215
AES Field Sampling Report 040715
Hall Laboratory Analytical Report 1504168
Hall Laboratory Analytical Report 1504286

C:\Users\emcnally\Dropbox (Animas Environmental)\0000 Animas Server Dropbox EM\2015 Projects\ConocoPhillips\SJ 28-6 #79\COPC San Juan 28-6 #79 Final Excavation Report 082415.docx



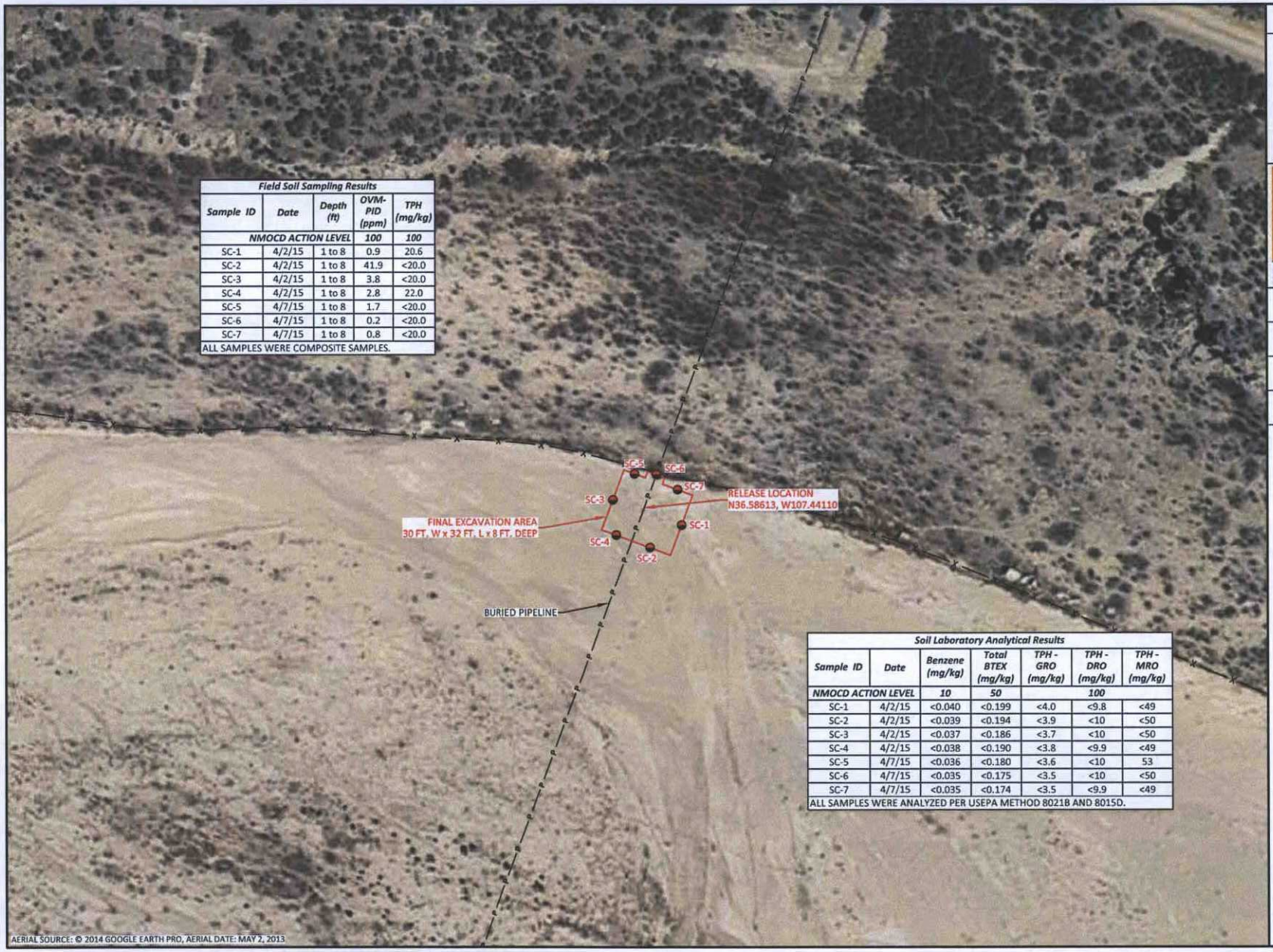
DRAWN BY: C. Lameman	**DATE DRAWN:** April 8, 2015	**FIGURE 1**
REVISIONS BY: C. Lameman	**DATE REVISED:** April 8, 2015	**TOPOGRAPHIC SITE LOCATION MAP**
CHECKED BY: E. Skyles	**DATE CHECKED:** April 8, 2015	ConocoPhillips SAN JUAN 28-6 #79 PIPELINE RELEASE NW¼ SW¼, SECTION 11, T27N, R6W RIO ARRIBA COUNTY, NEW MEXICO N36.58613, W107.44110
APPROVED BY: E. McNally	**DATE APPROVED:** April 8, 2015	

AES
Animas Environmental Services, LLC

FIGURE 2

AERIAL SITE MAP, FINAL EXCAVATION SAMPLE LOCATIONS AND RESULTS APRIL 2015

ConocoPhillips
SAN JUAN 28-6 #79 PIPELINE RELEASE
NW¼ SW¼, SECTION 11, T27N, R6W
RIO ARRIBA COUNTY, NEW MEXICO
N36.58613, W107.44110



Field Soil Sampling Results

Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	100
SC-1	4/2/15	1 to 8	0.9	20.6
SC-2	4/2/15	1 to 8	41.9	<20.0
SC-3	4/2/15	1 to 8	3.8	<20.0
SC-4	4/2/15	1 to 8	2.8	22.0
SC-5	4/7/15	1 to 8	1.7	<20.0
SC-6	4/7/15	1 to 8	0.2	<20.0
SC-7	4/7/15	1 to 8	0.8	<20.0

ALL SAMPLES WERE COMPOSITE SAMPLES.

Soil Laboratory Analytical Results

Sample ID	Date	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)	TPH - MRO (mg/kg)
NMOCD ACTION LEVEL		10	50	100		
SC-1	4/2/15	<0.040	<0.199	<4.0	<9.8	<49
SC-2	4/2/15	<0.039	<0.194	<3.9	<10	<50
SC-3	4/2/15	<0.037	<0.186	<3.7	<10	<50
SC-4	4/2/15	<0.038	<0.190	<3.8	<9.9	<49
SC-5	4/7/15	<0.036	<0.180	<3.6	<10	53
SC-6	4/7/15	<0.035	<0.175	<3.5	<10	<50
SC-7	4/7/15	<0.035	<0.174	<3.5	<9.9	<49

ALL SAMPLES WERE ANALYZED PER USEPA METHOD 8021B AND 8015D.

Animas Environmental Services, LLC

DRAWN BY: C. Lameman	**DATE DRAWN:** April 7, 2015
REVISIONS BY: C. Lameman	**DATE REVISED:** April 8, 2015
CHECKED BY: E. Skyles	**DATE CHECKED:** April 8, 2015
APPROVED BY: E. McNally	**DATE APPROVED:** April 8, 2015

LEGEND

- SAMPLE LOCATIONS
- BURIED PIPELINE

N

SCALE
40 20 0 40
10
(1 INCH = 40 FEET)

AES Field Sampling Report

Animas Environmental Services, LLC

Client: ConocoPhillips

Project Location: San Juan 28-6 #79

Date: 4/2/2015

Matrix: Soil

Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-1	4/2/2015	14:35	East Wall	0.9	20.6	14:55	20.0	1	DD
SC-2	4/2/2015	14:32	Southeast Wall	41.9	12.7	15:00	20.0	1	DD
SC-3	4/2/2015	17:15	West Wall	3.8	14.0	17:41	20.0	1	DD
SC-4	4/2/2015	16:08	Southwest Wal	2.8	22.0	18:28	20.0	1	DD

DF Dilution Factor
NA Not Analyzed
PQL Practical Quantitation Limit
**TPH concentrations recorded may be below PQL.*

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst: Dyla Daw

Report Finalized: 4/2/15

AES Field Sampling Report

Animas Environmental Services, LLC

Client: ConocoPhillips

Project Location: San Juan 28-6 #79

Date: 4/7/2015

Matrix: Soil

Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-5	4/7/2015	14:32	Northwest Wall	1.7	8.66	14:56	20.0	1	DD
SC-6	4/7/2015	14:50	North Wall	0.2	15.3	15:15	20.0	1	DD
SC-7	4/7/2015	15:08	Northeast Wall	0.8	7.33	15:30	20.0	1	DD

DF Dilution Factor
NA Not Analyzed
PQL Practical Quantitation Limit
**TPH concentrations recorded may be below PQL.*

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst: Dylan Dawn

Report Finalized: 4/7/15

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

April 08, 2015

Emilee Skyles
Animas Environmental
604 Pinon Street
Farmington, NM 87401
TEL: (505) 564-2281
FAX

RE: CoP SJ 28-6 #79 OrderNo.: 1504168

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 4 sample(s) on 4/4/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1504168**
Date Reported: **4/8/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 28-6 #79
Lab ID: 1504168-001 **Matrix:** SOIL

Client Sample ID: SC-1
Collection Date: 4/2/2015 2:35:00 PM
Received Date: 4/4/2015 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	4/7/2015 10:39:53 AM	18527
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/7/2015 10:39:53 AM	18527
Surr: DNOP	90.4	63.5-128		%REC	1	4/7/2015 10:39:53 AM	18527
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	4/7/2015 3:54:09 PM	18532
Surr: BFB	85.6	80-120		%REC	1	4/7/2015 3:54:09 PM	18532
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.040		mg/Kg	1	4/7/2015 3:54:09 PM	18532
Toluene	ND	0.040		mg/Kg	1	4/7/2015 3:54:09 PM	18532
Ethylbenzene	ND	0.040		mg/Kg	1	4/7/2015 3:54:09 PM	18532
Xylenes, Total	ND	0.079		mg/Kg	1	4/7/2015 3:54:09 PM	18532
Surr: 4-Bromofluorobenzene	98.2	80-120		%REC	1	4/7/2015 3:54:09 PM	18532

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 28-6 #79
Lab ID: 1504168-002 **Matrix:** SOIL

Client Sample ID: SC-2
Collection Date: 4/2/2015 2:32:00 PM
Received Date: 4/4/2015 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/7/2015 11:06:56 AM	18527
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/7/2015 11:06:56 AM	18527
Surr: DNOP	89.2	63.5-128		%REC	1	4/7/2015 11:06:56 AM	18527
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	4/7/2015 4:22:54 PM	18532
Surr: BFB	87.4	80-120		%REC	1	4/7/2015 4:22:54 PM	18532
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.039		mg/Kg	1	4/7/2015 4:22:54 PM	18532
Toluene	ND	0.039		mg/Kg	1	4/7/2015 4:22:54 PM	18532
Ethylbenzene	ND	0.039		mg/Kg	1	4/7/2015 4:22:54 PM	18532
Xylenes, Total	ND	0.077		mg/Kg	1	4/7/2015 4:22:54 PM	18532
Surr: 4-Bromofluorobenzene	97.3	80-120		%REC	1	4/7/2015 4:22:54 PM	18532

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 28-6 #79
Lab ID: 1504168-003 **Matrix:** SOIL

Client Sample ID: SC-3
Collection Date: 4/2/2015 5:15:00 PM
Received Date: 4/4/2015 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/7/2015 11:34:02 AM	18527
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/7/2015 11:34:02 AM	18527
Surr: DNOP	89.6	63.5-128		%REC	1	4/7/2015 11:34:02 AM	18527
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	4/7/2015 4:51:37 PM	18532
Surr: BFB	84.6	80-120		%REC	1	4/7/2015 4:51:37 PM	18532
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.037		mg/Kg	1	4/7/2015 4:51:37 PM	18532
Toluene	ND	0.037		mg/Kg	1	4/7/2015 4:51:37 PM	18532
Ethylbenzene	ND	0.037		mg/Kg	1	4/7/2015 4:51:37 PM	18532
Xylenes, Total	ND	0.075		mg/Kg	1	4/7/2015 4:51:37 PM	18532
Surr: 4-Bromofluorobenzene	94.4	80-120		%REC	1	4/7/2015 4:51:37 PM	18532

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 28-6 #79
Lab ID: 1504168-004 **Matrix:** SOIL

Client Sample ID: SC-4
Collection Date: 4/2/2015 4:08:00 PM
Received Date: 4/4/2015 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/7/2015 12:00:54 PM	18527
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/7/2015 12:00:54 PM	18527
Surr: DNOP	90.4	63.5-128		%REC	1	4/7/2015 12:00:54 PM	18527
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	4/7/2015 5:20:23 PM	18532
Surr: BFB	84.4	80-120		%REC	1	4/7/2015 5:20:23 PM	18532
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.038		mg/Kg	1	4/7/2015 5:20:23 PM	18532
Toluene	ND	0.038		mg/Kg	1	4/7/2015 5:20:23 PM	18532
Ethylbenzene	ND	0.038		mg/Kg	1	4/7/2015 5:20:23 PM	18532
Xylenes, Total	ND	0.076		mg/Kg	1	4/7/2015 5:20:23 PM	18532
Surr: 4-Bromofluorobenzene	92.9	80-120		%REC	1	4/7/2015 5:20:23 PM	18532

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1504168**

08-Apr-15

Client: Animas Environmental

Project: CoP SJ 28-6 #79

Sample ID **MB-18527**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **18527**	RunNo: **25330**
Prep Date: **4/6/2015**	Analysis Date: **4/7/2015**	SeqNo: **749672** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.0		10.00		89.7	63.5	128			

Sample ID **LCS-18527**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **18527**	RunNo: **25330**
Prep Date: **4/6/2015**	Analysis Date: **4/7/2015**	SeqNo: **749674** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.3	67.8	130			
Surr: DNOP	4.7		5.000		93.2	63.5	128			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1504168**

08-Apr-15

Client: Animas Environmental

Project: CoP SJ 28-6 #79

Sample ID **LCS-18532**	SampType: **LCS**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID: **LCSS**	Batch ID: **18532**			RunNo: **25343**					
Prep Date: **4/6/2015**	Analysis Date: **4/7/2015**			SeqNo: **750025**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.1	64	130			
Surr: BFB	910		1000		91.0	80	120			

Sample ID **MB-18532**	SampType: **MBLK**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID: **PBS**	Batch ID: **18532**			RunNo: **25343**					
Prep Date: **4/6/2015**	Analysis Date: **4/7/2015**			SeqNo: **750026**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	860		1000		85.6	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1504168**

08-Apr-15

Client: Animas Environmental

Project: CoP SJ 28-6 #79

Sample ID **LCS-18532**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **18532**	RunNo: **25343**
Prep Date: **4/6/2015**	Analysis Date: **4/7/2015**	SeqNo: **750068** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	104	76.6	128			
Toluene	0.99	0.050	1.000	0	98.6	75	124			
Ethylbenzene	1.0	0.050	1.000	0	103	79.5	126			
Xylenes, Total	3.1	0.10	3.000	0	103	78.8	124			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID **MB-18532**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **18532**	RunNo: **25343**
Prep Date: **4/6/2015**	Analysis Date: **4/7/2015**	SeqNo: **750069** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.98		1.000		98.4	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Animas Environmental Work Order Number: 1504168 RcptNo: 1

Received by/date: AT 04/04/15

Logged By: Anne Thorne 4/4/2015 8:00:00 AM Anne Thorne

Completed By: Anne Thorne 4/6/2015 Anne Thorne

Reviewed By: CS 04/06/15

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

April 10, 2015

Emilee Skyles
Animas Environmental
604 Pinon Street
Farmington, NM 87401
TEL: (505) 564-2281
FAX

RE: CoP SJ 28-6 #79 OrderNo.: 1504286

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 3 sample(s) on 4/8/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: 604 W Pinon St

Farmington, NM 87401

505-564-2281

Email or Fax#: eskyles@animasenvironmental.com

QA/QC Package:

X Standard ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:

X Standard ☐ Rush

Project Name:

CoP SJ 28-6 #79

Project #:

Project Manager:

Emilee Skyles

Sampler: D. Davis

On Ice: ☒ Yes ☐ No

Sample Temperature: 4

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and # (04/06/15 4oz Glass Jar)	Preservative Type	HEAL No. 604163	Arsenic - EPA 200.8	Specific Conductance - EPA 120.1	TSS - SM 2540D, TDS - SM 2540	Sulfide A4500-SD	Salinity	Radioactivity - Alpha/Beta - EPA 900.0	Dissolved Gases - RSK175	Major Anions- EPA300.0	Major Cations - EPA 200.7	Alkalinity - SM 2320B	BTEX - 8021B	TPH - EPA 8015B	Ammonia SM 4500 NH3		
4/2/15	1435	Soil	SC-1	Various	Various	-001											X	X			
4/2/15	1432	Soil	SC-2	Various	Various	-002											X	X			
4/2/15	1715	Soil	SC-3	Various	Various	-003											X	X			
4/2/15	1608	Soil	SC-4	Various	Various	-004											X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
4/3/15	1708			4/3/15	1708
4/3/15	1757			04/04/15	0900

Remarks: Bill to Conoco Phillips
20648928
Supervisor: Bobby Spearman
Ordered By: Dale Gallegos

WO#
USER: BRADI
Area: 2

Analytical Report
Lab Order **1504286**
Date Reported: **4/10/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: SC-5
Project: CoP SJ 28-6 #79
Collection Date: 4/7/2015 2:40:00 PM
Lab ID: 1504286-001 **Matrix:** MEOH (SOIL) **Received Date:** 4/8/2015 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/9/2015 1:54:27 PM	18574
Motor Oil Range Organics (MRO)	53	51		mg/Kg	1	4/9/2015 1:54:27 PM	18574
Surr: DNOP	98.0	63.5-128		%REC	1	4/9/2015 1:54:27 PM	18574
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	4/9/2015 12:12:45 AM	18551
Surr: BFB	86.8	80-120		%REC	1	4/9/2015 12:12:45 AM	18551
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.036		mg/Kg	1	4/9/2015 12:12:45 AM	18551
Toluene	ND	0.036		mg/Kg	1	4/9/2015 12:12:45 AM	18551
Ethylbenzene	ND	0.036		mg/Kg	1	4/9/2015 12:12:45 AM	18551
Xylenes, Total	ND	0.072		mg/Kg	1	4/9/2015 12:12:45 AM	18551
Surr: 4-Bromofluorobenzene	96.4	80-120		%REC	1	4/9/2015 12:12:45 AM	18551

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: SC-6
Project: CoP SJ 28-6 #79
Collection Date: 4/7/2015 2:59:00 PM
Lab ID: 1504286-002
Matrix: MEOH (SOIL)
Received Date: 4/8/2015 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/9/2015 3:15:03 PM	18574
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/9/2015 3:15:03 PM	18574
Surr: DNOP	98.1	63.5-128		%REC	1	4/9/2015 3:15:03 PM	18574
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	4/9/2015 12:41:26 AM	18551
Surr: BFB	85.7	80-120		%REC	1	4/9/2015 12:41:26 AM	18551
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.035		mg/Kg	1	4/9/2015 12:41:26 AM	18551
Toluene	ND	0.035		mg/Kg	1	4/9/2015 12:41:26 AM	18551
Ethylbenzene	ND	0.035		mg/Kg	1	4/9/2015 12:41:26 AM	18551
Xylenes, Total	ND	0.070		mg/Kg	1	4/9/2015 12:41:26 AM	18551
Surr: 4-Bromofluorobenzene	96.9	80-120		%REC	1	4/9/2015 12:41:26 AM	18551

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 28-6 #79
Lab ID: 1504286-003
Matrix: MEOH (SOIL)
Client Sample ID: SC-7
Collection Date: 4/7/2015 3:15:00 PM
Received Date: 4/8/2015 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/9/2015 3:41:38 PM	18574
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/9/2015 3:41:38 PM	18574
Surr: DNOP	102	63.5-128		%REC	1	4/9/2015 3:41:38 PM	18574
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	4/9/2015 1:10:03 AM	18551
Surr: BFB	84.8	80-120		%REC	1	4/9/2015 1:10:03 AM	18551
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.035		mg/Kg	1	4/9/2015 1:10:03 AM	18551
Toluene	ND	0.035		mg/Kg	1	4/9/2015 1:10:03 AM	18551
Ethylbenzene	ND	0.035		mg/Kg	1	4/9/2015 1:10:03 AM	18551
Xylenes, Total	ND	0.069		mg/Kg	1	4/9/2015 1:10:03 AM	18551
Surr: 4-Bromofluorobenzene	94.5	80-120		%REC	1	4/9/2015 1:10:03 AM	18551

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1504286**

10-Apr-15

Client: Animas Environmental

Project: CoP SJ 28-6 #79

Sample ID **MB-18574**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **18574**	RunNo: **25386**
Prep Date: **4/8/2015**	Analysis Date: **4/9/2015**	SeqNo: **751714** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.6		10.00		95.5	63.5	128			

Sample ID **LCS-18574**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **18574**	RunNo: **25386**
Prep Date: **4/8/2015**	Analysis Date: **4/9/2015**	SeqNo: **751806** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	97.1	67.8	130			
Surr: DNOP	4.6		5.000		92.4	63.5	128			

Sample ID **1504286-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **SC-5**	Batch ID: **18574**	RunNo: **25386**
Prep Date: **4/8/2015**	Analysis Date: **4/9/2015**	SeqNo: **751808** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.56	6.298	83.9	29.2	176			
Surr: DNOP	4.7		5.056		92.7	63.5	128			

Sample ID **1504286-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **SC-5**	Batch ID: **18574**	RunNo: **25386**
Prep Date: **4/8/2015**	Analysis Date: **4/9/2015**	SeqNo: **751886** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	50.40	6.298	89.9	29.2	176	5.78	23	
Surr: DNOP	5.1		5.040		101	63.5	128	0	0	

Sample ID **MB-18546**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **18546**	RunNo: **25386**
Prep Date: **4/7/2015**	Analysis Date: **4/9/2015**	SeqNo: **752140** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		100	63.5	128			

Sample ID **LCS-18546**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **18546**	RunNo: **25386**
Prep Date: **4/7/2015**	Analysis Date: **4/9/2015**	SeqNo: **752142** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1504286**

10-Apr-15

Client: Animas Environmental

Project: CoP SJ 28-6 #79

Sample ID **LCS-18546**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **18546**	RunNo: **25386**
Prep Date: **4/7/2015**	Analysis Date: **4/9/2015**	SeqNo: **752142** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	6.6		5.000		131	63.5	128			S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1504286**

10-Apr-15

Client: Animas Environmental

Project: CoP SJ 28-6 #79

Sample ID **MB-18551**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **18551**	RunNo: **25375**
Prep Date: **4/7/2015**	Analysis Date: **4/8/2015**	SeqNo: **751117** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	840		1000		84.0	80	120			

Sample ID **LCS-18551**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **18551**	RunNo: **25375**
Prep Date: **4/7/2015**	Analysis Date: **4/8/2015**	SeqNo: **751118** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.7	64	130			
Surr: BFB	900		1000		90.4	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1504286**

10-Apr-15

Client: Animas Environmental
Project: CoP SJ 28-6 #79

Sample ID **MB-18551**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **18551**	RunNo: **25375**
Prep Date: **4/7/2015**	Analysis Date: **4/8/2015**	SeqNo: **750899** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.95		1.000		94.8	80	120			

Sample ID **LCS-18551**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **18551**	RunNo: **25375**
Prep Date: **4/7/2015**	Analysis Date: **4/8/2015**	SeqNo: **750900** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.050	1.000	0	119	76.6	128			
Toluene	1.1	0.050	1.000	0	115	75	124			
Ethylbenzene	1.2	0.050	1.000	0	117	79.5	126			
Xylenes, Total	3.5	0.10	3.000	0	117	78.8	124			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Animas Environmental Work Order Number: 1504286 RcptNo: 1

Received by/date: 04/08/15

Logged By: Lindsay Mangin 4/8/2015 6:50:00 AM

Completed By: Lindsay Mangin 4/8/2015 7:51:01 AM

Reviewed By: CS 04/08/15

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.2	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: 604 W Pinon St

Farmington, NM 87401

505-564-2281

email or Fax#: eskyles@animasenvironmental.com

QA/QC Package:

X Standard ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:

X Standard ☐ Rush

Project Name:

CoP SJ 28-6 #79

Project #:

Project Manager:

Emilee Skyles

Sampler: D. Davis

On Ice: X Yes ☐ No

Sample Temperature: 1.2

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1504156	Arsenic - EPA 200.8	Specific Conductance - EPA 120.1	TSS - SM 2540D, TDS - SM 2540	Sulfide A4500-SD	Salinity	Radioactivity - Alpha/Beta - EPA 900.0	Dissolved Gases - RSK175	Major Anions- EPA300.0	Major Cations - EPA 200.7	Alkalinity - SM 2320B	BTEX - 8021B	TPH - EPA 8015B	Ammonia SM 4500 NH3		
4/7/15	1440	Soil	SC-5	Various	Various	-001											X	X			
4/7/15	1459	Soil	SC-6	Various	Various	-002											X	X			
4/7/15	1515	Soil	SC-7	Various	Various	-003											X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
4/7/15	1745			4/7/15	1749
4/7/15	1810			04/08/15	0650

Remarks: Bill to Conoco Phillips
20648928
Supervisor: Bobby Spearman
Ordered By: Dale Gallegos

WO#
USER: BRADL
Area: 2

December 4, 2015

Lisa Hunter
ConocoPhillips
San Juan Business Unit
(505) 258-1607

Via electronic mail to:
SJBUE-Team@ConocoPhillips.com

RE: Release Assessment Report
San Juan 28-6 #79
Rio Arriba County, New Mexico

Dear Ms. Hunter:

Animas Environmental Services, LLC (AES), at the request of ConocoPhillips (COPC), has prepared this summary of field operations and laboratory analyses associated with a release of natural gas from the San Juan 28-6 #79 well tie pipeline, which was discovered on March 26, 2015. The release consisted of an unknown quantity of natural gas and was discovered in association with a reduction in line pressure. The pipeline location is shown on the attached Topographic Site Location Map (Figure 1) and Aerial Site Map (Figure 2).

1.0 Site Information

1.1 Location

Site Name – San Juan 28-6 #79 Well Tie Pipeline
Location – NW¼ SW¼, Section 11, T27N, R6W, Rio Arriba County, New Mexico
Release Location Latitude/Longitude – N36.58613 and W107.44110, respectively
Land Jurisdiction – Private
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, Hydropunch Locations and Results, March and May 2015

604 W. Piñon St.
Farmington, NM 87401
505-564-2281

1911 Main, Ste 280
Durango, CO
970-403-3084

www.animasenvironmental.com

1.2 Hydrologic Information

The project falls within the USGS Hydrologic Unit Code (HUC) 140801030405, in the Martinez Canyon-Carrizo Canyon watershed. The project area is located in Carrizo Canyon Wash, an intermittent drainage which flows approximately 18 miles northwest into Canyon Largo and ultimately the perennial San Juan River near Blanco, New Mexico.

1.3 NMOCD Ranking

In accordance with New Mexico Oil Conservation Division (NMOCD) release protocols, action levels were established per NMOCD *Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993) prior to site work. The release was given a ranking score of 40 based on the following factors:

- **Depth to Groundwater:** During field sampling activities, AES determined depth to groundwater was approximately 5 feet below ground surface (bgs). (20 points)
- **Wellhead Protection Area:** The release location is not within a wellhead protection area. (0 points)
- **Distance to Surface Water Body:** The release occurred in the main channel of Carrizo Canyon Wash. (20 points)

The ranking score of 40 dictates that concentrations for impacted soils left in place must be below the NMOCD action levels of 10 milligrams per kilogram (mg/kg) benzene, 50 mg/kg total benzene, toluene, ethylbenzene, and xylenes (BTEX), and 100 mg/kg total petroleum hydrocarbons (TPH) as gasoline range organics (GRO) and diesel range organics (DRO).

Where groundwater contamination may be of concern at oil and gas release sites, the NMOCD utilizes the New Mexico Water Quality Control Commission (WQCC) standards and regulations.

1.4 Assessment

AES was initially contacted by Lindsay Dumas of COPC on February 9, 2015, and on March 26 and 31, 2015, Emilee Skyles and Dylan Davis of AES completed the initial soil and groundwater sampling field work. In order to determine potential impact to groundwater and extent, a release assessment was conducted. Field sampling activities included collection of seven discrete soil samples from seven soil borings as well as seven groundwater samples from seven temporary monitor wells. Samples were collected in the immediate vicinity, including upstream and downstream from the pipeline in order to delineate the full extent of petroleum hydrocarbon impact on soil and groundwater associated with the January 2015 release. All U.S. Army Corps of Engineers notification and permitting was organized by COPC. Sample locations and results are presented on Figure 2.

On May 4, 2015, AES returned to the location to collect additional groundwater samples from the four temporary well locations with elevated levels of contamination noted during the first sampling event. The assessment included reinstallation of four temporary monitor wells and collection of four groundwater samples. Sample locations and results are also presented on Figure 2.

2.0 Soil Sampling

Seven soil samples were collected from seven soil borings (HP-1 through HP-7). All soil samples were field screened for volatile organic compounds (VOCs) and analyzed for total petroleum hydrocarbons (TPH). All samples were submitted for confirmation laboratory analysis.

2.1 Field Sampling

2.1.1 Volatile Organic Compounds

Field screening for VOC vapors was conducted with a photo-ionization detector (PID) organic vapor meter (OVM). Before beginning field screening, the PID-OVM was first calibrated with 100 parts per million (ppm) isobutylene gas.

2.1.2 Total Petroleum Hydrocarbons

Field TPH samples were analyzed per U.S. Environmental Protection Agency (USEPA) Method 418.1 using a Buck Scientific Model HC-404 Total Hydrocarbon Analyzer Infrared Spectrometer (Buck). A 3-point calibration was completed prior to conducting soil analyses. Field analytical protocol followed AES's *Standard Operating Procedure: Field Analysis Total Petroleum Hydrocarbons per EPA Method 418.1*.

2.2 Laboratory Analyses

The soil samples collected for laboratory analysis were placed into new, clean, laboratory-supplied containers, which were then labeled, placed on ice, and logged onto a sample chain of custody record. Samples were maintained on ice until delivery to the analytical laboratory, Hall Environmental Analysis Laboratory (Hall) in Albuquerque, New Mexico. All soil samples were laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per USEPA Method 8021B; and
- TPH for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015D.

2.3 Field and Laboratory Analytical Results

On March 26 and 31, 2015, release assessment field screening results for VOCs via OVM showed concentrations ranging from 0.0 ppm in HP-6 up to 1,125 ppm in HP-1. Field TPH concentrations ranged from less than 20.0 mg/kg in HP-2 and HP-6 up to 55.8 mg/kg in HP-7. Results are included below in Table 1 and on Figure 2. The AES Field Sampling Reports are attached.

Table 1. Soil Field Sampling VOCs and TPH Results
San Juan 28-6 #79 Well Tie Pipeline, March 2015

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	TPH 418.1 (mg/kg)
*NMOCD Action Level**			*100*	*100*
HP-1	3/26/15	4	**1,125**	NA
HP-2	3/31/15	3.5	12.9	<20.0
HP-3	3/31/15	3	0.7	20.4
HP-4	3/31/15	3	13.8	38.7
HP-5	3/31/15	3	90.2	23.0
HP-6	3/31/15	5	0.0	<20.0
HP-7	3/31/15	3	0.8	55.8

*Action level determined by the NMOCD ranking score per *NMOCD Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993)

Laboratory analyses for all soil samples were used to confirm field sampling results. Benzene, total BTEX, and TPH (as GRO/DRO) concentrations were reported at 0.68 mg/kg, 3.69 mg/kg, and 7.5 mg/kg, respectively, in HP-1, while all concentrations were reported below detection limits in HP-2 though HP-7. Results are presented in Table 2 and on Figure 2. The laboratory analytical report is attached.

Table 2. Soil Laboratory Analytical Results – Benzene, Total BTEX, and TPH
San Juan 28-6 #79 Well Tie Pipeline, March 2015

Sample ID	Date Sampled	Sample Depth (ft bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)
*NMOCD Action Level**			*10*	*50*	*100*	
HP-1	3/26/15	4	0.68	3.69	7.5	<10
HP-2	3/31/15	3.5	<0.048	<0.239	<4.8	<9.5
HP-3	3/31/15	3	<0.049	<0.244	<4.9	<9.5

Sample ID	Date Sampled	Sample Depth (ft bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)
HP-4	3/31/15	3	<0.047	<0.236	<4.7	<9.9
HP-5	3/31/15	3	<0.049	<0.244	<4.9	<9.8
HP-6	3/31/15	5	<0.048	<0.240	<4.8	<10
HP-7	3/31/15	3	<0.048	<0.239	<4.8	<10

*Action level determined by the NMOCD ranking score per *NMOCD Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993)

3.0 Groundwater Sampling

A total of 11 groundwater samples were collected from seven temporary monitor wells (HP-1 through HP-7) during the assessments in March and May 2015. On March 26, March 31, and May 4, 2015, AES installed temporary monitor wells at predetermined locations (HP-1 through HP-7) with a hand auger and hydropunch screen. The screen in each temporary well was advanced to the capillary fringe and driven to a depth of approximately 7 feet below ground surface (bgs). The internal slotted screen of the hydropunch was set across the groundwater table at depths ranging from 3 to 5 feet bgs and left in place to allow groundwater to infiltrate and reach equilibrium. Groundwater samples were collected from the temporary wells using ½-inch disposable bailers and were submitted for laboratory analysis. An interface probe was used to determine depth to water. All samples were submitted to Hall for laboratory analyses of the following:

- BTEX per USEPA Method 8021B.

3.1 Laboratory Analytical Results

On March 26 and 31, 2015, laboratory analytical results for groundwater samples HP-1 and HP-5 indicated that dissolved phase concentrations exceeded the applicable WQCC standards for the following constituents:

- Benzene exceeded the WQCC standard of 10 micrograms per liter (µg/L) with concentrations of 3,900 µg/L (HP-1) and 4,300 µg/L (HP-5);
- Toluene exceeded the WQCC standard of 750 µg/L with concentrations of 8,100 µg/L (HP-1) and 3,200 µg/L (HP-5); and
- Xylenes exceeded the WQCC standard of 620 µg/L with concentrations of 6,100 µg/L (HP-1) and 2,500 µg/L (HP-5).

All other groundwater samples (HP-2, HP-3, HP-4, HP-6, and HP-7) were either below detection limits or WQCC standards, with the exception of benzene concentrations of 33 µg/L (HP-2) and 49 µg/L (HP-4).

On May 4, 2015, additional groundwater samples (HP-1, HP-2, HP-4, and HP-5) were collected at the request of COPC representative Lindsay Dumas. With the exception of HP-2, groundwater results indicated a significant decrease in concentrations of BTEX components in all samples, with toluene, ethylbenzene, and xylenes reported below detection limits or WQCC standards. BTEX concentrations increased in HP-2 between sampling events, with benzene rising above WQCC standards. Changes in benzene concentrations for HP-1, HP-4, and HP-5 are summarized below:

- HP-1: decreased from 3,900 µg/L to 140 µg/L (96 percent decrease);
- HP-4: decreased from 49 µg/L to below detection limit (<4.0 µg/L); and
- HP-5: decreased from 4,300 µg/L to 200 µg/L (95 percent decrease).

Benzene concentrations remained above WQCC standards in HP-1, HP-2, and HP-5. Laboratory analytical results are included in Table 3 and on Figure 2.

Table 3. Groundwater Laboratory Analytical Results – Benzene, Toluene, Ethylbenzene, and Xylenes
San Juan 28-6 #79 Well Tie Pipeline, March and May 2015

Sample ID	Date Sampled	Depth to Water (ft bgs)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Xylenes (µg/L)
WQCC Standards			***10***	***750***	***750***	***620***
HP-1	3/26/15	4	**3,900**	**8,100**	570	**6,100**
	5/4/15	4	**140**	<2.0	3.3	18
HP-2	3/31/15	3	**33**	<2.0	<2.0	11
	5/4/15	3	**160**	3.1	5.1	47
HP-3	3/31/15	3	<2.0	<2.0	<2.0	<4.0
HP-4	3/31/15	3	**49**	2.1	<2.0	16
	5/4/15	3	<2.0	<2.0	<2.0	<4.0
HP-5	3/31/15	3	**4,300**	**3,200**	350	**2,500**
	5/4/15	3	**200**	<2.0	<2.0	<4.0
HP-6	3/31/15	4.5	<2.0	<2.0	<2.0	<4.0
HP-7	3/31/15	3	<2.0	<2.0	<2.0	<4.0

4.0 Conclusions and Recommendations

On March 26 and 31, 2015, AES conducted a release assessment of petroleum contaminated soils associated with a historic release of produced water and condensate at the San Juan 28-6 #79 Well Tie Pipeline. Action levels for releases are determined by the NMOCD ranking score per *NMOCD Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993), and the site was assigned a rank of 40.

Release assessment field sampling results above the NMOCD action level of 100 ppm VOCs were reported in HP-1. However, all soil field sampling results were below the NMOCD action level of 100 mg/kg TPH. The highest VOC concentration was reported in HP-1 with 1,225 ppm, while the highest TPH concentration was reported in HP-7 at 55.8 mg/kg. Laboratory analyses for all samples were used to confirm field sampling results. Benzene and total BTEX concentrations were reported below the NMOCD action levels of 10 mg/kg and 50 mg/kg, respectively, in all samples. TPH concentrations as GRO/DRO were also all below the NMOCD action level of 100 mg/kg.

On March 26 and 31, 2015, seven groundwater samples (HP-1 through HP-7) were collected from the immediate vicinity of the release location and surrounding area. Laboratory analytical results showed dissolved phase benzene above the New Mexico WQCC standard in HP-1, HP-2, HP-4, and HP-5, and dissolved phase toluene and xylenes above the applicable WQCC standards in HP-1 and HP-5. The highest benzene concentration was reported 3,900 µg/L in HP-1. Depth to groundwater was measured at 4 feet bgs.

On May 4, 2015, AES collected an additional four samples in the vicinity of the release area (HP-1, HP-2, HP-4, and HP-5). Laboratory analytical results showed significant decreases in dissolved phase benzene, toluene, and xylenes; however concentrations were above the applicable New Mexico WQCC standard for benzene in HP-1, HP-2 and HP-5. The highest benzene concentration was reported in HP-5 with 200 µg/L. BTEX concentrations in HP-4 were reported below detection limits and applicable WQCC standards.

Based on final field sampling and laboratory analytical results of the release assessment at the San Juan 28-6 #79 Well Tie Pipeline, continued downgradient delineation of hydrocarbon impacted groundwater is recommended. In addition, quarterly groundwater monitoring and sampling is recommended in HP-1, HP-2, HP-4, and HP-5 until 8 consecutive quarters of laboratory concentrations below WQCC standards is achieved.

If you have any questions about this report or site conditions, please do not hesitate to contact me at (505) 564-2281.

Sincerely,

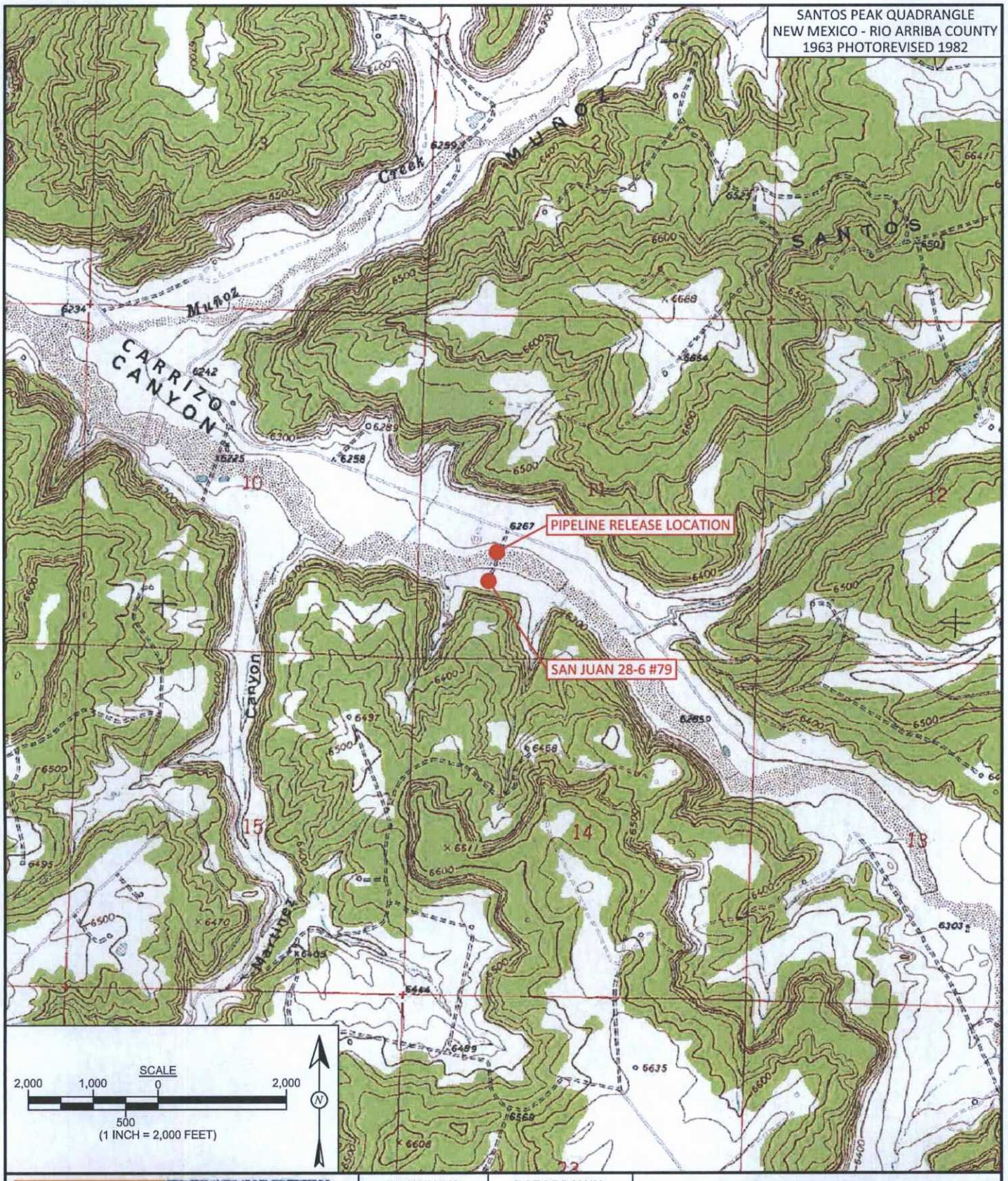
Emilee Skyles
Geologist/Project Lead

Elizabeth McNally, PE

Attachments:

Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, Hydropunch Locations and Results, March and May 2015
AES Field Sampling Report 032615
AES Field Sampling Report 033115
Hall Laboratory Analytical Report 1503C73
Hall Laboratory Analytical Report 1504075
Hall Laboratory Analytical Report 1504213
Hall Laboratory Analytical Report 1505140

R:\Animas 2000\Dropbox (Animas Environmental)\0000 Animas Server Dropbox EM\2015 Projects\ConocoPhillips\SJ 28-6 #79\Groundwater Investigation\San Juan 28-6 #79 Release Assessment Report 120415.docx



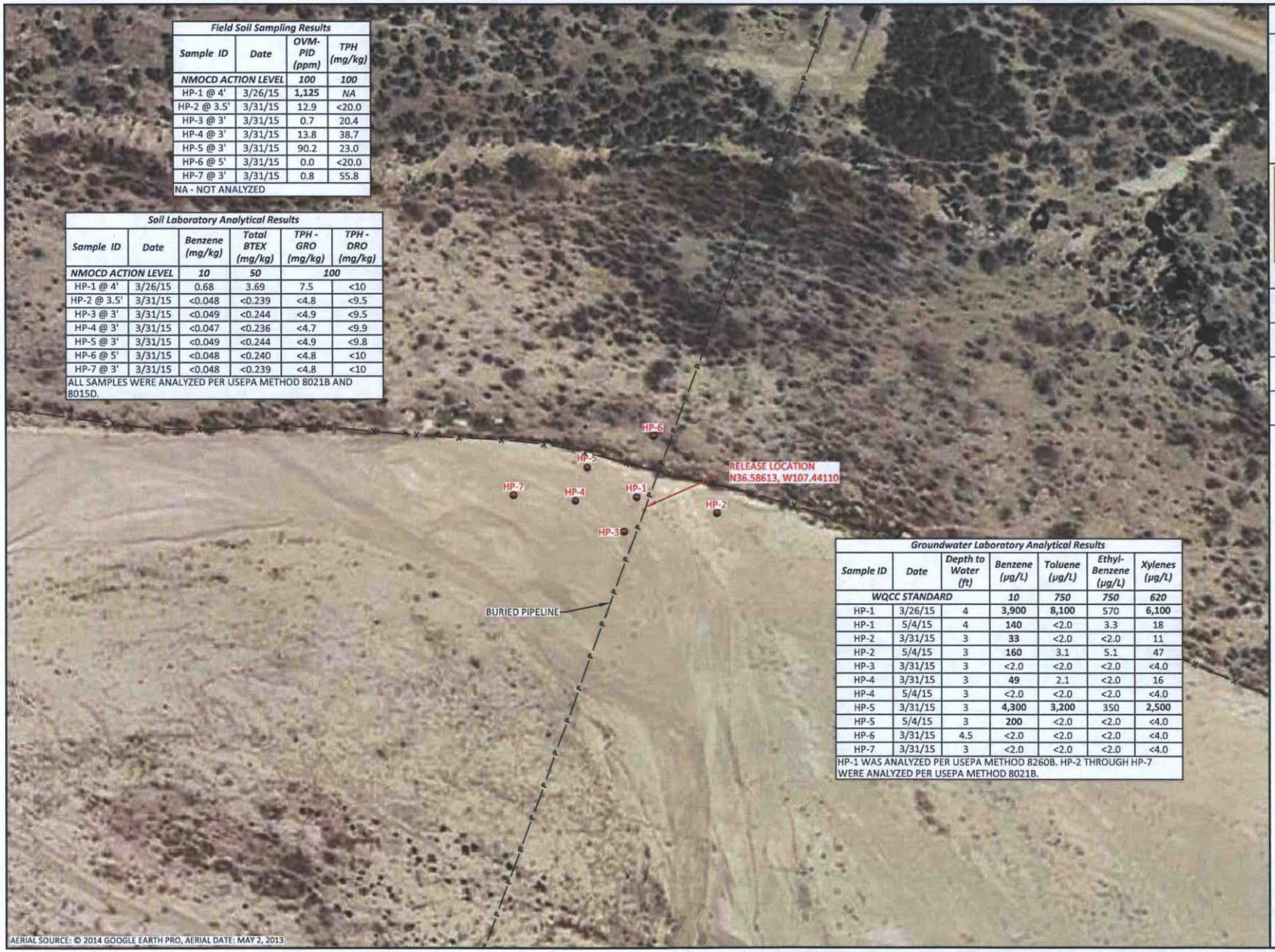
Animas Environmental Services, LLC

DRAWN BY: C. Lameman	**DATE DRAWN:** April 8, 2015
REVISIONS BY: C. Lameman	**DATE REVISED:** April 8, 2015
CHECKED BY: E. Skyles	**DATE CHECKED:** April 8, 2015
APPROVED BY: E. McNally	**DATE APPROVED:** April 8, 2015

FIGURE 1

TOPOGRAPHIC SITE LOCATION MAP

ConocoPhillips
SAN JUAN 28-6 #79 PIPELINE RELEASE
NW¼ SW¼, SECTION 11, T27N, R6W
RIO ARRIBA COUNTY, NEW MEXICO
N36.58613, W107.44110



Field Soil Sampling Results

Sample ID	Date	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL		100	100
HP-1 @ 4'	3/26/15	1,125	NA
HP-2 @ 3.5'	3/31/15	12.9	<20.0
HP-3 @ 3'	3/31/15	0.7	20.4
HP-4 @ 3'	3/31/15	13.8	38.7
HP-5 @ 3'	3/31/15	90.2	23.0
HP-6 @ 5'	3/31/15	0.0	<20.0
HP-7 @ 3'	3/31/15	0.8	55.8

NA - NOT ANALYZED

Soil Laboratory Analytical Results

Sample ID	Date	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)
NMOCD ACTION LEVEL		10	50	100	
HP-1 @ 4'	3/26/15	0.68	3.69	7.5	<10
HP-2 @ 3.5'	3/31/15	<0.048	<0.239	<4.8	<9.5
HP-3 @ 3'	3/31/15	<0.049	<0.244	<4.9	<9.5
HP-4 @ 3'	3/31/15	<0.047	<0.236	<4.7	<9.9
HP-5 @ 3'	3/31/15	<0.049	<0.244	<4.9	<9.8
HP-6 @ 5'	3/31/15	<0.048	<0.240	<4.8	<10
HP-7 @ 3'	3/31/15	<0.048	<0.239	<4.8	<10

ALL SAMPLES WERE ANALYZED PER USEPA METHOD 8021B AND 8015D.

Groundwater Laboratory Analytical Results

Sample ID	Date	Depth to Water (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Xylenes (µg/L)
WQCC STANDARD			10	750	750	620
HP-1	3/26/15	4	3,900	8,100	570	6,100
HP-1	5/4/15	4	140	<2.0	3.3	18
HP-2	3/31/15	3	33	<2.0	<2.0	11
HP-2	5/4/15	3	160	3.1	5.1	47
HP-3	3/31/15	3	<2.0	<2.0	<2.0	<4.0
HP-4	3/31/15	3	49	2.1	<2.0	16
HP-4	5/4/15	3	<2.0	<2.0	<2.0	<4.0
HP-5	3/31/15	3	4,300	3,200	350	2,500
HP-5	5/4/15	3	200	<2.0	<2.0	<4.0
HP-6	3/31/15	4.5	<2.0	<2.0	<2.0	<4.0
HP-7	3/31/15	3	<2.0	<2.0	<2.0	<4.0

HP-1 WAS ANALYZED PER USEPA METHOD 8260B. HP-2 THROUGH HP-7 WERE ANALYZED PER USEPA METHOD 8021B.

FIGURE 2

AERIAL SITE MAP, HYDROPUNCH LOCATIONS AND RESULTS MARCH AND MAY 2015

ConocoPhillips
SAN JUAN 28-6 #79 PIPELINE RELEASE
NW¼ SW¼, SECTION 11, T27N, R6W
RIO ARRIBA COUNTY, NEW MEXICO
N36.58613, W107.44110

Animas Environmental Services, LLC

DRAWN BY:	DATE DRAWN:
C. Lameman	April 7, 2015
REVISIONS BY:	DATE REVISED:
D. Dougi	December 09, 2015
CHECKED BY:	DATE CHECKED:
E. Skyles	December 09, 2015
APPROVED BY:	DATE APPROVED:
E. McNally	December 09, 2015

LEGEND

SAMPLE LOCATIONS
BURIED PIPELINE

N

SCALE
40 20 0 40
10
(1 INCH = 40 FEET)

AES Field Sampling Report

Animas Environmental Services, LLC

Client: ConocoPhillips

Project Location: San Juan 28-6 #79

Date: 3/26/2015

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
HP-1	3/26/2015	10:14	1,125	*Not Analyzed for TPH*				

DF Dilution Factor
NA Not Analyzed
PQL Practical Quantitation Limit
**Field TPH concentrations recorded may be below PQL.*

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst: Dylan Dawson

Report Finalized: 3/26/15

AES Field Sampling Report

Animas Environmental Services, LLC

Client: ConocoPhillips

Project Location: San Juan 28-6 #79

Date: 3/31/2015

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
HP-2	3/31/2015	11:27	12.9	17.7	12:03	20.0	1	DD
HP-3	3/31/2015	11:57	0.7	20.4	12:42	20.0	1	DD
HP-4	3/31/2015	12:45	13.8	38.7	14:10	20.0	1	DD
HP-5	3/31/2015	13:41	90.2	23.0	15:00	20.0	1	DD
HP-6	3/31/2015	14:57	0.0	19.0	15:57	20.0	1	DD
HP-7	3/31/2015	15:05	0.8	55.8	16:04	20.0	1	DD

DF Dilution Factor
NA Not Analyzed
PQL Practical Quantitation Limit
**Field TPH concentrations recorded may be below PQL.*

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst: Dyla Daw

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

March 31, 2015

Emilee Skyles
Animas Environmental
604 Pinon Street
Farmington, NM 87401
TEL: (505) 564-2281
FAX

RE: CoP SJ 28-6 # 79 OrderNo.: 1503C73

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 4 sample(s) on 3/27/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1503C73**
Date Reported: **3/31/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 28-6 # 79
Lab ID: 1503C73-001
Matrix: MEOH (SOIL)
Client Sample ID: HP-1 @ 4'
Collection Date: 3/26/2015 10:10:00 AM
Received Date: 3/27/2015 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/27/2015 11:20:14 AM	18374
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/27/2015 11:20:14 AM	18374
Surr: DNOP	95.9	63.5-128		%REC	1	3/27/2015 11:20:14 AM	18374
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	7.5	3.1		mg/Kg	1	3/27/2015 9:55:26 AM	18358
Surr: BFB	101	80-120		%REC	1	3/27/2015 9:55:26 AM	18358
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	0.68	0.031		mg/Kg	1	3/27/2015 9:55:26 AM	18358
Toluene	1.5	0.031		mg/Kg	1	3/27/2015 9:55:26 AM	18358
Ethylbenzene	0.11	0.031		mg/Kg	1	3/27/2015 9:55:26 AM	18358
Xylenes, Total	1.4	0.063		mg/Kg	1	3/27/2015 9:55:26 AM	18358
Surr: 4-Bromofluorobenzene	115	80-120		%REC	1	3/27/2015 9:55:26 AM	18358

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 28-6 # 79
Lab ID: 1503C73-002 **Matrix:** AQUEOUS

Client Sample ID: HP-1
Collection Date: 3/26/2015 11:15:00 AM
Received Date: 3/27/2015 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Fluoride	ND	0.50		mg/L	5	3/27/2015 10:51:01 AM	R25117
Chloride	3.4	2.5		mg/L	5	3/27/2015 10:51:01 AM	R25117
Nitrogen, Nitrite (As N)	ND	0.50		mg/L	5	3/27/2015 10:51:01 AM	R25117
Bromide	ND	0.50		mg/L	5	3/30/2015 8:50:22 PM	R25181
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	3/27/2015 10:51:01 AM	R25117
Phosphorus, Orthophosphate (As P)	ND	2.5		mg/L	5	3/27/2015 10:51:01 AM	R25117
Sulfate	22	2.5		mg/L	5	3/27/2015 10:51:01 AM	R25117
EPA METHOD 6010B: DISSOLVED METALS						Analyst: **JLF**	
Calcium	72	1.0		mg/L	1	3/27/2015 1:36:47 PM	R25123
Magnesium	8.9	1.0		mg/L	1	3/27/2015 1:36:47 PM	R25123
Potassium	1.8	1.0		mg/L	1	3/27/2015 2:41:28 PM	R25123
Sodium	110	10		mg/L	10	3/27/2015 1:38:32 PM	R25123
SM2510B: SPECIFIC CONDUCTANCE						Analyst: **JRR**	
Conductivity	800	0.010		µmhos/cm	1	3/27/2015 12:24:03 PM	R25116
SM2320B: ALKALINITY						Analyst: **JRR**	
Bicarbonate (As CaCO3)	422.3	20.00		mg/L CaCO3	1	3/27/2015 12:24:03 PM	R25116
Carbonate (As CaCO3)	ND	2.000		mg/L CaCO3	1	3/27/2015 12:24:03 PM	R25116
Total Alkalinity (as CaCO3)	422.3	20.00		mg/L CaCO3	1	3/27/2015 12:24:03 PM	R25116
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	470	200		mg/L	1	3/30/2015 3:28:00 PM	18383

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 28-6 # 79
Lab ID: 1503C73-003 **Matrix:** AQUEOUS

Client Sample ID: HP-1
Collection Date: 3/26/2015 11:00:00 AM
Received Date: 3/27/2015 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	3900	200		µg/L	200	3/27/2015 1:51:38 PM	R25121
Toluene	8100	200		µg/L	200	3/27/2015 1:51:38 PM	R25121
Ethylbenzene	570	200		µg/L	200	3/27/2015 1:51:38 PM	R25121
Methyl tert-butyl ether (MTBE)	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
1,2,4-Trimethylbenzene	280	200		µg/L	200	3/27/2015 1:51:38 PM	R25121
1,3,5-Trimethylbenzene	150	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
1,2-Dichloroethane (EDC)	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
Naphthalene	7.7	4.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
1-Methylnaphthalene	ND	8.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
2-Methylnaphthalene	ND	8.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
Acetone	ND	20		µg/L	2	3/27/2015 12:44:20 PM	R25121
Bromobenzene	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
Bromodichloromethane	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
Bromoform	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
Bromomethane	ND	6.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
2-Butanone	ND	20		µg/L	2	3/27/2015 12:44:20 PM	R25121
Carbon disulfide	ND	20		µg/L	2	3/27/2015 12:44:20 PM	R25121
Carbon Tetrachloride	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
Chlorobenzene	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
Chloroethane	ND	4.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
Chloroform	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
Chloromethane	ND	6.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
2-Chlorotoluene	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
4-Chlorotoluene	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
cis-1,2-DCE	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
cis-1,3-Dichloropropene	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
1,2-Dibromo-3-chloropropane	ND	4.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
Dibromochloromethane	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
Dibromomethane	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
1,2-Dichlorobenzene	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
1,3-Dichlorobenzene	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
1,4-Dichlorobenzene	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
Dichlorodifluoromethane	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
1,1-Dichloroethane	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
1,1-Dichloroethene	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
1,2-Dichloropropane	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
1,3-Dichloropropane	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
2,2-Dichloropropane	ND	4.0		µg/L	2	3/27/2015 12:44:20 PM	R25121

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 28-6 # 79
Lab ID: 1503C73-003 **Matrix:** AQUEOUS

Client Sample ID: HP-1
Collection Date: 3/26/2015 11:00:00 AM
Received Date: 3/27/2015 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
Hexachlorobutadiene	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
2-Hexanone	ND	20		µg/L	2	3/27/2015 12:44:20 PM	R25121
Isopropylbenzene	45	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
4-Isopropyltoluene	3.8	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
4-Methyl-2-pentanone	ND	20		µg/L	2	3/27/2015 12:44:20 PM	R25121
Methylene Chloride	ND	6.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
n-Butylbenzene	ND	6.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
n-Propylbenzene	50	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
sec-Butylbenzene	3.3	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
Styrene	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
tert-Butylbenzene	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
1,1,2,2-Tetrachloroethane	ND	4.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
Tetrachloroethene (PCE)	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
trans-1,2-DCE	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
1,1,1-Trichloroethane	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
1,1,2-Trichloroethane	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
Trichloroethene (TCE)	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
Trichlorofluoromethane	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
1,2,3-Trichloropropane	ND	4.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
Vinyl chloride	ND	2.0		µg/L	2	3/27/2015 12:44:20 PM	R25121
Xylenes, Total	6100	300		µg/L	200	3/27/2015 1:51:38 PM	R25121
Surr: 1,2-Dichloroethane-d4	111	70-130		%REC	2	3/27/2015 12:44:20 PM	R25121
Surr: 4-Bromofluorobenzene	96.1	70-130		%REC	2	3/27/2015 12:44:20 PM	R25121
Surr: Dibromofluoromethane	95.2	70-130		%REC	2	3/27/2015 12:44:20 PM	R25121
Surr: Toluene-d8	91.8	70-130		%REC	2	3/27/2015 12:44:20 PM	R25121

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: Trip Blank
Project: CoP SJ 28-6 # 79
Collection Date:
Lab ID: 1503C73-004
Matrix: TRIP BLANK
Received Date: 3/27/2015 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
Toluene	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
Ethylbenzene	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
Naphthalene	ND	2.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
1-Methylnaphthalene	ND	4.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
2-Methylnaphthalene	ND	4.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
Acetone	ND	10		µg/L	1	3/27/2015 2:56:50 PM	R25121
Bromobenzene	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
Bromodichloromethane	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
Bromoform	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
Bromomethane	ND	3.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
2-Butanone	ND	10		µg/L	1	3/27/2015 2:56:50 PM	R25121
Carbon disulfide	ND	10		µg/L	1	3/27/2015 2:56:50 PM	R25121
Carbon Tetrachloride	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
Chlorobenzene	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
Chloroethane	ND	2.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
Chloroform	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
Chloromethane	ND	3.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
2-Chlorotoluene	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
4-Chlorotoluene	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
cis-1,2-DCE	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
Dibromochloromethane	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
Dibromomethane	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
1,1-Dichloroethane	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
1,1-Dichloroethene	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
1,2-Dichloropropane	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
1,3-Dichloropropane	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
2,2-Dichloropropane	ND	2.0		µg/L	1	3/27/2015 2:56:50 PM	R25121

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- O RSD is greater than RSDlimit
- P Sample pH Not In Range
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 28-6 # 79
Lab ID: 1503C73-004

Client Sample ID: Trip Blank
Collection Date:
Matrix: TRIP BLANK
Received Date: 3/27/2015 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
Hexachlorobutadiene	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
2-Hexanone	ND	10		µg/L	1	3/27/2015 2:56:50 PM	R25121
Isopropylbenzene	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
4-Isopropyltoluene	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
4-Methyl-2-pentanone	ND	10		µg/L	1	3/27/2015 2:56:50 PM	R25121
Methylene Chloride	ND	3.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
n-Butylbenzene	ND	3.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
n-Propylbenzene	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
sec-Butylbenzene	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
Styrene	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
tert-Butylbenzene	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
trans-1,2-DCE	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
Trichlorofluoromethane	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
Vinyl chloride	ND	1.0		µg/L	1	3/27/2015 2:56:50 PM	R25121
Xylenes, Total	ND	1.5		µg/L	1	3/27/2015 2:56:50 PM	R25121
Surr: 1,2-Dichloroethane-d4	93.7	70-130		%REC	1	3/27/2015 2:56:50 PM	R25121
Surr: 4-Bromofluorobenzene	96.1	70-130		%REC	1	3/27/2015 2:56:50 PM	R25121
Surr: Dibromofluoromethane	96.7	70-130		%REC	1	3/27/2015 2:56:50 PM	R25121
Surr: Toluene-d8	91.6	70-130		%REC	1	3/27/2015 2:56:50 PM	R25121

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1503C73**

31-Mar-15

Client: Animas Environmental

Project: CoP SJ 28-6 # 79

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R25117**	RunNo: **25117**
Prep Date:	Analysis Date: **3/27/2015**	SeqNo: **742525** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R25117**	RunNo: **25117**
Prep Date:	Analysis Date: **3/27/2015**	SeqNo: **742526** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.49	0.10	0.5000	0	98.2	90	110			
Chloride	4.8	0.50	5.000	0	95.2	90	110			
Nitrogen, Nitrite (As N)	0.95	0.10	1.000	0	95.3	90	110			
Nitrogen, Nitrate (As N)	2.5	0.10	2.500	0	101	90	110			
Phosphorus, Orthophosphate (As P	4.9	0.50	5.000	0	98.7	90	110			
Sulfate	9.7	0.50	10.00	0	96.6	90	110			

Sample ID **1503C73-002AMS**	SampType: **MS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **HP-1**	Batch ID: **R25117**	RunNo: **25117**
Prep Date:	Analysis Date: **3/27/2015**	SeqNo: **742528** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	3.0	0.50	2.500	0	118	66.1	113			S
Chloride	28	2.5	25.00	3.370	97.8	81.8	112			
Nitrogen, Nitrite (As N)	4.9	0.50	5.000	0	97.7	66.4	111			
Nitrogen, Nitrate (As N)	13	0.50	12.50	0.2388	104	84	109			
Phosphorus, Orthophosphate (As P	27	2.5	25.00	0	109	69	109			
Sulfate	73	2.5	50.00	21.58	102	88.3	114			

Sample ID **1503C73-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 300.0: Anions**
Client ID: **HP-1**	Batch ID: **R25117**	RunNo: **25117**
Prep Date:	Analysis Date: **3/27/2015**	SeqNo: **742529** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	3.0	0.50	2.500	0	119	66.1	113	0.198	20	S
Chloride	28	2.5	25.00	3.370	97.0	81.8	112	0.728	20	
Nitrogen, Nitrite (As N)	4.9	0.50	5.000	0	97.3	66.4	111	0.431	20	
Nitrogen, Nitrate (As N)	13	0.50	12.50	0.2388	103	84	109	1.42	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1503C73**

31-Mar-15

Client: Animas Environmental

Project: CoP SJ 28-6 # 79

Sample ID **1503C73-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 300.0: Anions**
Client ID: **HP-1**	Batch ID: **R25117**	RunNo: **25117**
Prep Date:	Analysis Date: **3/27/2015**	SeqNo: **742529** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phosphorus, Orthophosphate (As P	27	2.5	25.00	0	108	69	109	0.728	20	
Sulfate	72	2.5	50.00	21.58	101	88.3	114	1.03	20	

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R25117**	RunNo: **25117**
Prep Date:	Analysis Date: **3/27/2015**	SeqNo: **742581** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R25117**	RunNo: **25117**
Prep Date:	Analysis Date: **3/27/2015**	SeqNo: **742582** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.51	0.10	0.5000	0	102	90	110			
Chloride	4.8	0.50	5.000	0	96.6	90	110			
Nitrogen, Nitrite (As N)	0.97	0.10	1.000	0	97.2	90	110			
Nitrogen, Nitrate (As N)	2.5	0.10	2.500	0	102	90	110			
Phosphorus, Orthophosphate (As P	5.0	0.50	5.000	0	100	90	110			
Sulfate	9.8	0.50	10.00	0	97.8	90	110			

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R25181**	RunNo: **25181**
Prep Date:	Analysis Date: **3/30/2015**	SeqNo: **744197** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bromide	ND	0.10								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R25181**	RunNo: **25181**
Prep Date:	Analysis Date: **3/30/2015**	SeqNo: **744198** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bromide	2.5	0.10	2.500	0	99.4	90	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1503C73**

31-Mar-15

Client: Animas Environmental

Project: CoP SJ 28-6 # 79

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R25181**	RunNo: **25181**
Prep Date:	Analysis Date: **3/31/2015**	SeqNo: **744241** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bromide	ND	0.10								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R25181**	RunNo: **25181**
Prep Date:	Analysis Date: **3/31/2015**	SeqNo: **744242** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bromide	2.5	0.10	2.500	0	102	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1503C73**

31-Mar-15

Client: Animas Environmental

Project: CoP SJ 28-6 # 79

Sample ID **MB-18374**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **18374**	RunNo: **25115**
Prep Date: **3/27/2015**	Analysis Date: **3/27/2015**	SeqNo: **741645** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.4		10.00		94.3	63.5	128			

Sample ID **LCS-18374**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **18374**	RunNo: **25115**
Prep Date: **3/27/2015**	Analysis Date: **3/27/2015**	SeqNo: **741646** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	86.6	67.8	130			
Surr: DNOP	4.9		5.000		97.1	63.5	128			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1503C73**

31-Mar-15

Client: Animas Environmental

Project: CoP SJ 28-6 # 79

Sample ID **MB-18358**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **18358**	RunNo: **25120**
Prep Date: **3/26/2015**	Analysis Date: **3/27/2015**	SeqNo: **742138** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	970		1000		96.9	80	120			

Sample ID **LCS-18358**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **18358**	RunNo: **25120**
Prep Date: **3/26/2015**	Analysis Date: **3/27/2015**	SeqNo: **742139** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	64	130			
Surr: BFB	870		1000		86.6	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1503C73**

31-Mar-15

Client: Animas Environmental
Project: CoP SJ 28-6 # 79

Sample ID **MB-18358**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **18358**	RunNo: **25120**
Prep Date: **3/26/2015**	Analysis Date: **3/27/2015**	SeqNo: **742168** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		113	80	120			

Sample ID **LCS-18358**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **18358**	RunNo: **25120**
Prep Date: **3/26/2015**	Analysis Date: **3/27/2015**	SeqNo: **742169** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.050	1.000	0	98.2	76.6	128			
Toluene	0.92	0.050	1.000	0	92.2	75	124			
Ethylbenzene	0.87	0.050	1.000	0	87.0	79.5	126			
Xylenes, Total	2.7	0.10	3.000	0	89.3	78.8	124			
Surr: 4-Bromofluorobenzene	0.78		1.000		78.0	80	120			S

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1503C73**

31-Mar-15

Client: Animas Environmental

Project: CoP SJ 28-6 # 79

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R25121**	RunNo: **25121**
Prep Date:	Analysis Date: **3/27/2015**	SeqNo: **741804** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1503C73**

31-Mar-15

Client: Animas Environmental
Project: CoP SJ 28-6 # 79

Sample ID **5ml rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R25121**	RunNo: **25121**
Prep Date:	Analysis Date: **3/27/2015**	SeqNo: **741804** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.9	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		95.6	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	8.6		10.00		86.0	70	130			

Sample ID **100nglcs200nganxs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R25121**	RunNo: **25121**
Prep Date:	Analysis Date: **3/27/2015**	SeqNo: **741806** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	70	130			
Toluene	21	1.0	20.00	0	105	70	130			
Chlorobenzene	20	1.0	20.00	0	98.0	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1503C73**

31-Mar-15

Client: Animas Environmental

Project: CoP SJ 28-6 # 79

Sample ID **100nglcs200nganxs**	SampType: **LCS**			TestCode: **EPA Method 8260B: VOLATILES**					
Client ID: **LCSW**	Batch ID: **R25121**			RunNo: **25121**					
Prep Date:	Analysis Date: **3/27/2015**			SeqNo: **741806**	Units: **µg/L**				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	23	1.0	20.00	0	114	75.6	144			
Trichloroethene (TCE)	18	1.0	20.00	0	92.2	70	130			
Surr: 1,2-Dichloroethane-d4	9.2		10.00		92.5	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		95.9	70	130			
Surr: Dibromofluoromethane	10		10.00		99.8	70	130			
Surr: Toluene-d8	9.4		10.00		94.1	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1503C73**

31-Mar-15

Client: Animas Environmental
Project: CoP SJ 28-6 # 79

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Dissolved Metals**
Client ID: **PBW**	Batch ID: **R25123**	RunNo: **25123**
Prep Date:	Analysis Date: **3/27/2015**	SeqNo: **741820** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	ND	1.0								
Magnesium	ND	1.0								
Sodium	ND	1.0								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 6010B: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **R25123**	RunNo: **25123**
Prep Date:	Analysis Date: **3/27/2015**	SeqNo: **741821** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	50	1.0	50.00	0	100	80	120			
Magnesium	51	1.0	50.00	0	101	80	120			
Sodium	50	1.0	50.00	0	99.3	80	120			

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Dissolved Metals**
Client ID: **PBW**	Batch ID: **R25123**	RunNo: **25123**
Prep Date:	Analysis Date: **3/27/2015**	SeqNo: **741932** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	ND	1.0								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 6010B: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **R25123**	RunNo: **25123**
Prep Date:	Analysis Date: **3/27/2015**	SeqNo: **741933** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	50	1.0	50.00	0	99.9	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1503C73**

31-Mar-15

Client: Animas Environmental

Project: CoP SJ 28-6 # 79

Sample ID **mb-1**	SampType: **MBLK**	TestCode: **SM2320B: Alkalinity**							
Client ID: **PBW**	Batch ID: **R25116**	RunNo: **25116**							
Prep Date:	Analysis Date: **3/27/2015**	SeqNo: **743012**	Units: **mg/L CaCO3**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	ND	20.00								

Sample ID **lcs-1**	SampType: **LCS**	TestCode: **SM2320B: Alkalinity**							
Client ID: **LCSW**	Batch ID: **R25116**	RunNo: **25116**							
Prep Date:	Analysis Date: **3/27/2015**	SeqNo: **743013**	Units: **mg/L CaCO3**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	78.88	20.00	80.00	0	98.6	90	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1503C73**

31-Mar-15

Client: Animas Environmental

Project: CoP SJ 28-6 # 79

Sample ID **MB-18383**	SampType: **MBLK**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **PBW**	Batch ID: **18383**	RunNo: **25163**
Prep Date: **3/27/2015**	Analysis Date: **3/30/2015**	SeqNo: **743511** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID **LCS-18383**	SampType: **LCS**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **LCSW**	Batch ID: **18383**	RunNo: **25163**
Prep Date: **3/27/2015**	Analysis Date: **3/30/2015**	SeqNo: **743512** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1010	20.0	1000	0	101	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **Animas Environmental** Work Order Number: **1503C73** RcptNo: **1**

Received by/date: 03/27/15

Logged By: **Lindsay Mangin** **3/27/2015 7:30:00 AM**

Completed By: **Lindsay Mangin** **3/27/2015 8:07:06 AM**

Reviewed By: 03/27/15

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	~~Yes~~ ☑	No ☑	
9. Was preservative added to bottles?	Yes ☑	~~No~~ ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☑	No ☐	No VOA Vials ☐
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

FOR DISSOLVED METALS ANALYSIS: A FILTERED 125mL OF EXTRA VOLUME & ADDED 0.4mL HNO3 FOR ACCEPTABLE pH 03/27/15

# of preserved bottles checked for pH: 2 (<2 or >12 unless noted)

Adjusted? YES

Checked by:

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.3	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: 604 W. Pinon St.
Farmington, NM 87401

Phone #: 505-564-2281

email or Fax#: SJBLE-Team@conocophillips.com

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☑ Rush SAME-DAY

Project Name:
CoP SJ 28-6 #79

Project #:

Project Manager:
E. Skyles

Sampler: E. Skyles / D. Davis

On Ice: ☑ Yes ☐ No

Sample Temperature: 2.3

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1503673	BTEX + ~~MTBE~~ + ~~TMB's~~ (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Cation-Anion Balance				Air Bubbles (Y or N)
3/26/15	10:10	Soil	HP-1 @4'	1-4oz.	ice	-001	X		X													
3/26/15	11:15	Aqueous	HP-1	VARIOUS	VARIOUS	-002												X				
3/26/15	11:00	Aqueous	HP-1	3-40mL	HCl	-002										X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
3/26/15	1602		Christine Walters	3/26/15	1602
Date:	Time:	Relinquished by:	Received by:	Date	Time
3/26/15	1720	Christine Walters		03/27/15	0720

Remarks: Bill to ConocoPhillips
Ordered by: Lindsay Dumas
WO#
AREA -
PLEASE FILTER FOR DISSOLVED*

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

April 07, 2015

Emilee Skyles
Animas Environmental
604 Pinon Street
Farmington, NM 87401
TEL: (505) 564-2281
FAX

RE: CoP SJ 28-6 # 79 OrderNo.: 1504075

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 6 sample(s) on 4/2/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: HP-2
Project: CoP SJ 28-6 # 79
Collection Date: 3/31/2015 11:50:00 AM
Lab ID: 1504075-001
Matrix: AQUEOUS
Received Date: 4/2/2015 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	33	2.0		µg/L	2	4/3/2015 9:56:45 PM	R25296
Toluene	ND	2.0		µg/L	2	4/3/2015 9:56:45 PM	R25296
Ethylbenzene	ND	2.0		µg/L	2	4/3/2015 9:56:45 PM	R25296
Xylenes, Total	11	4.0		µg/L	2	4/3/2015 9:56:45 PM	R25296
Surr: 4-Bromofluorobenzene	105	80-120		%REC	2	4/3/2015 9:56:45 PM	R25296

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 28-6 # 79
Lab ID: 1504075-002 **Matrix:** AQUEOUS

Client Sample ID: HP-3
Collection Date: 3/31/2015 12:32:00 PM
Received Date: 4/2/2015 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	2.0		µg/L	2	4/3/2015 10:26:01 PM	R25296
Toluene	ND	2.0		µg/L	2	4/3/2015 10:26:01 PM	R25296
Ethylbenzene	ND	2.0		µg/L	2	4/3/2015 10:26:01 PM	R25296
Xylenes, Total	ND	4.0		µg/L	2	4/3/2015 10:26:01 PM	R25296
Surr: 4-Bromofluorobenzene	97.5	80-120		%REC	2	4/3/2015 10:26:01 PM	R25296

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 28-6 # 79
Lab ID: 1504075-003 **Matrix:** AQUEOUS

Client Sample ID: HP-4
Collection Date: 3/31/2015 1:00:00 PM
Received Date: 4/2/2015 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	49	2.0		µg/L	2	4/3/2015 10:55:16 PM	R25296
Toluene	2.1	2.0		µg/L	2	4/3/2015 10:55:16 PM	R25296
Ethylbenzene	ND	2.0		µg/L	2	4/3/2015 10:55:16 PM	R25296
Xylenes, Total	16	4.0		µg/L	2	4/3/2015 10:55:16 PM	R25296
Surr: 4-Bromofluorobenzene	112	80-120		%REC	2	4/3/2015 10:55:16 PM	R25296

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 28-6 # 79
Lab ID: 1504075-004 **Matrix:** AQUEOUS

Client Sample ID: HP-5
Collection Date: 3/31/2015 2:30:00 PM
Received Date: 4/2/2015 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	4300	50		µg/L	50	4/6/2015 12:41:18 PM	R25329
Toluene	3200	50		µg/L	50	4/6/2015 12:41:18 PM	R25329
Ethylbenzene	350	50		µg/L	50	4/6/2015 12:41:18 PM	R25329
Xylenes, Total	2500	100		µg/L	50	4/6/2015 12:41:18 PM	R25329
Surr: 4-Bromofluorobenzene	112	80-120		%REC	50	4/6/2015 12:41:18 PM	R25329

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 28-6 # 79
Lab ID: 1504075-005 **Matrix:** AQUEOUS

Client Sample ID: HP-6
Collection Date: 4/1/2015 2:50:00 PM
Received Date: 4/2/2015 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	2.0		µg/L	2	4/6/2015 1:10:37 PM	R25329
Toluene	ND	2.0		µg/L	2	4/6/2015 1:10:37 PM	R25329
Ethylbenzene	ND	2.0		µg/L	2	4/6/2015 1:10:37 PM	R25329
Xylenes, Total	ND	4.0		µg/L	2	4/6/2015 1:10:37 PM	R25329
Surr: 4-Bromofluorobenzene	104	80-120		%REC	2	4/6/2015 1:10:37 PM	R25329

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: HP-7
Project: CoP SJ 28-6 # 79
Collection Date: 4/1/2015 2:35:00 PM
Lab ID: 1504075-006
Matrix: AQUEOUS
Received Date: 4/2/2015 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	2.0		µg/L	2	4/4/2015 12:22:50 AM	R25296
Toluene	ND	2.0		µg/L	2	4/4/2015 12:22:50 AM	R25296
Ethylbenzene	ND	2.0		µg/L	2	4/4/2015 12:22:50 AM	R25296
Xylenes, Total	ND	4.0		µg/L	2	4/4/2015 12:22:50 AM	R25296
Surr: 4-Bromofluorobenzene	92.0	80-120		%REC	2	4/4/2015 12:22:50 AM	R25296

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1504075**

07-Apr-15

Client: Animas Environmental
Project: CoP SJ 28-6 # 79

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **R25296**	RunNo: **25296**
Prep Date:	Analysis Date: **4/3/2015**	SeqNo: **748080** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	0	113	80	120			
Toluene	21	1.0	20.00	0	107	80	120			
Ethylbenzene	21	1.0	20.00	0	103	80	120			
Xylenes, Total	62	2.0	60.00	0	103	80	120			
Surr: 4-Bromofluorobenzene	24		20.00		118	80	120			

Sample ID **5ML-RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW**	Batch ID: **R25296**	RunNo: **25296**
Prep Date:	Analysis Date: **4/3/2015**	SeqNo: **748095** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	18		20.00		89.7	80	120			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **R25329**	RunNo: **25329**
Prep Date:	Analysis Date: **4/6/2015**	SeqNo: **749428** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	80	120			
Toluene	19	1.0	20.00	0	95.8	80	120			
Ethylbenzene	19	1.0	20.00	0	92.7	80	120			
Xylenes, Total	56	2.0	60.00	0	93.0	80	120			
Surr: 4-Bromofluorobenzene	20		20.00		102	80	120			

Sample ID **5ML-RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW**	Batch ID: **R25329**	RunNo: **25329**
Prep Date:	Analysis Date: **4/6/2015**	SeqNo: **749439** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	19		20.00		95.9	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Animas Environmental | Work Order Number: 1504075 | RcptNo: 1

Received by/date: AT 04/02/15

Logged By: Lindsay Mangin 4/2/2015 7:00:00 AM

Completed By: Lindsay Mangin 4/2/2015 8:18:01 AM

Reviewed By: JA 04/02/15

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☑	No ☐	No VOA Vials ☐
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: 604 W. Pinon
Farmington, NM 87401

Phone #: 505-564-2281

email or Fax#:

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☑ Standard ☐ Rush _____

Project Name: CoP SJ 28-6 # 79

Project #:

Project Manager: E. Skyles

Sampler: ES / DD

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.6°

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1504075	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
3/1/15	11:50	Aqueous	HP-2	3-40mL	HCl	-001	X															
3/1/15	12:32	Aqueous	HP-3	3-40mL	HCl	-002	X															
3/1/15	13:00	Aqueous	HP-4	3-40mL	HCl	-003	X															
3/1/15	1430	Aqueous	HP-5	3-40mL	HCl	-004	X															
3/1/15	1450	Aqueous	HP-6	3-40mL	HCl	-005	X															
3/1/15	1435	Aqueous	HP-7	3-40mL	HCl	-006	X															

Date:	Time:	Relinquished by:	Received by:	Date	Time
4/1/15	1744			4/1/15	1744
4/1/15	1825	Christine Walters		04/01/15	0700

Remarks: Bill to ConocoPhillips ordered by: Dale Gallegos
WO# 20648928
USER: BRADLRY

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

April 10, 2015

Emilee Skyles
Animas Environmental
604 Pinon Street
Farmington, NM 87401
TEL: (505) 564-2281
FAX

RE: CoP SJ 28-6 #79 OrderNo.: 1504213

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 6 sample(s) on 4/7/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 28-6 #79
Lab ID: 1504213-001 **Matrix:** SOIL

Client Sample ID: HP-2 @ 3.5'
Collection Date: 3/31/2015 11:27:00 AM
Received Date: 4/7/2015 6:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	4/9/2015 7:16:38 PM	18546
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/9/2015 7:16:38 PM	18546
Surr: DNOP	97.5	63.5-128		%REC	1	4/9/2015 7:16:38 PM	18546
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/8/2015 12:15:22 PM	18551
Surr: BFB	83.9	80-120		%REC	1	4/8/2015 12:15:22 PM	18551
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.048		mg/Kg	1	4/8/2015 12:15:22 PM	18551
Toluene	ND	0.048		mg/Kg	1	4/8/2015 12:15:22 PM	18551
Ethylbenzene	ND	0.048		mg/Kg	1	4/8/2015 12:15:22 PM	18551
Xylenes, Total	ND	0.095		mg/Kg	1	4/8/2015 12:15:22 PM	18551
Surr: 4-Bromofluorobenzene	91.8	80-120		%REC	1	4/8/2015 12:15:22 PM	18551

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 28-6 #79
Lab ID: 1504213-002 **Matrix:** SOIL

Client Sample ID: HP-3 @ 3'
Collection Date: 3/31/2015 11:57:00 AM
Received Date: 4/7/2015 6:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	4/9/2015 8:37:20 PM	18546
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/9/2015 8:37:20 PM	18546
Surr: DNOP	97.6	63.5-128		%REC	1	4/9/2015 8:37:20 PM	18546
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/8/2015 1:41:34 PM	18551
Surr: BFB	84.2	80-120		%REC	1	4/8/2015 1:41:34 PM	18551
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.049		mg/Kg	1	4/8/2015 1:41:34 PM	18551
Toluene	ND	0.049		mg/Kg	1	4/8/2015 1:41:34 PM	18551
Ethylbenzene	ND	0.049		mg/Kg	1	4/8/2015 1:41:34 PM	18551
Xylenes, Total	ND	0.097		mg/Kg	1	4/8/2015 1:41:34 PM	18551
Surr: 4-Bromofluorobenzene	94.1	80-120		%REC	1	4/8/2015 1:41:34 PM	18551

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 28-6 #79
Lab ID: 1504213-003 **Matrix:** SOIL

Client Sample ID: HP-4 @ 3'
Collection Date: 3/31/2015 12:45:00 PM
Received Date: 4/7/2015 6:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/9/2015 9:04:08 PM	18546
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/9/2015 9:04:08 PM	18546
Surr: DNOP	97.8	63.5-128		%REC	1	4/9/2015 9:04:08 PM	18546
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/8/2015 3:07:43 PM	18551
Surr: BFB	84.3	80-120		%REC	1	4/8/2015 3:07:43 PM	18551
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.047		mg/Kg	1	4/8/2015 3:07:43 PM	18551
Toluene	ND	0.047		mg/Kg	1	4/8/2015 3:07:43 PM	18551
Ethylbenzene	ND	0.047		mg/Kg	1	4/8/2015 3:07:43 PM	18551
Xylenes, Total	ND	0.095		mg/Kg	1	4/8/2015 3:07:43 PM	18551
Surr: 4-Bromofluorobenzene	94.5	80-120		%REC	1	4/8/2015 3:07:43 PM	18551

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
E	Value above quantitation range
J	Analyte detected below quantitation limits
O	RSD is greater than RSDlimit
R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 28-6 #79
Lab ID: 1504213-004 **Matrix:** SOIL

Client Sample ID: HP-5 @ 3'
Collection Date: 3/31/2015 1:41:00 PM
Received Date: 4/7/2015 6:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	4/9/2015 9:30:38 PM	18546
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/9/2015 9:30:38 PM	18546
Surr: DNOP	94.3	63.5-128		%REC	1	4/9/2015 9:30:38 PM	18546
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/8/2015 3:36:23 PM	18551
Surr: BFB	86.2	80-120		%REC	1	4/8/2015 3:36:23 PM	18551
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.049		mg/Kg	1	4/8/2015 3:36:23 PM	18551
Toluene	ND	0.049		mg/Kg	1	4/8/2015 3:36:23 PM	18551
Ethylbenzene	ND	0.049		mg/Kg	1	4/8/2015 3:36:23 PM	18551
Xylenes, Total	ND	0.097		mg/Kg	1	4/8/2015 3:36:23 PM	18551
Surr: 4-Bromofluorobenzene	97.1	80-120		%REC	1	4/8/2015 3:36:23 PM	18551

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 28-6 #79
Lab ID: 1504213-005 **Matrix:** SOIL

Client Sample ID: HP-6 @ 5'
Collection Date: 3/31/2015 2:30:00 PM
Received Date: 4/7/2015 6:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/9/2015 9:57:32 PM	18546
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/9/2015 9:57:32 PM	18546
Surr: DNOP	95.5	63.5-128		%REC	1	4/9/2015 9:57:32 PM	18546
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/8/2015 4:05:11 PM	18551
Surr: BFB	84.4	80-120		%REC	1	4/8/2015 4:05:11 PM	18551
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.048		mg/Kg	1	4/8/2015 4:05:11 PM	18551
Toluene	ND	0.048		mg/Kg	1	4/8/2015 4:05:11 PM	18551
Ethylbenzene	ND	0.048		mg/Kg	1	4/8/2015 4:05:11 PM	18551
Xylenes, Total	ND	0.096		mg/Kg	1	4/8/2015 4:05:11 PM	18551
Surr: 4-Bromofluorobenzene	93.7	80-120		%REC	1	4/8/2015 4:05:11 PM	18551

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 28-6 #79
Lab ID: 1504213-006 **Matrix:** SOIL

Client Sample ID: HP-7 @ 3'
Collection Date: 3/31/2015 3:15:00 PM
Received Date: 4/7/2015 6:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/9/2015 10:24:19 PM	18546
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	4/9/2015 10:24:19 PM	18546
Surr: DNOP	94.3	63.5-128		%REC	1	4/9/2015 10:24:19 PM	18546
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/8/2015 4:33:59 PM	18551
Surr: BFB	84.8	80-120		%REC	1	4/8/2015 4:33:59 PM	18551
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.048		mg/Kg	1	4/8/2015 4:33:59 PM	18551
Toluene	ND	0.048		mg/Kg	1	4/8/2015 4:33:59 PM	18551
Ethylbenzene	ND	0.048		mg/Kg	1	4/8/2015 4:33:59 PM	18551
Xylenes, Total	ND	0.095		mg/Kg	1	4/8/2015 4:33:59 PM	18551
Surr: 4-Bromofluorobenzene	93.9	80-120		%REC	1	4/8/2015 4:33:59 PM	18551

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1504213**

10-Apr-15

Client: Animas Environmental

Project: CoP SJ 28-6 #79

Sample ID **MB-18546**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **18546**	RunNo: **25386**
Prep Date: **4/7/2015**	Analysis Date: **4/9/2015**	SeqNo: **752140** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		100	63.5	128			

Sample ID **LCS-18546**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **18546**	RunNo: **25386**
Prep Date: **4/7/2015**	Analysis Date: **4/9/2015**	SeqNo: **752142** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	66	10	50.00	0	132	67.8	130			S
Surr: DNOP	6.6		5.000		131	63.5	128			S

Sample ID **1504213-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **HP-2 @ 3.5'**	Batch ID: **18546**	RunNo: **25386**
Prep Date: **4/7/2015**	Analysis Date: **4/9/2015**	SeqNo: **752145** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	9.7	48.50	0	101	29.2	176			
Surr: DNOP	4.7		4.850		97.4	63.5	128			

Sample ID **1504213-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **HP-2 @ 3.5'**	Batch ID: **18546**	RunNo: **25386**
Prep Date: **4/7/2015**	Analysis Date: **4/9/2015**	SeqNo: **752146** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.7	29.2	176	4.32	23	
Surr: DNOP	4.8		5.000		95.8	63.5	128	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1504213**

10-Apr-15

Client: Animas Environmental

Project: CoP SJ 28-6 #79

Sample ID **MB-18551**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **18551**	RunNo: **25375**
Prep Date: **4/7/2015**	Analysis Date: **4/8/2015**	SeqNo: **751117** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	840		1000		84.0	80	120			

Sample ID **LCS-18551**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **18551**	RunNo: **25375**
Prep Date: **4/7/2015**	Analysis Date: **4/8/2015**	SeqNo: **751118** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.7	64	130			
Surr: BFB	900		1000		90.4	80	120			

Sample ID **1504213-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **HP-2 @ 3.5'**	Batch ID: **18551**	RunNo: **25375**
Prep Date: **4/7/2015**	Analysis Date: **4/8/2015**	SeqNo: **751123** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	4.7	23.74	0	118	47.9	144			
Surr: BFB	890		949.7		93.5	80	120			

Sample ID **1504213-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **HP-2 @ 3.5'**	Batch ID: **18551**	RunNo: **25375**
Prep Date: **4/7/2015**	Analysis Date: **4/8/2015**	SeqNo: **751124** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	4.8	23.81	0	116	47.9	144	1.94	29.9	
Surr: BFB	890		952.4		93.2	80	120	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1504213**

10-Apr-15

Client: Animas Environmental
Project: CoP SJ 28-6 #79

Sample ID **MB-18551**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **18551**	RunNo: **25375**
Prep Date: **4/7/2015**	Analysis Date: **4/8/2015**	SeqNo: **750899** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.95		1.000		94.8	80	120			

Sample ID **LCS-18551**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **18551**	RunNo: **25375**
Prep Date: **4/7/2015**	Analysis Date: **4/8/2015**	SeqNo: **750900** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.050	1.000	0	119	76.6	128			
Toluene	1.1	0.050	1.000	0	115	75	124			
Ethylbenzene	1.2	0.050	1.000	0	117	79.5	126			
Xylenes, Total	3.5	0.10	3.000	0	117	78.8	124			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID **1504213-002AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **HP-3 @ 3'**	Batch ID: **18551**	RunNo: **25375**
Prep Date: **4/7/2015**	Analysis Date: **4/8/2015**	SeqNo: **750903** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.049	0.9747	0	108	69.2	126			
Toluene	1.0	0.049	0.9747	0.009845	105	65.6	128			
Ethylbenzene	1.1	0.049	0.9747	0	109	65.5	138			
Xylenes, Total	3.2	0.097	2.924	0	108	63	139			
Surr: 4-Bromofluorobenzene	0.97		0.9747		99.2	80	120			

Sample ID **1504213-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **HP-3 @ 3'**	Batch ID: **18551**	RunNo: **25375**
Prep Date: **4/7/2015**	Analysis Date: **4/8/2015**	SeqNo: **750904** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.049	0.9728	0	117	69.2	126	7.82	18.5	
Toluene	1.1	0.049	0.9728	0.009845	116	65.6	128	9.34	20.6	
Ethylbenzene	1.2	0.049	0.9728	0	124	65.5	138	12.9	20.1	
Xylenes, Total	3.6	0.097	2.918	0	123	63	139	13.1	21.1	
Surr: 4-Bromofluorobenzene	0.98		0.9728		101	80	120	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Animas Environmental Work Order Number: 1504213 RcptNo: 1

Received by/date: AT 04/07/15

Logged By: Anne Thorne 4/7/2015 6:40:00 AM Anne Thorne

Completed By: Anne Thorne 4/7/2015 Anne Thorne

Reviewed By: 04/07/15

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: 604 W. Pinon St.
Farmington, NM 87401

Phone #: 505-564-2281

Email or Fax#:

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name:
CP SJ 28-6 #79

Project #:

Project Manager:
E. Skyles

Sampler: E. Skyles / D. Davis

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1504213	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
3/31/15	11:27	Soil	HP-2 @ 3.5'	1-4oz	cool	-001	X		X													
3/31/15	11:57	Soil	HP-3 @ 3'	1-4oz	cool	-002	X		X													
3/31/15	12:45	Soil	HP-4 @ 3'	1-4oz	cool	-003	X		X													
3/31/15	13:41	Soil	HP-5 @ 3'	1-4oz	cool	-004	X		X													
3/31/15	14:30	Soil	HP-6 @ 5'	1-4oz	cool	-005	X		X													
3/31/15	15:15	Soil	HP-7 @ 3'	1-4oz	cool	-006	X		X													

Date:	Time:	Relinquished by:	Received by:	Date	Time
4/6/15	1632			4/6/15	1632
4/6/15	1717			04/07/15	0640

Remarks: Bill to Conoco Phillips
WO # 20648928
USER: BRADLRY
Supervisor: Bobby Spearman
Area: 24
Ordered by: Lindsay Dumas

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

May 08, 2015

Emilee Skyles
Animas Environmental
604 Pinon Street
Farmington, NM 87401
TEL: (505) 564-2281
FAX

RE: CoP SJ 28-6 #79 OrderNo.: 1505140

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 4 sample(s) on 5/5/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 28-6 #79
Lab ID: 1505140-001 **Matrix:** AQUEOUS

Client Sample ID: HP-1
Collection Date: 5/4/2015 10:30:00 AM
Received Date: 5/5/2015 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	140	2.0		µg/L	2	5/6/2015 2:16:08 PM	R26016
Toluene	ND	2.0		µg/L	2	5/6/2015 2:16:08 PM	R26016
Ethylbenzene	3.3	2.0		µg/L	2	5/6/2015 2:16:08 PM	R26016
Xylenes, Total	18	4.0		µg/L	2	5/6/2015 2:16:08 PM	R26016
Surr: 4-Bromofluorobenzene	111	80-120		%REC	2	5/6/2015 2:16:08 PM	R26016

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 28-6 #79
Lab ID: 1505140-002
Matrix: AQUEOUS
Client Sample ID: HP-2
Collection Date: 5/4/2015 10:40:00 AM
Received Date: 5/5/2015 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	160	2.0		µg/L	2	5/6/2015 2:45:23 PM	R26016
Toluene	3.1	2.0		µg/L	2	5/6/2015 2:45:23 PM	R26016
Ethylbenzene	5.1	2.0		µg/L	2	5/6/2015 2:45:23 PM	R26016
Xylenes, Total	47	4.0		µg/L	2	5/6/2015 2:45:23 PM	R26016
Surr: 4-Bromofluorobenzene	121	80-120	S	%REC	2	5/6/2015 2:45:23 PM	R26016

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 28-6 #79
Lab ID: 1505140-003 **Matrix:** AQUEOUS

Client Sample ID: HP-4
Collection Date: 5/4/2015 10:50:00 AM
Received Date: 5/5/2015 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	2.0		µg/L	2	5/6/2015 3:14:34 PM	R26016
Toluene	ND	2.0		µg/L	2	5/6/2015 3:14:34 PM	R26016
Ethylbenzene	ND	2.0		µg/L	2	5/6/2015 3:14:34 PM	R26016
Xylenes, Total	ND	4.0		µg/L	2	5/6/2015 3:14:34 PM	R26016
Surr: 4-Bromofluorobenzene	112	80-120		%REC	2	5/6/2015 3:14:34 PM	R26016

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: HP-5
Project: CoP SJ 28-6 #79
Collection Date: 5/4/2015 11:00:00 AM
Lab ID: 1505140-004
Matrix: AQUEOUS
Received Date: 5/5/2015 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	200	2.0		µg/L	2	5/6/2015 3:43:45 PM	R26016
Toluene	ND	2.0		µg/L	2	5/6/2015 3:43:45 PM	R26016
Ethylbenzene	ND	2.0		µg/L	2	5/6/2015 3:43:45 PM	R26016
Xylenes, Total	ND	4.0		µg/L	2	5/6/2015 3:43:45 PM	R26016
Surr: 4-Bromofluorobenzene	95.2	80-120		%REC	2	5/6/2015 3:43:45 PM	R26016

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1505140**

08-May-15

Client: Animas Environmental
Project: CoP SJ 28-6 #79

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW**	Batch ID: **R26016**	RunNo: **26016**
Prep Date:	Analysis Date: **5/6/2015**	SeqNo: **771267** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
Surr: 4-Bromofluorobenzene	22		20.00		108	80	120			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **R26016**	RunNo: **26016**
Prep Date:	Analysis Date: **5/6/2015**	SeqNo: **771268** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	93.9	80	120			
Toluene	22	1.0	20.00	0	112	80	120			
Ethylbenzene	22	1.0	20.00	0	110	80	120			
Xylenes, Total	66	2.0	60.00	0	110	80	120			
1,2,4-Trimethylbenzene	22	1.0	20.00	0	108	80	120			
1,3,5-Trimethylbenzene	22	1.0	20.00	0	111	80	120			
Surr: 4-Bromofluorobenzene	25		20.00		127	80	120			S

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Animas Environmental | Work Order Number: 1505140 | RcptNo: 1

Received by/date: AT 05/05/15

Logged By: Ashley Gallegos 5/5/2015 6:50:00 AM

Completed By: Ashley Gallegos 5/5/2015 9:23:39 AM

Reviewed By: CS 05/05/15

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	~~Yes ☑~~ DA 05/05/15	No ☑	No VOA Vials ☐
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted? _____
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.4	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: 604 W Pinon St

Farmington, NM 87401

505-564-2281

Email or Fax#: eskyles@animasenvironmental.com

QA/QC Package:

X Standard ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other_____

☐ EDD (Type) _____

Turn-Around Time:

X Standard ☐ Rush_____

Project Name:

CoP SJ 28-6 #79

Project #:

Project Manager:

Emilee Skyles

Sampler: D. Davis

On Ice: X Yes ☐ No

Sample Temperature: 2.7

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No 1505 140	Arsenic - EPA 200.8	Specific Conductance - EPA 120.1	TSS - SM 2540D, TDS - SM 2540	Sulfide A4500-SD	Salinity	Radioactivity - Alpha/Beta - EPA 900.0	Dissolved Gases - RSK175	Major Anions- EPA300.0	Major Cations - EPA 200.7	Alkalinity - SM 2320B	BTEX - 8021B	TPH - EPA 8015B	Ammonia SM 4500 NH3		
5/4/15	10:30	Aqueous	HP-1	3 - 40 mL VOA	HCl	-001											X				
5/4/15	1040	Aqueous	HP-2	3 - 40 mL VOA	HCl	-002											X				
5/4/15	10:50	Aqueous	HP-4	3 - 40 mL VOA	HCl	-003											X				
5/4/15	11:00	Aqueous	HP-5	3 - 40 mL VOA	HCl	-004											X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
5/4/15	1612	Dylan Davis	Christine Walker	5/4/15	1612
5/4/15	1754	Christine Walker		05/05/15	0850

Remarks: Bill to Conoco Phillips
20648928
Supervisor: Bobby Spearman
Ordered By: Lindsay Dumas

WO#
USER: BRA
Area

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.