

2016 Annual Groundwater Monitoring Report San Juan River Gas Plant Kirtland, New Mexico

**Prepared for
El Paso Natural Gas Company, LLC**

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Contents

1.0	Introduction	1-1
2.0	Site Background	2-1
2.1	Site Description	2-1
2.2	Project History	2-1
2.3	Geology and Hydrogeology.....	2-3
3.0	Field Activities	3-1
3.1	Depth-to-Water Measurements	3-1
3.2	HydraSleeve Groundwater Sampling.....	3-1
4.0	Results and Discussion	4-1
4.1	Groundwater Elevation and Gradient.....	4-1
4.2	Groundwater Analytical Results	4-1
5.0	Conclusions and Future Activities	5-1
5.1	Conclusions	5-1
5.2	Future Activities	5-1
6.0	References.....	6-1

Figures

- 1 Site Location Map
- 2 Site Map
- 3 Potentiometric Surface Map—December 2016
- 4 December 2016 Exceedances in Groundwater

Tables

- 1 Groundwater Elevation Data
- 2 Summary of BTEX Groundwater Analytical Results
- 3 Summary of Metals and Inorganics Groundwater Analytical Results

Appendix

- A 2016 Laboratory Analytical Report

Acronyms and Abbreviations

bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and total xylenes
cy	cubic yards
DTW	depth to water
EPNG	El Paso Natural Gas Company, LLC
mg/L	milligrams per liter
MW	monitoring well
NMOCD	New Mexico Oil Conservation Division
NMWQCC	New Mexico Water Quality Control Commission
O&M	operations and maintenance
ORC	oxygen-releasing compound
QA/QC	quality assurance/quality control
SJRP	San Juan River (Gas) Plant
TD	total depth
TDS	total dissolved solids
VOC	volatile organic compound

SECTION 1

Introduction

This *2016 Annual Groundwater Monitoring Report* has been prepared on behalf of El Paso Natural Gas Company, LLC (EPNG) to present the results of the December 2016 groundwater monitoring activities at the San Juan River Gas Plant (SJRP, the site). The site is currently regulated by the New Mexico Oil Conservation Division (NMOCD) and is located at 99 Road 6500, Kirtland, San Juan County, New Mexico. Groundwater sampling events for the site are conducted on an annual basis. The site location is shown in Figure 1 and the site plan is shown in Figure 2. The 2016 groundwater sampling event was performed by CH2M, the current EPNG contractor for the site.

Site Background

2.1 Site Description

The project site is located near Kirtland, New Mexico and is currently operating as a natural gas processing and distribution facility. The SJRP receives natural gas from production wells located in the San Juan Basin of New Mexico and southern Utah. El Paso Natural Gas (EPNG) owned the SJRP until June 1992, when it was sold to Western Gas Resources, Inc., which is a subsidiary of Anadarko Petroleum Corporation. EPNG retained responsibility for environmental impacts known to exist prior to the 1992 sale of the facility. In May 2014, Western Gas Resources sold the facility to CCI San Juan, LLC, a subsidiary company of Castleton Commodities International, LLC (CCI). The SJRP is a 630-acre facility that contains natural gas processing facilities, a sulfur recovery plant, water and hydrocarbon tanks, a pigging station, flare, and several 16- to 24-inch diameter natural gas pipelines that cross the facility. The facility formerly contained two raw water ponds and three wastewater evaporation ponds, which are now closed. During 2002 and 2003, a Praxair nitrogen plant was built north of the SJRP, approximately 300 yards south of monitoring wells MW-8 and MW-9. Closure of the evaporation ponds, flare pits, and other potential contaminant source areas were completed from 1992 through 1995. In general, the area surrounding the impacted portions at the site are not densely packed with industrial activity. Properties adjacent to the SJRP include undeveloped land to the north, a public golf course to the south, commercial and residential to the east and a coal mine to the west.

2.2 Project History

In 1985, the New Mexico Oil Conservation Division (NMOCD) issued a directive for oil and gas producers to cease discharging production fluids to unlined surface impoundments (pits) located in the groundwater recharge areas of the San Juan Basin and major river drainages to the San Juan, Animas, and La Plata Rivers. Once discharge had ceased, producers were required to investigate and remediate soil and groundwater contamination caused by these pits. In response, a number of investigations and removal actions have been completed at the SJRP (MWH, 2011, except as noted):

- Multiple investigations were conducted at the SJRP between 1985 and 1995. During these investigations, 24 monitoring wells were installed at various locations at the site.
- In 1992, the north and south flare pits were closed and 18,200 cubic yards (cy) and 3,520 cy of contaminated soil were removed from these flare pits, respectively. The former landfarm located southwest of the main production area is composed of the soil excavated from the north and south flare pits during their closure. On June 29, 1993, NMOCD granted closure of the flare pits with the condition that designated monitoring wells located downgradient of each former pit be monitored on an annual basis. On June 17, 1997, NMOCD granted closure of the soil landfarms. The former wastewater evaporation ponds were closed during 1995 and 1996. The pit and pond closure activities included capping with compacted, low permeability soils. During the same time period, EPNG abandoned 17 monitoring wells, upgraded two wells, and installed five new monitoring wells. In addition, a soil gas investigation was performed. The results of the investigation indicated the presence of shallow hydrocarbon contamination near monitoring wells MW-8 and MW-9.

- During January 2001, EPNG submitted a groundwater remediation work plan to NMOCD which addressed the elevated benzene in monitoring wells MW-8 and MW-9. This work plan included provisions to install an air sparging system with two air sparging wells and one injection point located within 10 feet of each monitoring well. NMOCD gave approval to begin remediation activities in June 2001. The air sparging injection wells (SW-8 and SW-9) were installed during October 2001 and developed during November 2001. Following installation, a pre-pilot air sparging test was conducted at both wells. The results of the test indicated good communication between SW-9 and MW-9, but poor communication between SW-8 and MW-8. Due to poor communication between SW-8 and MW-8, magnesium peroxide oxygen-releasing compound (ORC) socks were utilized in MW-8 in lieu of air sparging. The air sparging system was installed in the vicinity of MW-9 and began operation on November 14, 2001.
- From February 2002 through December 2002, site activities consisted of continued operation and maintenance (O&M) of the air sparging system, and site-wide annual groundwater monitoring.
- In 2003, site activities included periodic O&M of the air sparging system, replacement of the ORC socks in MW-8, quarterly groundwater sampling of MW-8 and MW-9, and site-wide annual groundwater monitoring.
- Due to benzene, toluene, ethyl benzene, and xylenes (BTEX) concentrations below the New Mexico Water Quality Control Commission (NMWQCC) standards, the air sparging system was shut down in February 2004 to make an assessment of static groundwater conditions at the site.
- During 2004 through 2006, site activities included replacement of the ORC socks in MW-8, quarterly groundwater sampling of MW-8 and MW-9, and site-wide annual groundwater monitoring.
- EPNG submitted a Stage 1 Abatement Plan to NMOCD in November 2005 to investigate hydrocarbon impacts in the groundwater near the Praxair evaporation pond at the SJRP. NMOCD approved the work plan on January 23, 2006, and investigative activities began. Due to the ineffectiveness of direct push technology, which was found to be limited during investigation activities, a revised work plan was submitted to NMOCD in September 2006. The revised work plan recommended further investigation be performed using a hollow-stem auger.
- Monitoring well MW-7, located immediately adjacent to the Praxair facility, was plugged and abandoned in May 2007 at the request of Praxair to accommodate new process construction at that location.
- During the May 2008 sampling event, it was reported that monitoring well MW-5 had been destroyed due to subsurface coal mining activities to the west of SJRP. The destruction of the well was determined to have occurred between February and May 2008.
- From May 2008 through the end of 2011, the environmental program at the SJRP consisted of remediation via the ORC socks in MW-8 and site-wide groundwater monitoring.
- In 2013, annual groundwater samples were collected in December (CH2M, 2014). Sitewide groundwater elevation measurements were collected from monitoring wells MW-4, MW-6, MW-8, MW-9, and MW-2. Groundwater samples were collected from each of the five monitoring wells. NMWQCC exceedances included benzene (186 µg/L) in MW-9 and other metals and inorganic constituents in each of the five wells.
- In 2014, annual groundwater samples were collected in December (CH2M, 2015). Sitewide groundwater elevation measurements were collected from monitoring wells MW-4, MW-6, MW-8, MW-9, and MW-2. Groundwater samples were collected from each of the five monitoring wells.

NMWQCC exceedances included benzene (46.1 µg/L) in MW-9 and other metals and inorganic constituents in each of the five wells.

- In 2015, annual groundwater samples were collected in December (CH2M, 2016). Sitewide groundwater elevation measurements were collected from monitoring wells MW-4, MW-6, MW-8, MW-9, and MW-2. Groundwater samples were collected from each of the five monitoring wells. NMWQCC exceedances included benzene (104 µg/L) in MW-9 and other metals and inorganic constituents in each of the five wells.

2.3 Geology and Hydrogeology

The site geology and hydrogeology discussed below is based upon reports prepared by Philip Environmental for EPNG in 1998 (Philip Environmental, 1998), K.W. Brown and Associates in 1987 (K.W. Brown, 1987), and the investigation performed by EPNG in February 2006.

Based on the drilling logs from the site investigations, the soil beneath the site consist of fine sand to fine sand with clay and minor amounts of gravel and cobbles. According to the soil borings located in the valley or alluvial fans (MW-5, MW-8, and MW-9), the soil consists of fine sand and clay. The soil observed in borings (MW-6 and MW-7) located on the mesas and terraces consist of fine sand with gravel and cobble units and some unconsolidated sandstone and shales. The most prevalent lithology at the SJRP is alluvial sediments, composed of fluvial sediments and to a lesser extent, the terrace deposits of gravel and cobbles. Below the alluvial sediments are the sedimentary beds of the Kirtland Shale Formation, which are composed of both shales and sandstone units. The areas north of the SJRP are underlain by a shale unit of the Kirtland Formation. A sandstone unit of the Kirtland Formation underlies the SJRP. In September 1992, during the south flare pit remediation activities, a distinct clay unit was discovered at depths of approximately 15 feet below the original bottom of the south flare pit.

During the investigation performed by EPNG on February 13 and 14, 2006, the direct push technology drilling rigs encountered refusal in a hard shale, siltstone, a silty sand mixture, and a sandstone at depth intervals ranging from 8 to 15 feet below ground surface. During the investigation, it was observed that the lithology generally transitioned from a clay soil at shallower depths to alternating units of weathered shale and sandstone. These findings and observations are similar to those reported in previous geological evaluations at the site. It was also determined that a majority of the soil borings advanced during the February 2006 investigation encountered refusal in the units of the Kirtland Formation.

According to the boring logs for the monitoring wells installed near the Praxair pond, groundwater was encountered at depths approximately 60 to 70 feet below ground surface. The regional groundwater flow in the San Juan Basin is from the topographically high outcrop areas towards the lower outcrop areas. The main discharge area for the San Juan Basin is discharged to the San Juan River Valley (Stone, 1983). The San Juan River is located approximately two miles south of the SJRP.

Based on the groundwater elevation data collected during the December 2016 sampling event, the groundwater flow direction at the SJRP is to the west-southwest.

SECTION 3

Field Activities

On December 13, 2016, CH2M conducted groundwater monitoring at the SJRP site. The following sections summarize the groundwater monitoring activities conducted during the December 2016 monitoring event.

3.1 Depth-to-Water Measurements

Groundwater measurements were attempted at five (5) site monitoring wells (MW-2, MW-4, MW-6, MW-8, and MW-9). At each well, field personnel collected air monitoring data from the well head and ambient breathing zone using a photoionization detector to measure volatile organic compounds (VOCs). Following collection of air monitoring data, depth to water (DTW) and total depth (TD) were measured at the monitoring wells.

3.2 HydraSleeve Groundwater Sampling

Following collection of DTW and TD measurements, groundwater samples were collected using the HydraSleeve method of no-purge groundwater sampling. HydraSleeves were installed in monitoring wells during the 2015 groundwater sampling event and were retrieved during the 2016 groundwater sampling event. After groundwater samples were collected, new HydraSleeves were placed in the wells.

Since there is no purging process with HydraSleeves, field indicator parameters are not collected. Additionally, based on the HydraSleeve sampler size and the required sample volume, any water in the sampler not used for sampling was disposed of properly.

Groundwater samples were submitted for laboratory analyses of VOCs via U.S. Environmental Protection Agency SW-846 Method 8260B, Resource, Conservation, and Recovery Act Metals via Method SW-6010B, mercury via Method SW-7470A, alkalinity via Method A2320B, chloride/sulfate via Method E300, nitrate/nitrite via Method E353.2, and total dissolved solids (TDS) via Method SM-2540C. Quality assurance/quality control (QA/QC) samples were also collected to ensure proper decontamination, sample handling, and to provide information for laboratory data validation.

Results and Discussion

4.1 Groundwater Elevation and Gradient

DTW measurements were collected at five wells (MW-2, MW-4, MW-6, MW-8, and MW-9). The DTW measurements ranged from approximately 11 to 54 feet below ground surface (bgs). The direction of groundwater flow at the site during December 2016 was to the west-southwest and the groundwater gradient was approximately 0.033 foot per foot. The gradient and groundwater flow direction are consistent with previous reports.

Historical and the December 2016 groundwater elevation data are provided in Table 1. A potentiometric surface map depicting the groundwater elevations collected during the 2016 monitoring event is provided in Figure 3.

4.2 Groundwater Analytical Results

Tables 2 and 3 summarize the historical and 2016 groundwater analytical results. The 2016 laboratory analytical reports and data validation reports are provided in Appendix A. Figure 4 presents analyte concentrations in groundwater for only those analytes that exceed the NMWQCC standards.

Concentrations of benzene exceeded the NMWQCC standard of 0.01 milligrams per liter (mg/L) at monitoring well MW-9. Metal concentrations that exceeded the NMWQCC standard include: aluminum (2 locations); cadmium (1 location); cobalt (2 locations); iron (2 locations); manganese (4 locations); nickel (2 locations); and selenium (2 locations).

Concentrations of sulfate and TDS were elevated above the NMWQCC standards of 600 mg/L and 1,000 mg/L, respectively, at each site monitoring well. Monitoring well MW-9 had the highest sulfate. TDS concentrations in each site monitoring well were greater than 4,500 mg/L, with the greatest concentration reported at 16,400 mg/L at MW-9. The highest sulfate concentration of 12,100 mg/L was reported at MW-9.

Concentrations of chloride were elevated above the NMWQCC standard of 250 mg/L at monitoring wells MW-4, MW-6, MW-8, and MW-9, with the greatest concentration of 738 mg/L reported in MW-6. Concentrations of nitrate/nitrite were elevated above the NMWQCC standard of 10 mg/L at monitoring well MW-6 at 45.2 mg/L.

SECTION 5

Conclusions and Future Activities

The following conclusions and recommendations are presented relative to groundwater conditions at the SJRP site, based on the groundwater elevation and analytical data obtained during the December 2016 monitoring event.

5.1 Conclusions

Groundwater monitoring has been conducted at the site since 1985. There is uncertainty regarding the nature and extent of the VOCs; and the potential impacts in the onsite monitoring wells from metals and general chemistry parameters.

Collecting the annual samples in December presents potential problems with weather and laboratory-related issues that can arise as part of sampling events and that cannot be corrected prior to the end of the year. In 2017, EPNG will begin performing the annual groundwater sampling in October of each year.

5.2 Future Activities

EPNG is planning to implement additional investigation activities at the site during 2017. These site investigation activities will generally include:

- Drill soil borings and collect soil samples.
- Install new monitoring wells in locations that will provide better delineation of the VOCs; these wells will be constructed with longer screens so that they will have a longer service life should groundwater elevations continue to decline and/or if groundwater elevations increase in response to increased precipitation in the vicinity of the site.
- Collect DTW measurements and groundwater samples from the site wells.
- Review the data to evaluate the groundwater flow direction and compare the VOC concentration distribution to NMWQCC standards.
- If required, evaluate potential remediation approaches and additional delineation locations.

SECTION 6

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Figures

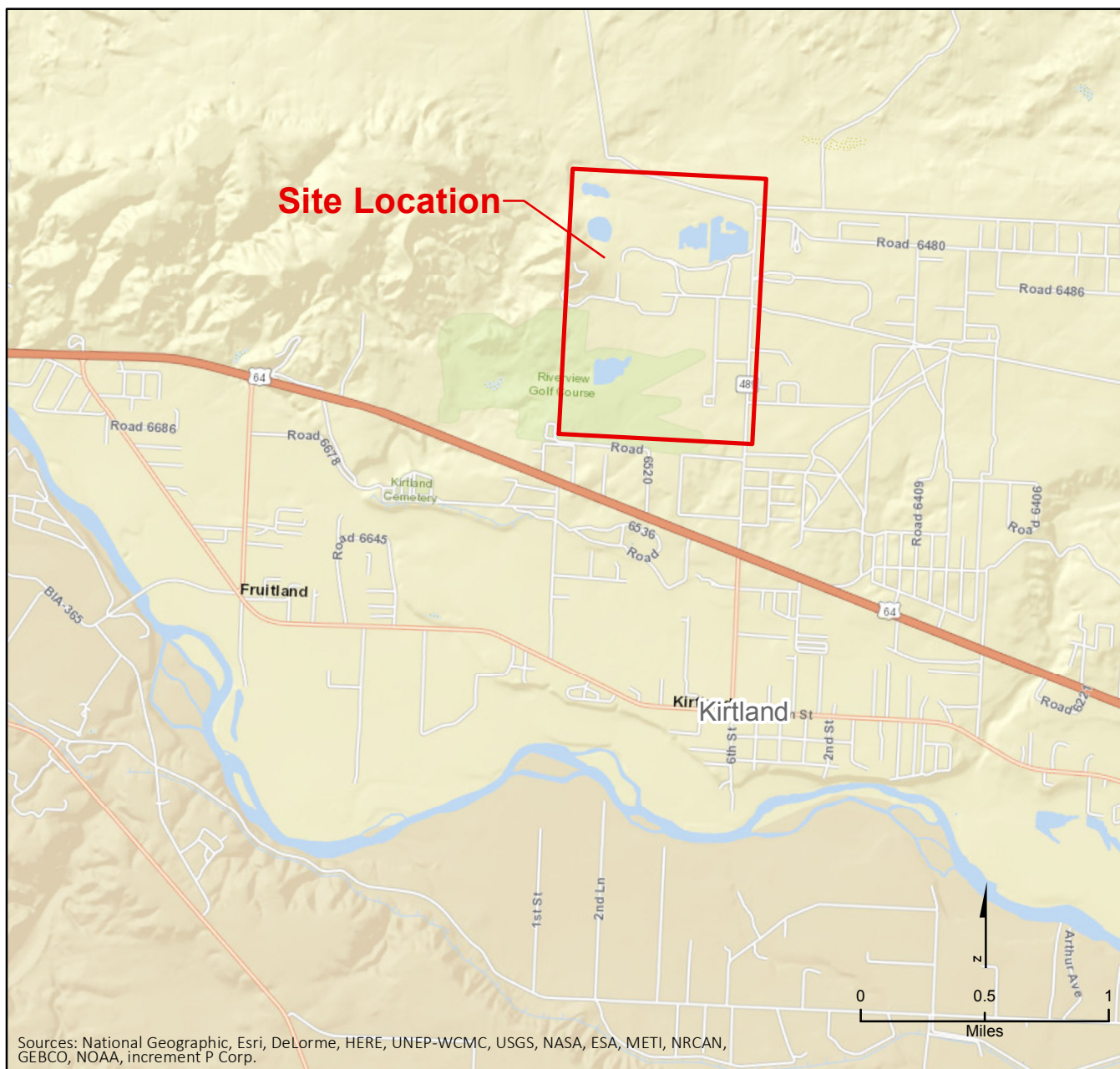


Figure 1
Site Location Map

2016 Annual Groundwater Monitoring Report
San Juan River Gas Plant Site
Kirtland, New Mexico



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- LEGEND**
- Monitoring Well
 - Fence
 - Site Feature
 - Former Flare Pit

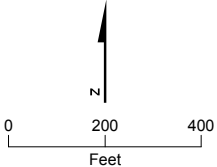


Figure 2
Site Map
2016 Annual Groundwater Monitoring Report
San Juan River Gas Plant
Kirtland, New Mexico



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

LEGEND

- Monitoring Well
- Fence
- Site Feature
- Former Flare Pit
- Groundwater Elevation Contours (Dashed where Inferred)
- Groundwater Flow Direction

Notes:
5559 Groundwater Elevation (in feet above mean sea level)

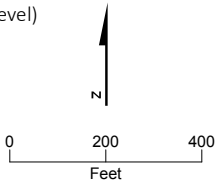
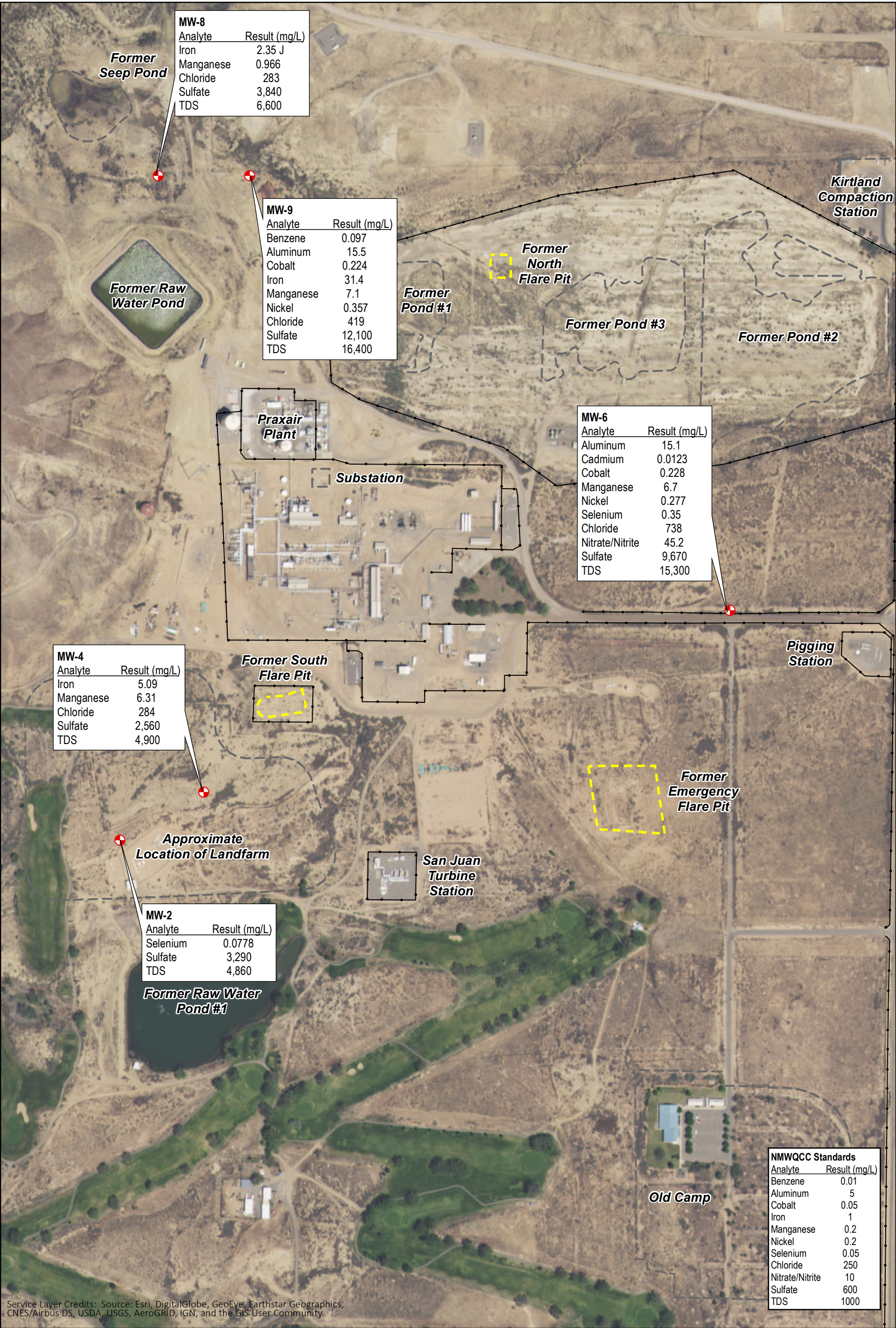


Figure 3
Potentiometric Surface Map - December 2016
2016 Annual Groundwater Monitoring Report
San Juan River Gas Plant
Kirtland, New Mexico



- LEGEND**
- Monitoring Well
 - Site Feature
 - Fence
 - Former Flare Pit

Notes:
mg/L = milligrams per liter
NMWQCC = New Mexico Water
Quality Control Commission
TDS = total dissolved solids

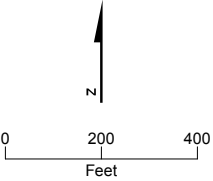


Figure 4
Groundwater Exceedances of NMWQCC
Standards - December 2016
2016 Annual Groundwater Monitoring Report
San Juan River Gas Plant
Kirtland, New Mexico

Tables

Table 1

Groundwater Elevation Data*San Juan River Gas Plant, Kirtland, New Mexico*

Monitoring Well	TOC Elevation (ft AMSL)	Measurement Date	Depth to Water (ft BTOC)	GW Elevation (ft AMSL)
MW-2	5280.11	9/25/2001	NA	NA
		8/15/2002	57.55	5222.56
		8/26/2003	57.53	5222.58
		8/27/2004	57.76	5222.35
		8/24/2005	58.50	5221.61
		8/10/2006	58.72	5221.39
		8/23/2007	52.73	5227.38
		8/27/2008	55.53	5224.58
		8/28/2009	55.24	5224.87
		8/26/2010	52.80	5227.31
		8/31/2011	53.69	5226.42
		12/19/2013	55.31	5224.80
		12/16/2014	54.98	5225.13
		12/15/2015	54.31	5225.80
		12/13/2016	53.91	5226.20
MW-4	5283.08	9/25/2001	NA	NA
		8/15/2002	52.93	5230.15
		8/26/2003	53.53	5229.55
		8/27/2004	54.44	5228.64
		8/24/2005	55.29	5227.79
		8/10/2006	55.57	5227.51
		8/23/2007	51.87	5231.21
		8/27/2008	52.24	5230.84
		8/28/2009	58.70	5224.38
		8/26/2010	52.32	5230.76
		8/31/2011	51.63	5231.45
		12/19/2013	52.00	5231.08
		12/16/2014	52.08	5231.00
		12/15/2015	51.62	5231.46
		12/13/2016	51.38	5231.70
MW-5	5257.44	2/10/1998	16.29	5241.15
		5/12/1998	16.09	5241.35
		8/7/1998	17.69	5239.75
		11/4/1998	16.76	5240.68
		2/10/1999	15.51	5241.93
		5/17/1999	15.49	5241.95
		8/18/1999	16.67	5240.77
		11/30/1999	16.6	5240.84
		4/10/2000	15.52	5241.92
		6/29/2000	16.83	5240.61
		9/29/2000	17.58	5239.86
		12/21/2000	16.38	5241.06
		3/27/2001	15.13	5242.31
		6/27/2001	16.04	5241.40
		9/25/2001	17.39	5240.05
		11/29/2001	17.45	5239.99
		1/25/2002	17.73	5239.71
		8/15/2002	18.61	5238.83
		8/26/2003	17.33	5240.11

Table 1

Groundwater Elevation Data*San Juan River Gas Plant, Kirtland, New Mexico*

Monitoring Well	TOC Elevation (ft AMSL)	Measurement Date	Depth to Water (ft BTOC)	GW Elevation (ft AMSL)
MW-5	5257.44	8/27/2004	16.80	5240.64
		8/24/2005	13.83	5243.61
		8/10/2006	NA	NA
		8/23/2007	14.42	5243.02
MW-6	5304.84	9/25/2001	NA	NA
		8/15/2002	31.50	5273.34
		8/26/2003	31.76	5273.08
		8/27/2004	31.85	5272.99
		8/24/2005	29.93	5274.91
		8/10/2006	30.37	5274.47
		8/23/2007	30.70	5274.14
		8/27/2008	31.27	5273.57
		8/28/2009	31.44	5273.40
		8/26/2010	31.55	5273.29
		8/31/2011	31.47	5273.37
		12/19/2013	30.98	5273.86
		12/16/2014	31.55	5273.29
		12/15/2015	31.55	5273.29
		12/13/2016	32.00	5272.84
MW-7	5293.13	9/25/2001	NA	NA
		8/15/2002	27.07	5266.06
		8/26/2003	27.00	5266.13
		8/27/2004	23.55	5269.58
		8/24/2005	19.48	5273.65
		10/08/2006	20.33	5272.80
MW-8	5259.94	2/10/1998	10.39	5249.55
		5/12/1998	10.02	5249.92
		8/7/1998	10.13	5249.81
		11/4/1998	10.75	5249.19
		2/10/1999	11.31	5248.63
		5/17/1999	10.93	5249.01
		8/18/1999	10.44	5249.50
		11/30/1999	11.10	5248.84
		4/10/2000	11.70	5248.24
		6/29/2000	11.16	5248.78
		9/29/2000	NA	NA
		12/21/2000	11.96	5247.98
		3/27/2001	12.32	5247.62
		6/27/2001	11.49	5248.45
		9/25/2001	11.06	5248.88
		10/29/2001	11.31	5248.63
		1/25/2002	12.35	5247.59
		5/23/2002	12.60	5247.34
		8/15/2002	12.90	5247.04
		3/6/2003	12.79	5247.15
		5/15/2003	12.25	5247.69
		8/26/2003	11.16	5248.78
		11/25/2003	12.79	5247.15

Table 1

Groundwater Elevation Data*San Juan River Gas Plant, Kirtland, New Mexico*

Monitoring Well	TOC Elevation (ft AMSL)	Measurement Date	Depth to Water (ft BTOC)	GW Elevation (ft AMSL)
MW-8	5259.94	5/18/2004	12.02	5247.92
		8/27/2004	6.26	5253.68
		11/17/2004	6.46	5253.48
		2/17/2005	7.43	5252.51
		5/19/2005	3.56	5256.38
		8/24/2005	6.02	5253.92
		11/9/2005	8.38	5251.56
		2/20/2006	8.55	5251.39
		5/24/2006	6.31	5253.63
		8/10/2006	6.80	5253.14
		12/27/2006	4.94	5255.00
		2/27/2007	5.40	5254.54
		5/25/2007	6.28	5253.66
		8/23/2007	9.25	5250.69
		11/28/2007	12.16	5247.78
		2/13/2008	10.41	5249.53
		5/8/2008	10.40	5249.54
		8/27/2008	11.15	5248.79
		11/18/2008	11.90	5248.04
		2/18/2009	13.60	5246.34
		5/5/2009	13.07	5246.87
		8/28/2009	13.75	5246.19
		11/4/2009	18.58	5241.36
		2/18/2010	21.19	5238.75
		5/26/2010	13.72	5246.22
		8/26/2010	20.64	5239.30
		9/11/2010	21.60	5238.34
		12/19/2013	15.11	5244.83
		12/16/2014	15.90	5244.04
		12/15/2015	15.05	5244.89
		12/13/2016	14.92	5245.02
MW-9	5260.97	2/10/1998	4.90	5256.07
		5/12/1998	4.22	5256.75
		8/7/1998	5.12	5255.85
		11/4/1998	4.60	5256.37
		2/10/1999	4.67	5256.30
		5/17/1999	4.48	5256.49
		8/18/1999	4.85	5256.12
		11/30/1999	5.38	5255.59
		4/10/2000	4.74	5256.23
		6/29/2000	5.47	5255.50
		9/29/2000	NA	NA
		12/21/2000	5.82	5255.15
		3/27/2001	5.34	5255.63
		6/27/2001	5.68	5255.29
		9/25/2001	6.77	5254.20
		10/29/2001	6.91	5254.06
		12/26/2001	5.68	5255.29
		1/25/2002	7.27	5253.70

Table 1

Groundwater Elevation Data*San Juan River Gas Plant, Kirtland, New Mexico*

Monitoring Well	TOC Elevation (ft AMSL)	Measurement Date	Depth to Water (ft BTOC)	GW Elevation (ft AMSL)
MW-9	5260.97	2/21/2002	NA	NA
		5/23/2002	5.45	5255.52
		8/15/2002	6.93	5254.05
		3/6/2003	6.82	5254.15
		5/15/2003	5.45	5255.52
		8/26/2003	6.69	5254.28
		11/25/2003	6.42	5254.55
		5/18/2004	5.97	5255.00
		8/27/2004	6.49	5254.48
		11/17/2004	6.02	5254.95
		2/17/2005	5.69	5255.28
		5/19/2005	4.78	5256.19
		8/24/2005	5.19	5255.78
		11/9/2005	4.93	5256.04
		2/20/2006	4.83	5256.14
		5/24/2006	4.47	5256.50
		8/10/2006	5.19	5255.78
		12/27/2006	4.13	5256.84
		2/27/2007	4.24	5256.73
		5/25/2007	3.81	5257.16
		8/23/2007	4.85	5256.12
		11/28/2007	5.13	5255.84
		2/13/2008	5.28	5255.69
		5/8/2008	4.71	5256.26
		8/27/2008	6.06	5254.91
		11/18/2008	6.53	5254.44
		2/18/2009	6.69	5254.28
		5/5/2009	12.18	5248.79
		8/28/2009	16.54	5244.43
		11/4/2009	16.63	5244.34
		2/18/2010	16.18	5244.79
		5/26/2010	16.36	5244.61
		8/26/2010	16.93	5244.04
		11/9/2010	15.28	5245.69
		2/7/2011	15.17	5245.80
		5/16/2011	14.75	5246.22
		8/31/2011	14.46	5246.51
		11/8/2011	14.45	5246.52
		2/22/2012	14.09	5246.88
		12/19/2013	12.97	5248.00
		12/16/2014	12.86	5248.11
		12/15/2015	11.83	5249.14
		12/13/2016	11.16	5249.81

Notes:

NA - Historical measurement is not available

ft BTOC - feet below top of casing

ft AMSL - feet above mean sea level

TOC - top of casing

Table 2

Summary of BTEX Groundwater Analytical Results*San Juan River Gas Plant, Kirtland, New Mexico*

Monitoring Well	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)
NMWQCC Standard (mg/L):		0.01	0.75	0.75	0.62
MW-2	9/25/2001	<0.002	<0.002	<0.002	<0.002
	8/15/2002	0.0014	0.0004	0.0008	0.001
	8/26/2003	<0.001	<0.001	<0.001	<0.003
	8/27/2004	<0.001	<0.001	<0.001	<0.003
	8/24/2005	<0.001	<0.001	<0.001	<0.002
	8/10/2006	<0.001	<0.001	<0.001	<0.002
	8/23/2007	<0.001	<0.001	<0.001	<0.002
	8/27/2008	<0.001	<0.001	<0.001	<0.003
	8/28/2009	<0.001	<0.001	<0.001	<0.002
	8/26/2010	<0.002	<0.002	<0.002	<0.006
	8/31/2011	<0.001	<0.001	<0.001	<0.003.0
	12/19/2013	<0.00008	<0.00015	<0.00011	<0.00026
	12/18/2014	<0.00008	<0.00015	<0.00011	<0.00026
	12/15/2015	<0.000176	<0.000198	<0.000212	<0.000366
	12/13/2016	<0.000176	<0.000198	<0.000212	<0.000366
MW-4	9/25/2001	<0.002	0.0082	0.0043	0.017
	8/15/2002	0.0008	0.0005	0.0011	0.0009
	8/26/2003	<0.001	<0.001	<0.001	<0.003
	8/27/2004	<0.001	<0.001	<0.001	<0.003.0
	8/24/2005	<0.001	<0.001	<0.001	<0.002
	8/10/2006	<0.001	<0.001	<0.001	<0.002
	8/23/2007	0.00037 J	<0.001	<0.001	<0.002
	8/27/2008	<0.001	<0.001	<0.001	<0.003.0
	8/28/2009	<0.001	<0.001	<0.001	<0.002
	8/26/2010	<0.002	<0.002	<0.002	<0.006
	8/31/2011	<0.001	<0.001	<0.001	<0.003.0
	12/19/2013	0.000208 J	<0.00015	<0.00011	<0.00026
	12/18/2014	0.000235	<0.00015	<0.00011	<0.00026
	12/15/2015	0.00021 J	<0.000198	<0.000212	<0.000366
	12/13/2016	0.000176 J	<0.000198 J	<0.000212 J	<0.000366 J
MW-5	2/10/1998	<0.001	<0.001	<0.001	<0.003.0
	5/12/1998	<0.001	<0.001	<0.001	<0.003
	8/7/1998	<0.001	<0.001	<0.001	<0.003
	11/4/1998	<0.001	<0.001	<0.001	<0.003
	2/10/1999	<0.001	<0.001	<0.001	<0.003
	5/17/1999	<0.001	<0.001	<0.001	<0.003
	8/18/1999	<0.001	<0.001	<0.001	<0.003
	11/30/1999	<0.002	<0.002	<0.002	<0.002
	4/10/2000	<0.002	<0.002	<0.002	<0.002
	6/29/2000	<0.002	<0.002	<0.002	<0.002
	9/29/2000	<0.002	<0.002	<0.002	<0.002
	12/21/2000	0.0022	<0.002	<0.002	0.0091
	3/27/2001	0.0098	<0.002	<0.002	<0.002
	6/27/2001	<0.002	<0.002	<0.002	<0.002
	9/25/2001	0.0026	<0.0005	<0.0005	<0.0005
	11/29/2001	<0.0005	<0.0005	<0.0005	<0.0005
	1/25/2002	<0.0005	<0.0005	<0.0005	<0.0005

Table 2

Summary of BTEX Groundwater Analytical Results*San Juan River Gas Plant, Kirtland, New Mexico*

Monitoring Well	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)
NMWQCC Standard (mg/L):		0.01	0.75	0.75	0.62
MW-5	8/15/2002	0.0004	<0.0005	<0.0005	0.001
	8/26/2003	<0.001	<0.001	<0.001	<0.003
	8/27/2004	<0.001	<0.001	<0.001	<0.003
	8/24/2005	<0.001	<0.001	<0.001	<0.002
	8/10/2006	0.0023	<0.001	<0.001	<0.002
	23/08/2007	0.0037	<0.001	<0.001	<0.002
MW-6	9/25/2001	0.0021	0.005	<0.002	<0.002
	8/15/2002	0.0003	<0.0005	<0.0005	0.0009
	8/26/2003	<0.001	<0.001	<0.001	<0.003
	8/27/2004	<0.001	<0.001	<0.001	<0.003
	8/24/2005	<0.001	<0.001	<0.001	<0.002
	8/10/2006	<0.001	<0.001	<0.001	<0.002
	8/23/2007	<0.001	<0.001	<0.001	<0.002
	8/27/2008	<0.001	<0.001	<0.001	<0.003
	8/28/2009	<0.001	<0.001	<0.001	<0.002
	8/26/2010	<0.002	<0.002	<0.002	<0.006
	8/31/2011	<0.001	<0.001	<0.001	<0.003
	12/19/2013	<0.00008	<0.00015	<0.00011	<0.00026
	12/18/2014	0.0000812	<0.00015	<0.00011	<0.00026
	12/15/2015	<0.000176	<0.000198	<0.000212	<0.000366
	12/13/2016	<0.000176	<0.000198	<0.000212	<0.000366
MW-7	9/25/2001	<0.002	<0.002	<0.002	<0.002
	8/15/2002	0.0004	0.0004	0.0009	0.001
	8/26/2003	<0.001	<0.001	<0.001	<0.003
	8/27/2004	<0.001	<0.001	<0.001	<0.003
	8/24/2005	<0.001	<0.001	<0.001	<0.002
	8/10/2006	<0.001	<0.001	<0.001	<0.002
MW-8	2/10/1998	0.316	<0.001	0.0094	0.0284
	5/12/1998	0.449	<0.001	0.0139	0.0629
	8/7/1998	0.509	<0.001	0.0071	0.0429
	11/4/1998	0.408	<0.001	<0.001	0.0145
	2/10/1999	0.261	<0.001	<0.001	0.0061
	5/17/1999	0.205	0.00102	<0.001	0.00725
	8/18/1999	0.265	0.00209	0.00106	0.0096
	11/30/1999	0.26	<0.002	0.0021	0.0160
	4/10/2000	0.2	0.0044	<0.002	0.0095
	6/29/2000	0.024	<0.002	<0.002	<0.002
	9/29/2000	0.284	<0.002	6.600	<0.002
	12/21/2000	<0.002	<0.002	<0.002	0.0067
	3/27/2001	0.015	<0.002	<0.002	<0.002
	6/27/2001	0.085	<0.002	<0.002	<0.002
	9/25/2001	0.03	0.0037	<0.002	<0.002
	10/29/2001	0.053	<0.0005	0.0047	<0.0005
	1/25/2002	0.11	<0.0005	0.0023	0.0098
	5/23/2002	0.2	<0.0025	0.0079	0.017
	8/15/2002	0.8	<0.0005	0.0044	0.0073

Table 2

Summary of BTEX Groundwater Analytical Results*San Juan River Gas Plant, Kirtland, New Mexico*

Monitoring Well	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)
NMWQCC Standard (mg/L):		0.01	0.75	0.75	0.62
MW-8	3/6/2003	0.3	0.0004	0.002	0.0027
	5/15/2003	<0.001	<0.001	<0.001	<0.003
	8/26/2003	0.891	<0.001	0.0266	0.0131
	11/25/2003	0.0819	<0.001	0.0023	0.0052
	5/18/2004	<0.001	<0.001	<0.001	<0.003
	8/27/2004	<0.001	<0.001	<0.001	<0.003
	11/17/2004	0.157	<0.001	0.0136	0.027
	2/17/2005	0.159	<0.001	0.0059	0.0138
	5/19/2005	<0.001	0.0017	0.0034	0.001 J
	8/24/2005	<0.001	<0.001	0.0026	<0.002
	11/9/2005	0.164	0.00036 J	0.011	0.03
	2/20/2006	0.0852	<0.001	0.0083	0.0176
	5/24/2006	36.300	<0.001	0.005	0.0097
	8/10/2006	0.00057 J	<0.001	0.0034	0.0064
	12/27/2006	0.0256	<0.001	0.0046	0.009
	2/27/2007	0.0281	<0.001	0.0055	0.0114
	5/25/2007	0.0196	<0.001	0.005	0.0098
	8/23/2007	<0.005	<0.005	<0.005	<0.010
	11/28/2007	<0.002	<0.002	<0.002	0.00045 J
	2/13/2008	0.006	<0.002	0.00071 J	<0.006
	5/8/2008	<0.001	<0.001	<0.001	<0.002
	8/27/2008	<0.001	<0.001	<0.001	<0.003
	11/18/2008	<0.002	<0.002	<0.002	<0.006
	2/18/2009	0.00065 J	<0.001	<0.001	<0.002
	5/5/2009	0.00024 J	<0.001	<0.001	<0.002
	8/28/2009	<0.001	<0.001	<0.001	<0.002
	11/4/2009	<0.001	<0.001	<0.001	<0.002
	2/18/2010	<0.001	<0.001	<0.001	<0.002
	5/26/2010	0.00081 J	<0.002	<0.002	<0.006
	8/26/2010	<0.002	<0.002	<0.002	<0.006
	11/9/2010	<0.002	<0.002	<0.002	<0.006
	19/12/2013	0.003	<0.00015	<0.00011	<0.00026
	12/18/2014	<0.00008	<0.00015	<0.00011	<0.00026
	12/15/2015	0.000802 J	<0.000198	<0.000212	<0.000366
	12/13/2016	0.00184	<0.000198	<0.000212	<0.000366
MW-9	2/10/1998	0.0731	<0.001	0.0071	0.0075
	5/12/1998	0.0895	<0.001	0.00851	0.00561
	8/7/1998	0.077	<0.001	0.00708	0.005
	11/4/1998	0.0898	<0.001	0.00942	0.0109
	2/10/1999	0.077	<0.001	0.0081	0.006
	5/17/1999	0.0783	<0.001	0.00754	0.00363
	8/18/1999	0.0764	<0.001	0.00721	0.00497
	11/30/1999	0.082	<0.002	0.0075	0.0053
	4/10/2000	0.048	0.0021	0.0047	0.0059
	6/29/2000	0.1	<0.002	0.0092	<0.002
	9/29/2000	0.095	<0.002	0.011	0.009
	12/21/2000	0.086	<0.002	0.0071	0.012

Table 2

Summary of BTEX Groundwater Analytical Results*San Juan River Gas Plant, Kirtland, New Mexico*

Monitoring Well	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)
NMWQCC Standard (mg/L):		0.01	0.75	0.75	0.62
MW-9	3/27/2001	0.061	<0.002	0.0057	<0.002
	6/27/2001	0.087	<0.002	0.0077	<0.002
	9/25/2001	0.023	0.002	0.0022	<0.002
	10/29/2001	0.12	<0.0005	0.0024	0.0051
	12/26/2001	0.034	0.0011	0.0099	0.017
	1/25/2002	0.022	<0.0005	0.0044	0.003
	2/21/2002	0.048	<0.0005	0.0074	0.0045
	5/23/2002	0.0014	<0.0005	<0.0005	<0.001
	8/15/2002	0.0117	<0.0005	0.0021	0.0009
	3/6/2003	0.0002	0.0002	<0.001	0.0008
	5/15/2003	<0.001	<0.001	<0.001	<0.003
	8/26/2003	0.0293	<0.001	<0.001	<0.003
	11/25/2003	0.0086	<0.001	0.0011	<0.003
	5/18/2004	0.0152	<0.001	0.0025	<0.003
	8/27/2004	0.0295	<0.001	0.004	0.0018
	11/17/2004	0.0359	<0.001	0.0052	0.0022
	2/17/2005	0.0517	<0.001	0.0083	0.0037
	5/19/2005	0.133	<0.001	0.0289	0.0135
	8/24/2005	0.0565	<0.001	0.0126	0.0049
	11/9/2005	0.076	<0.001	0.0188	0.0069
	2/20/2006	0.0779	<0.001	0.0191	0.0071
	5/24/2006	0.0734	<0.001	0.0177	0.0066
	8/10/2006	0.0887	<0.001	0.0225	0.0093
	12/27/2006	0.0769	<0.001	0.019	0.0063
	2/27/2007	0.0448	<0.001	0.0092	0.0028
	5/25/2007	0.082	<0.001	0.0196	0.0065
	8/23/2007	0.0881	<0.001	0.0212	0.0138
	11/28/2007	0.0909	<0.002	0.0204	0.007
	2/13/2008	0.0844	<0.002	0.0221	0.0092
	5/8/2008	0.0718	<0.001	0.0202	0.008
	8/27/2008	0.0879	<0.001	0.0234	0.0107
	11/18/2008	0.0953	<0.002	0.0228	0.0095
	2/18/2009	0.0913	<0.001	0.0257	0.0095
	5/5/2009	0.0554	0.00042 J	0.0137	0.0068
	8/28/2009	0.0631	<0.001	0.009	0.0046
	11/4/2009	0.0694	<0.001	0.0092	0.0042
	2/18/2010	0.0707	<0.001	0.0097	0.0052
	5/26/2010	0.0918	<0.002	0.0188	0.0109
	8/26/2010	0.0723	<0.002	0.0128	0.0045 J
	11/9/2010	0.0866	0.00066 J	0.0187	0.0099
	2/7/2011	0.0901	<0.002	0.0225	0.0102
	5/16/2011	0.0995	<0.001	0.0307	0.0179
	8/31/2011	0.112	<0.001	0.0356	0.0172
	11/8/2011	0.113	<0.001	0.0376	0.0189
	2/22/2012	0.136	<0.001	0.0462	0.022

Table 2

Summary of BTEX Groundwater Analytical Results*San Juan River Gas Plant, Kirtland, New Mexico*

Monitoring Well	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)
NMWQCC Standard (mg/L):		0.01	0.75	0.75	0.62
MW-9	12/19/2013	0.186	0.000246 J	0.0575	0.015
	12/18/2014	0.0461	<0.00015	0.0183	0.0155
	12/15/2015	0.104	0.00023 J	0.0415	0.0142
	12/13/2016	0.097	<0.000198	0.0374	0.0103

Notes:

Bold text indicates detected concentration

Highlighted and bold cells indicate concentration exceeding NMWQCC standard

mg/L - milligrams per liter

J - chemical detected at concentration above instrument

detection limit but below method detection limit

< = not detected above listed method detection limit

Table 3
Summary of Metals and Inorganics Groundwater Analytical Results
San Juan River Gas Plant, Kirtland, New Mexico

Analyte	NMWQCC Standard (mg/L)	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2
		9/25/2001	8/15/2002	8/21/2002	8/26/2003	8/27/2004	8/24/2005	10/08/2006	8/23/2007	8/27/2008	8/28/2009	8/26/2010	8/31/2011	12/19/2013
Metals (mg/L)														
Aluminum	5	4.2	1.13	--	2.07	--	1.24	1.54	12.8	--	21.0	5.18	6.08000	5.82
Arsenic	0.1	<0.005	0.0049	--	0.0055	0.005	<0.005	<0.005	<0.005	--	<0.005	<0.005	<0.005	0.00480 J
Barium	1	0.029	0.0327	--	< 0.2	0.2	<0.02	<0.2	<0.2	--	<0.2	<0.2	<0.2	0.0346
Boron	NE	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	0.01	<0.004	0.0008	--	0.004	0.004	<0.004	<0.004	<0.004	--	<0.004	<0.004	<0.004	0.000900 J
Calcium	NE	400	402	--	349	--	454	399	404	--	356	319	330	384
Chromium	0.05	<0.01	0.0056	--	< 0.01	0.01	<0.01	<0.01	<0.01	--	0.0127	<0.01	<0.01	0.00810 J
Cobalt	0.05	<0.05	0.0035	--	< 0.05	--	<0.05	<0.05	<0.05	--	<0.05	<0.05	<0.05	0.00790 J
Copper	1	0.015	0.116	--	0.0428	--	<0.025	<0.025	0.0329	--	0.0272	<0.025	<0.025	0.0309
Iron	1	4.6	1.76	--	1.48	--	1.58	1.02	10.3	--	16.5	4.3	4.75	8.29
Lead	0.05	0.08	0.0031	--	< 0.003	0.003	0.009	0.0102	0.014	--	0.0089	0.0051	0.0141	0.0106
Magnesium	NE	120	108	--	106	--	126	111	133	--	110	103	97.3	103
Manganese	0.2	0.23	0.216	--	0.0439	--	0.163	0.256	0.223	--	0.268	0.0871	0.178	0.487
Mercury	0.002	--	0.00012	--	< 0.0002	0.0002	<0.0002	<0.0002	<0.0002	--	--	<0.0002	<0.0002	<0.000082
Molybdenum	1	<0.01	0.0028	--	< 0.01	--	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.00273
Nickel	0.2	<0.04	0.0075	--	< 0.04	--	<0.04	<0.04	<0.04	--	<0.04	<0.04	<0.04	0.00900 J
Potassium	NE	4.7	13.40	--	< 5	--	5.84	5.63	8.88	--	10.2	5.29	<5.000	4.02
Selenium	0.05	0.12	0.108	--	0.0896	0.115	0.124	0.136	0.143	--	0.132	0.111	0.122	0.0978
Silver	0.05	<0.01	0.0028	--	< 0.01	0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	0.00130 J
Sodium	NE	1200	1350	--	1030	--	1400	1150	1120	--	1130	1160	1200	1260
Zinc	10	<0.02	0.0733	--	0.0581	--	0.459	0.148	0.169	--	0.0981	0.0344	0.0552	0.156
Inorganics (mg/L)														
Alkalinity	NE	--	--	170	196	180	138	163	165	178	174	198	176	203
Chloride	250	300	--	296	309	431	265	162	338	308	795	290	318	275
Nitrate+Nitrite	10	25	--	--	21.8	25.2	17	18	18	17.2	17.7	19.5	16.7	19.7
Sulfate	600	3600	--	3380	3630	3160	3170	3420	3410	3320	3000	3200	1530	3330
TDS	1000	5800	--	5690	5880	6170	5730	4920	5710	4920	5870	5970	5860	5460

Notes:

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Table 3
Summary of Metals and Inorganics Groundwater Analytical Results
San Juan River Gas Plant, Kirtland, New Mexico

Analyte	NMWQCC Standard (mg/L)	MW-2	MW-2	MW-2	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4
		12/18/2014	12/15/2015	12/13/2016	9/25/2001	8/15/2002	8/21/2002	8/26/2003	8/26/2004	8/24/2005	8/10/2006	8/23/2007	8/27/2008	8/28/2009	8/26/2010
Metals (mg/L)															
Aluminum	5	<0.0216	<0.0926	<0.0926	9.3	1.37	--	5.29	--	<0.2	0.416	9.29	9.81	1.0	3.31
Arsenic	0.1	<0.00328	<0.00285	<0.00285	0.22	0.0207	--	0.0818	0.018	0.0262	0.0636	0.0211	0.0342	0.0125	0.0175
Barium	1	0.0131	0.0112 J	0.0078 J	0.11	0.0271	--	0.2	0.20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Boron	NE	--	0.584	--	--	--									
Cadmium	0.01	<0.00035	0.0004 J	0.0006 J	0.017	0.0012	--	0.01	0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Calcium	NE	298	--	284	210	210	--	212	--	286	245	249	267	234	228
Chromium	0.05	0.0036	0.003 J	<0.00159	ND	0.0102	--	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	0.05	0.0008	0.0068 J	<0.00031	0.28	0.191	--	0.156	--	0.144	0.103	0.0883	0.094	0.0752	0.0576
Copper	1	0.0120	--	0.0092 J	0.82	0.158	--	0.789	--	0.0629	0.0567	0.0683	0.15	0.0334	0.0589
Iron	1	<0.0866	0.752	<0.027	31.0	6.5	--	12.4	--	10.2	31.8	21.7	17.7	8.16	9.93
Lead	0.05	<0.0029	<0.00219	<0.00219	0.17	0.0113	--	0.0401	0.003	0.165	0.051	0.014	0.0512	0.014	0.0195
Magnesium	NE	86.6	--	84.5	81	80.1	--	88.1	--	111	95.3	108	113	101	100
Manganese	0.2	0.005	1.03	<0.00036	6.1	6.08	--	6.88	--	8.78	5.8	6.59	7.19	6.4	5.97
Mercury	0.002	--	<0.082	<0.000082	--	0.00061	--	0.0035	0.003	0.00026	0.00021	0.00042	<0.0002	--	0.00068
Molybdenum	1	0.00273	0.003 J	<0.0029	ND	0.0027	--	0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	0.2	<0.0022	0.0279	<0.0008	0.33	0.261	--	0.251	--	0.26	0.182	0.268	0.229	0.199	0.203
Potassium	NE	3.35	--	3.17	7.3	8.99	--	9.39	--	9.62	8.77	10.1	13.1	8.13	7.86
Selenium	0.05	0.0908	0.0762	0.0778	<0.005	0.0034	--	0.005	0.005	0.0058	<0.005	<0.005	<0.005	<0.005	0.0076
Silver	0.05	<0.00125	--	<0.00129	<0.01	0.0017	--	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium	NE	1030	--	1170	920	1040	--	802	--	1190	1050	910	1020	1020	1050
Zinc	10	0.011	--	0.0141 J	4.2	0.241	--	1.55	--	0.159	0.2	0.11	0.05	<0.02	0.0287
Inorganics (mg/L)															
Alkalinity	NE	215	197	169 J	--	--	874	446	888	650	870	820	916	428	856
Chloride	250	234	245	206	330	--	234	303	453	321	385	303	16.9	373	345
Nitrate+Nitrite	10	20.9	33.4	9.59	--	--	--	4	10	0.5	0.2	2.1	0.39	0.64	0.54
Sulfate	600	3170	3280	3290	2000	--	1790	2090	2000	2010	2250	2000	2150	2230	2150
TDS	1000	5390	5000	4860	3920	--	4060	4540	4410	4330	3840	4460	4120	4820	4810

Notes:
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Table 3
Summary of Metals and Inorganics Groundwater Analytical Results
San Juan River Gas Plant, Kirtland, New Mexico

Analyte	NMWQCC Standard (mg/L)	MW-4	MW-4	MW-4	MW-4	MW-4	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5
		8/31/2011	12/19/2013	12/18/2014	12/15/2015	12/13/2016	11/30/1999	4/10/2000	6/29/2000	9/29/2000	12/21/2000	3/27/2001	6/27/2001	9/25/2001	8/15/2002
Metals (mg/L)															
Aluminum	5	1.38	0.702	<0.0216	0.403 J	<0.0926	--	--	--	--	--	--	--	458.0	2.7
Arsenic	0.1	0.0082	0.101	0.008	<0.00285	<0.00285	--	--	--	--	--	--	--	<0.005	0.0106
Barium	1	<0.2	0.0327	0.0335	0.01 J	0.0074 J	--	--	--	--	--	--	--	0.16	0.0175
Boron	NE			--	0.778	--					--	--	--	--	--
Cadmium	0.01	<0.004	0.00150 J	<0.00035	0.0009 J	0.0008 J	--	--	--	--	--	--	--	<0.004	0.00046
Calcium	NE	263	323	276	--	280	--	--	--	--	--	--	--	400	361
Chromium	0.05	<0.01	0.00310 J	0.00240	0.0024 J	<0.00159	--	--	--	--	--	--	--	0.022	0.005
Cobalt	0.05	0.0536	0.201	0.0452	0.0426	0.0334	--	--	--	--	--	--	--	0.035	0.0127
Copper	1	0.0268	0.0913	0.0072	--	0.003 J	--	--	--	--	--	--	--	0.059	0.014
Iron	1	5.38	24.90	5.86	3.65	5.09	0.16	0.12	0.38	0.24	0.59000	3.30000	0.46000	63.0	3.38
Lead	0.05	0.0128	0.016	<0.0029	<0.00219	<0.00219	--	--	--	--	--	--	--	0.15	0.0048
Magnesium	NE	105	123	113	--	116	--	--	--	--	--	--	--	220	168
Manganese	0.2	5.03	8.77	5.95	5.81	6.31	2.5	3.3	3.3	1.8	0.02600	4.20000	3.80000	3.9	3.26
Mercury	0.002	0.00031	<0.000082	--	<0.082	<0.000082	--	--	--	--	--	--	--	--	0.00008
Molybdenum	1	<0.01	0.179	<0.00273	0.001 J	<0.00054	--	--	--	--	--	--	--	<0.01	0.005
Nickel	0.2	238.0	0.358	0.183	0.186	0.192	--	--	--	--	--	--	--	0.059	0.0493
Potassium	NE	6.75	8.09	6.1	--	6.25	--	--	--	--	--	--	--	24.0	30.9
Selenium	0.05	<0.005	0.00860 J	<0.00417	0.0255 J	<0.00287	--	--	--	--	--	--	--	<0.005	0.0032
Silver	0.05	<0.01	<0.00125	0.0016	--	<0.00129	--	--	--	--	--	--	--	<0.01	0.0026
Sodium	NE	1130	1310	1060	--	1250	--	--	--	--	--	--	--	6300	5980
Zinc	10	<0.02	0.15700	0.0091	--	0.0044 J	--	--	--	--	--	--	--	0.19	0.049
Inorganics (mg/L)															
Alkalinity	NE	34	765	908	831	798	--	--	--	--	--	--	340	--	--
Chloride	250	1240	377	380	390	284	280	--	--	--	--	--	380	290	--
Nitrate+Nitrite	10	0.14	0.695	0.0986	0.0985	<0.0017	10	5	10	2	1	5	--	--	--
Sulfate	600	2140	2640	2670	2720	2560	17000	16000	16000	--	14000	16000	18000	14000	--
TDS	1000	4210	5330	5450	5190	4900	--	--	--	--	--	--	19500	20300	--

Notes:

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Table 3
Summary of Metals and Inorganics Groundwater Analytical Results
San Juan River Gas Plant, Kirtland, New Mexico

Analyte	NMWQCC Standard (mg/L)	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6
		8/21/2002	8/26/2003	8/27/2004	8/24/2005	8/10/2006	8/23/2007	9/25/2001	8/15/2002	8/21/2002	8/26/2003	8/27/2004	8/24/2005	8/10/2006
Metals (mg/L)														
Aluminum	5	--	12.5	--	1.19	3.34	16.9	22.0	13.6	--	24.5	--	14.5	6.45
Arsenic	0.1	--	0.0089	0.005	<0.005	<0.005	<0.005	<0.005	0.0078	--	0.005	0.005	<0.005	<0.005
Barium	1	--	0.2	0.2	<0.2	<0.2	<0.2	0.015	0.0139	--	0.2	0.2	<0.2	<0.2
Boron	NE	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	0.01	--	0.004	0.004	<0.004	0.004	0.0048	0.012	0.0109	--	0.0133	0.0102	0.0114	0.0068
Calcium	NE	--	348	--	418	338	342	400	388	--	343	--	447	389
Chromium	0.05	--	0.01	0.01	<0.01	<0.01	<0.01	<0.01	0.0303	--	0.01	0.01	<0.01	<0.01
Cobalt	0.05	--	0.05	--	<0.05	0.0505	0.0637	0.26	0.202	--	0.236	--	0.219	0.123
Copper	1	--	0.0502	--	<0.025	<0.025	0.03	0.046	0.0434	--	0.0807	--	0.0378	<0.025
Iron	1	--	11.8	--	3.18	1.99	12.1	2.9	0.986	--	5.51	--	0.427	0.296
Lead	0.05	--	0.0061	0.003	0.0134	0.0096	0.0205	0.25	0.005	--	0.0039	0.003	0.0103	0.0076
Magnesium	NE	--	200	--	245	203	232	420	316	--	360	--	376	273
Manganese	0.2	--	5.87	--	8.65	7.64	8.04	9.6	6.55	--	8.63	--	8.25	4.82
Mercury	0.002	--	0.0002	0.0002	<0.0002	<0.0002	<0.0002	--	0.0001	--	0.0002	0.0002	<0.0002	<0.0002
Molybdenum	1	--	0.01	--	<0.01	<0.01	<0.01	<0.01	0.005	--	0.0100	--	<0.01	<0.01
Nickel	0.2	--	0.0755	--	0.153	0.18	0.183	0.32	0.272	--	0.3100	--	0.275	0.155
Potassium	NE	--	32.0	--	42.8	44.4	46.4	22.0	29.1	--	29.4	--	37.6	34.2
Selenium	0.05	--	0.005	0.0075	0.0073	<0.005	<0.005	0.3	0.304	--	0.247	0.331	0.618	0.995
Silver	0.05	--	0.01	0.01	<0.01	<0.01	<0.01	<0.01	0.004	--	0.01	0.01	<0.01	<0.01
Sodium	NE	--	4390	--	6050	4640	4410	4000	4080	--	3830	--	4370	3400
Zinc	10	--	0.109	--	0.168	0.259	0.304	0.79	0.612	--	0.729	--	0.764	0.527
Inorganics (mg/L)														
Alkalinity	NE	459	358	393	125	109	35	--	--	145	12	11	25	54
Chloride	250	331	488	773	1150	1140	1730	1300	--	1040	1410	1340	1150	1320
Nitrate+Nitrite	10	--	20	20	0.2	0.1	2.6	ND	--	--	70.3	88.3	176	314
Sulfate	600	14400	14200	14500	11700	10500	11400	10000	--	8300	10300	9320	8490	8400
TDS	1000	20300	19900	21400	21700	11700	18600	16500	--	14900	17100	16600	17700	11600

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Table 3
Summary of Metals and Inorganics Groundwater Analytical Results
San Juan River Gas Plant, Kirtland, New Mexico

Analyte	NMWQCC Standard (mg/L)	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-7	MW-7	MW-7	MW-7	MW-7
		8/23/2007	8/27/2008	8/28/2009	8/26/2010	8/31/2011	12/19/2013	12/18/2014	12/15/2015	12/13/2016	9/25/2001	8/15/2002	8/21/2002	8/26/2003	8/27/2004
Metals (mg/L)															
Aluminum	5	12.6	--	16.8	19.2	16.3	14.8	6.99	12.3	15.1	14.0	3.21	--	35.6	--
Arsenic	0.1	<0.005	--	<0.005	<0.005	<0.005	<0.00328	<0.00328	<0.00285	<0.00285	<0.005	0.0072	--	0.0144	0.0089
Barium	1	<0.2	--	<0.2	<0.2	<0.2	0.0108 J	0.0100	0.0103 J	0.0055 J	0.085	0.0441	--	0.302	0.265
Boron	NE	--	--	--	--	--	--	--	0.737	--	--	--	--	--	--
Cadmium	0.01	0.0081	--	0.0095	0.0114	0.0131	0.0116	0.00730	0.0103	0.0123	<0.004	0.0013	--	0.004	0.004
Calcium	NE	325	--	359	331	350	389	393	--	386	450	416	--	397	--
Chromium	0.05	<0.01	--	<0.01	<0.01	<0.01	<0.00155	0.00180	0.0018 J	<0.00159	<0.01	0.0081	--	0.0213	0.0187
Cobalt	0.05	0.161	--	0.176	0.199	0.227	0.238	0.128	0.196	0.228	0.029	0.0116	--	0.05	--
Copper	1	0.0387	--	0.0383	0.042	0.0479	0.045	0.0541	--	0.0657	0.039	0.0237	--	0.0921	--
Iron	1	3.78	--	3.44	4.6	1.04	0.418	<0.0866	0.148 J	0.0696 J	14.0	4.24	--	32.7	--
Lead	0.05	0.011	--	0.0044	0.0151	0.0187	<0.00290	<0.0029	<0.00219	<0.00219	0.15	0.005	--	0.0168	0.0155
Magnesium	NE	356	--	315	326	326	318	285	--	320	230	173	--	229	--
Manganese	0.2	5.88	--	6.83	7.2	8.06	6.92	4.40	5.95	6.7	8.9	4.57	--	4.85	--
Mercury	0.002	<0.0002	--	--	<0.0002	<0.0002	<0.000082	--	<0.082	<0.000082	--	0.0001	--	0.0002	0.002
Molybdenum	1	<0.01	--	<0.01	<0.01	<0.01	<0.00273	<0.00273	<0.00054	<0.00054	<0.01	0.0021	--	0.01	--
Nickel	0.2	0.187	--	0.228	0.305	0.333	0.299	0.163	0.238	0.277	0.043	0.0267	--	0.0483	--
Potassium	NE	39.4	--	34.8	27.6	21.1	19.7	18.50	--	21.6	15.0	26.8	--	25.1	--
Selenium	0.05	0.893	--	0.381	0.335	0.351	0.332	0.358	0.356	0.35	<0.005	0.0114	--	0.0141	0.0098
Silver	0.05	<0.01	--	<0.01	<0.01	<0.01	0.0023 J	<0.00125	--	<0.00129	<0.01	0.0034	--	0.01	0.01
Sodium	NE	3370	--	3470	3620	3860	3950	3510	--	4070	4800	4810	--	4490	--
Zinc	10	0.594	--	0.592	0.692	0.772	0.836	0.36700	--	0.665	0.14	0.068	--	0.199	--
Inorganics (mg/L)															
Alkalinity	NE	30	17	6	<5.0	12	<10	<5	5	<5	--	--	900	995	1040
Chloride	250	1830	1150	1290	1180	1190	1310	874	875	738	460	--	367	369	694
Nitrate+Nitrite	10	258	140	97.8	57	92.2	137	147	156	45.2	ND	--	--	20	24
Sulfate	600	8930	3780	4140	9180	8970	9600	10200	11300	9670	11000	--	11000	11900	10800
TDS	1000	15500	16300	16000	14900	15600	16300	21100	15300	15300	16500	--	17500	17600	16000

Notes:

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Table 3
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San Juan River Gas Plant, Kirtland, New Mexico

Analyte	NMWQCC Standard (mg/L)	MW-7	MW-7	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8
		8/24/2005	8/10/2006	11/30/1999	4/10/2000	6/29/2000	9/29/2000	12/21/2000	3/27/2001	6/27/2001	9/25/2001	10/29/2001	8/15/2002	8/21/2002
Metals (mg/L)														
Aluminum	5	0.6	0.801	--	--	--	--	--	--	--	0.24	--	0.508	--
Arsenic	0.1	<0.005	<0.005	--	--	--	--	--	--	--	<0.005	--	0.0238	--
Barium	1	<0.2	<0.2	--	--	--	--	--	--	--	0.019	--	0.029	--
Boron	NE	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	0.01	<0.004	<0.004	--	--	--	--	--	--	--	<0.004	--	0.002	--
Calcium	NE	462	421	--	--	--	--	--	--	--	370	310	67.2	--
Chromium	0.05	<0.01	<0.01	--	--	--	--	--	--	--	<0.01	--	1.08	--
Cobalt	0.05	<0.05	<0.05	--	--	--	--	--	--	--	<0.05	--	0.007	--
Copper	1	0.0256	<0.025	--	--	--	--	--	--	--	<0.025	--	0.014	--
Iron	1	0.226	0.295	0.16	1.8	0.32	0.32	0.16	1.1	1.1	2.5	0.87	6.89	--
Lead	0.05	0.009	0.0089	--	--	--	--	--	--	--	0.25	--	0.005	--
Magnesium	NE	238	231	--	--	--	--	--	--	--	370	280	465	--
Manganese	0.2	5.34	4.58	4.3	2.4	3.6	1.6	0.011	1.0	2.9	0.52	7.5	0.162	--
Mercury	0.002	<0.0002	<0.0002	--	--	--	--	--	--	--	--	--	0.0001	--
Molybdenum	1	<0.01	<0.01	--	--	--	--	--	--	--	<0.01	--	0.0568	--
Nickel	0.2	<0.04	<0.04	--	--	--	--	--	--	--	<0.04	--	0.251	--
Potassium	NE	27.7	31.0	--	--	--	--	--	--	--	20.0	36.0	62.9	--
Selenium	0.05	0.0181	0.0477	--	--	--	--	--	--	--	<0.005	--	0.0022	--
Silver	0.05	<0.01	<0.01	--	--	--	--	--	--	--	<0.01	--	0.01	--
Sodium	NE	5540	4970	--	--	--	--	--	--	--	6200	4500	4720	--
Zinc	10	0.0791	0.0889	--	--	--	--	--	--	--	<0.02	--	0.0145	--
Inorganics (mg/L)														
Alkalinity	NE	925	1140	--	--	--	--	--	--	4200	--	24	--	4420
Chloride	250	307	344	--	--	--	--	--	--	440	610	780	--	318
Nitrate+Nitrite	10	22	33	10	5	5	2	1	5	10	ND	0.2	--	--
Sulfate	600	11000	14200	5200	5000	7500	8500	12000	6300	6200	9600	10	--	5450
TDS	1000	19900	16500	--	--	--	--	--	--	13800	18000	17000	--	13200

Notes:

-- = not analyzed for the listed analyte

Bold text indicates detected concentration

Highlighted and bold cells indicate concentration exceeding NMWQCC standard

mg/L = milligrams per liter

< or ND = not detected above method detection limit

NE = Not Established

NMWQCC = New Mexico Water Quality Control Commision

Table 3
Summary of Metals and Inorganics Groundwater Analytical Results
San Juan River Gas Plant, Kirtland, New Mexico

Analyte	NMWQCC Standard (mg/L)	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-9	MW-9
		8/26/2003	8/27/2004	8/24/2005	8/10/2006	8/23/2007	8/27/2008	8/28/2009	8/26/2010	12/19/2013	12/18/2014	12/15/2015	12/13/2016	11/30/1999	4/10/2000
Metals (mg/L)															
Aluminum	5	1.62	--	0.634	0.219	1.3	3.26	5.34	5.21	0.651	<0.0216	<0.0926	0.348 J	--	--
Arsenic	0.1	0.008	0.0207	0.0062	0.0074	<0.005	0.0055	0.0122	0.03	<0.00328	0.0051	0.0037 J	<0.00285	--	--
Barium	1	0.2	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.0414	0.0322	0.0666	0.0555	--	--
Boron	NE	--	--	--	--	--	--	--	--	--	--	0.236	--	--	--
Cadmium	0.01	0.004	0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.00035	<0.00035	0.0003 J	0.0005 J	--	--
Calcium	NE	354	--	155	91.6	69.5	101	34.3	36.2	57.3	63.1	--	73.5	--	--
Chromium	0.05	0.01	0.01	<0.01	<0.01	<0.01	<0.01	0.013	0.018	<0.00155	0.0017	<0.00159	<0.00159	--	--
Cobalt	0.05	0.05	--	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.0017 J	<0.00063	0.0025 J	0.0012 J	--	--
Copper	1	0.0414	--	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.0102	0.0137	--	0.0017 J	--	--
Iron	1	2.39	--	0.831	<0.1	0.855	1.97	3.07	3.83	0.65	<0.0866	5.02	2.35 J	2.2	2.7
Lead	0.05	0.003	0.0074	0.0069	0.0051	0.0048	0.0043	0.0039	0.0087	<0.0029	<0.0029	<0.00219	<0.00219	--	--
Magnesium	NE	370	--	274	216	288	264	373	36.8	166	114	--	79.4	--	--
Manganese	0.2	1.46	--	1.23	1.04	0.59	0.557	0.869	0.367	0.351	0.0165	2.06	0.966	8.8	9.2
Mercury	0.002	0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.000082	--	<0.082	<0.000082	--	--
Molybdenum	1	0.01	--	0.0293	0.016	0.0165	<10	0.0321	0.0333	0.0087 J	0.02	0.0039 J	0.0085 JB	--	--
Nickel	0.2	0.04	--	<0.04	<0.04	<0.04	<0.04	<0.04	<0.2	0.0033 J	0.0033	<0.0008	<0.0008	--	--
Potassium	NE	45.4	--	75.6	73.0	87.4	89.0	85.6	226.0	35.4	39.6	--	26.4	--	--
Selenium	0.05	0.005	0.0062	<0.005	<0.005	<0.005	<0.005	<0.005	0.0075	<0.00417	<0.00417	0.0171 J	<0.00287	--	--
Silver	0.05	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00125	0.0017	--	<0.00129	--	--
Sodium	NE	4390	--	2610	2210	2220	2790	2850	2800	2280	2180	--	2600 B	--	--
Zinc	10	0.0748	--	0.0421	0.0526	0.132	0.0207	0.0234	<0.1	0.399	0.0064	--	0.0589 B	--	--
Inorganics (mg/L)															
Alkalinity	NE	5030	4920	1880	2150	2580	3380	3860	9250	3150	<5	3800	2090	--	--
Chloride	250	726	806	261	147	165	4	<1.0	<1.0	271	206	284	283	--	--
Nitrate+Nitrite	10	20	20	0.7	0.7	0.6	0.36	1.2	3	0.366	0.34	0.017	<0.017	10	5
Sulfate	600	8260	7760	4920	4160	3980	3590	4050	2150	2310	2520	3120	3840	14000	12000
TDS	1000	17900	17000	11000	7820	8200	9420	10700	12000	6540	6880	7290	6600	--	--

Notes:

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Bold text indicates detected concentration

Highlighted and bold cells indicate concentration exceeding NMWQCC standard

mg/L = milligrams per liter

< or ND = not detected above method detection limit

NE = Not Established

NMWQCC = New Mexico Water Quality Control Commision

Table 3
Summary of Metals and Inorganics Groundwater Analytical Results
San Juan River Gas Plant, Kirtland, New Mexico

Analyte	NMWQCC Standard (mg/L)	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9
		6/29/2000	9/29/2000	12/21/2000	3/27/2001	6/27/2001	9/25/2001	10/29/2001	8/15/2002	8/21/2009	8/26/2003	8/27/2004	8/24/2005	8/10/2006
Metals (mg/L)														
Aluminum	5	--	--	--	--	--	7.0	--	8.9	--	43.9	--	13.6	9.77
Arsenic	0.1	--	--	--	--	--	<0.005	--	0.0088	--	0.0061	0.005	<0.005	<0.005
Barium	1	--	--	--	--	--	0.0088	--	0.0119	--	0.2	0.2	<0.2	<0.2
Boron	NE	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	0.01	--	--	--	--	--	<0.004	--	0.0084	--	0.0094	0.0081	0.0089	0.0082
Calcium	NE	--	--	--	--	--	340	310	358	--	319	--	385	346
Chromium	0.05	--	--	--	--	--	<0.01	--	0.0078	--	0.0169	0.0104	<0.01	<0.01
Cobalt	0.05	--	--	--	--	--	0.18	--	0.183	--	0.2	--	0.212	0.193
Copper	1	--	--	--	--	--	0.031	--	0.0512	--	0.162	--	0.059	0.0458
Iron	1	0.85	1.2	--	1.4	3.7	3.3	0.13	0.849	--	29.0	--	4.39	1.48
Lead	0.05	--	--	--	--	--	0.2	--	0.005	--	0.0135	0.007	0.0111	0.0087
Magnesium	NE	--	--	--	--	--	310	270	258	--	270	--	282	244
Manganese	0.2	8.5	8.4	0.1	9.0	9.3	8.3	0.54	6.47	--	7.33	--	7.87	7.36
Mercury	0.002	--	--	--	--	--	--	--	0.00013	--	0.0002	0.0002	<0.0002	<0.0002
Molybdenum	1	--	--	--	--	--	<0.01	--	0.005	--	0.01	--	<0.01	<0.01
Nickel	0.2	--	--	--	--	--	0.3	--	0.295	--	0.335	--	0.335	0.307
Potassium	NE	--	--	--	--	--	12.0	43.0	25.6	--	23.0	--	25.9	23.8
Selenium	0.05	--	--	--	--	--	<0.005	--	0.0067	--	0.005	0.0065	0.0068	<0.005
Silver	0.05	--	--	--	--	--	<0.01	--	0.0029	--	0.01	0.0100	<0.01	<0.01
Sodium	NE	--	--	--	--	--	3900	4800	4490	--	3980	--	4650	3720
Zinc	10	--	--	--	--	--	0.53	--	0.0145	--	0.597	--	0.693	0.624
Inorganics (mg/L)														
Alkalinity	NE	--	--	--	--	ND	--	4000	--	<4	13	24.5	19	22
Chloride	250	--	--	--	--	770	2200	530	--	673	752	969	782	674
Nitrate+Nitrite	10	5	2	1	5	10	ND	0.23	--	--	20	20	<0.050	<0.050
Sulfate	600	11000	11000	3800	11000	13000	12000	2200	--	11600	11800	12000	10200	10700
TDS	1000	--	--	--	--	16600	17000	16000	--	17200	16800	17400	18400	11000

Notes:

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Bold text indicates detected concentration

Highlighted and bold cells indicate concentration exceeding NMWQCC standard

mg/L = milligrams per liter

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NE = Not Established

NMWQCC = New Mexico Water Quality Control Commision

Table 3
Summary of Metals and Inorganics Groundwater Analytical Results
San Juan River Gas Plant, Kirtland, New Mexico

Analyte	NMWQCC Standard (mg/L)	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9
		8/23/2007	8/27/2008	8/28/2009	8/26/2010	11/09/2010	8/31/2011	12/19/2013	12/18/2014	12/15/2015	12/13/2016
Metals (mg/L)											
Aluminum	5	16.3	14.5	14.7	11.1	--	14.0	11.6	9.64	9.03	15.5
Arsenic	0.1	<0.005	<0.005	<0.005	<0.005	--	<0.005	<0.00328	<0.00328	<0.00285	<0.00285
Barium	1	<0.2	<0.2	<0.2	<0.2	--	<0.2	0.0098 J	0.0191	0.021	0.0134 J
Boron	NE	--	--	--	--	--	--	--	--	0.679	--
Cadmium	0.01	<0.004	0.0085	0.0063	0.0061	--	0.0082	0.009	0.00940	0.0069	0.0084
Calcium	NE	108	361	314	300	--	318	375	352	--	379
Chromium	0.05	<0.01	<0.01	<0.01	<0.01	--	<0.01	0.0017 J	0.00450	0.0029 J	0.0023 J
Cobalt	0.05	0.205	0.197	0.228	0.235	--	0.187	0.216	0.228	0.185	0.224
Copper	1	0.121	0.0629	0.043	0.0335	--	0.0682	0.0895	0.1600	--	0.0803
Iron	1	6.33	3.66	8.93	7.4	--	7.83	7.75	18.50	19.6	31.4
Lead	0.05	0.0084	0.0051	0.0065	0.014	--	0.0239	<0.00290	0.004	<0.00219	<0.00219
Magnesium	NE	289	276	245	244	--	217	225	234	--	239
Manganese	0.2	6.42	7.77	8.3	7.9	--	6.79	6.59	7.31	6.2	7.1
Mercury	0.002	<0.0002	<0.0002	--	<0.0002	--	<0.0002	<0.000082	--	0.0867 J	<0.000082
Molybdenum	1	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.00273	<0.00273	0.0006 J	<0.00054
Nickel	0.2	0.318	0.316	0.336	0.391	--	0.328	0.339	0.348	0.297	0.357
Potassium	NE	23.7	28.0	24.6	19.1	--	13.1	12.3	12.00	--	15.3
Selenium	0.05	<0.005	<0.005	<0.005	0.00970	--	<0.005	<0.00417	<0.00417	<0.00287	<0.00287
Silver	0.05	<0.01	<0.01	<0.01	<0.01	--	<0.01	0.0016 J	0.0015	--	<0.00129
Sodium	NE	3590	3760	3930	4080	--	4080	4390	4270	--	4500
Zinc	10	0.732	0.65	0.604	0.608	--	0.751	1.02	0.881	--	1.1
Inorganics (mg/L)											
Alkalinity	NE	25	18	30	34	--	28	46.5	<5	5	<5
Chloride	250	775	606	1440	580	--	576	398	508	441	419
Nitrate+Nitrite	10	0.4	<0.10	<0.10	<0.10	--	<0.10	0.147	0.0981	0.017	1.39
Sulfate	600	10900	4630	4030	10300	--	8440	11200	11000	13000	12100
TDS	1000	16500	16200	17700	15800	--	15800	15300	148000	15900	16400

Notes:

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Bold text indicates detected concentration

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mg/L = milligrams per liter

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Appendix A
2016 Laboratory Analytical Report

ANALYTICAL REPORT

Job Number: 600-141139-1

Job Description: Kinder Morgan Bloomfield, NM San Juan

For:
CH2M Hill Constructors, Inc.
14701 St. Mary's Lane
Suite 300
Houston, TX 77079-2923
Attention: Mr. John Ynfante



Approved for release.
Cathy L. Upton
Project Manager I
12/30/2016 12:30 PM

Cathy L Upton, Project Manager I
6310 Rothway Street, Houston, TX, 77040
(713)690-4444
cathy.upton@testamericainc.com
12/30/2016

Table of Contents

Cover Title Page	1
Data Summaries	5
Case Narrative	5
Method Summary	7
Sample Summary	8
Detection Summary	9
Client Sample Results	12
Definitions	20
Surrogate Summary	21
QC Sample Results	22
QC Association	29
Chronicle	33
Default Detection Limits	36
Certification Summary	37
Manual Integration Summary	38
Organic Sample Data	54
GC/MS VOA	54
Method 8260B Low Level	54
Method 8260B Low Level QC Summary	55
Method 8260B Low Level Sample Data	67
Standards Data	75
Method 8260B Low Level ICAL Data	75
Method 8260B Low Level CCAL Data	87
Raw QC Data	93
Method 8260B Low Level Blank Data	93
Method 8260B Low Level LCS/LCSD Data	95

Table of Contents

Method 8260B Low Level Run Logs	99
Inorganic Sample Data	102
Metals Data	102
Met Cover Page	103
Met Sample Data	104
Met QC Data	110
Met ICV/CCV	110
Met CRQL	121
Met Blanks	122
Met ICSA/ICSAB	131
Met MS/MSD/PDS	135
Met Dup/Trip	136
Met LCS/LCSD	137
Met MDL	140
Met IECF	144
Met Linear Ranges	147
Met Preparation Log	148
Met Analysis Run Log	150
Met Prep Data	166
General Chemistry Data	170
Gen Chem Cover Page	171
Gen Chem Sample Data	172
Gen Chem QC Data	184
Gen Chem ICV/CCV	184
Gen Chem Blanks	185
Gen Chem MS/MSD/PDS	186

Table of Contents

Gen Chem LCS/LCSD	188
Gen Chem MDL	190
Gen Chem Analysis Run Log	196
Gen Chem Prep Data	202
Shipping and Receiving Documents	209
Client Chain of Custody	210
Sample Receipt Checklist	212

CASE NARRATIVE

Client: CH2M Hill Constructors, Inc.

Project: Kinder Morgan Bloomfield, NM San Juan

Report Number: 600-141139-1

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

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

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

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

RECEIPT

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

The samples were received on 12/14/2016; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.7 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples SANJUAN-MW09-12132016 (600-141139-1), SANJUAN-TB01-12132016 (600-141139-2), SANJUAN-MW08-12132016 (600-141139-3), SANJUAN-MD08-12132016 (600-141139-4), SANJUAN-W02-12132016 (600-141139-5), SANJUAN-MW04-12132016 (600-141139-6) and SANJUAN-MW06-12132016 (600-141139-7) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 12/18/2016 and 12/19/2016.

The following volatile sample was analyzed with significant headspace in the sample vial(s): SANJUAN-MW04-12132016 (600-141139-6). Significant headspace is defined as a bubble greater than 6 mm in diameter (was >6mm, but approximately <1cm).

Sample SANJUAN-MW09-12132016 (600-141139-1) [10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

ANIONS

Samples SANJUAN-MW09-12132016 (600-141139-1), SANJUAN-MW08-12132016 (600-141139-3), SANJUAN-MD08-12132016 (600-141139-4), SANJUAN-W02-12132016 (600-141139-5), SANJUAN-MW04-12132016 (600-141139-6) and SANJUAN-MW06-12132016 (600-141139-7) were analyzed for Anions in accordance with EPA Method 300.0. The samples were analyzed on 12/23/2016, 12/24/2016 and 12/28/2016.

Chloride was detected in method blank MB 600-203607/4 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

Samples SANJUAN-MW09-12132016 (600-141139-1)[200X], SANJUAN-MW09-12132016 (600-141139-1)[500X], SANJUAN-MW08-12132016 (600-141139-3)[250X], SANJUAN-MD08-12132016 (600-141139-4)[250X], SANJUAN-W02-12132016 (600-141139-5)[200X], SANJUAN-MW04-12132016 (600-141139-6)[200X], SANJUAN-MW06-12132016 (600-141139-7)[200X] and SANJUAN-MW06-12132016 (600-141139-7)[500X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

DISSOLVED METALS (ICP)

Samples SANJUAN-MW09-12132016 (600-141139-1), SANJUAN-MW08-12132016 (600-141139-3), SANJUAN-MD08-12132016 (600-141139-4), SANJUAN-W02-12132016 (600-141139-5), SANJUAN-MW04-12132016 (600-141139-6) and SANJUAN-MW06-12132016 (600-141139-7) were analyzed for Metals (ICP) in accordance with SW846 6010C. The samples were prepared on 12/28/2016 and analyzed on 12/28/2016 and 12/29/2016.

Sodium and Zinc were detected in method blank MB 600-203516/1-A associated with analytical batch 600-203574 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Molybdenum and Sodium were detected in method blank MB 600-203516/1-A associated with analytical batch 600-203675 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

The continuing calibration verification (CCV) associated with batch 600-203574 recovered above the upper control limit for Molybdenum. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

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

DISSOLVED MERCURY (CVAA)

Samples SANJUAN-MW09-12132016 (600-141139-1), SANJUAN-MW08-12132016 (600-141139-3), SANJUAN-MD08-12132016 (600-141139-4), SANJUAN-W02-12132016 (600-141139-5), SANJUAN-MW04-12132016 (600-141139-6) and SANJUAN-MW06-12132016 (600-141139-7) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 12/23/2016 and analyzed on 12/27/2016.

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

ALKALINITY

Samples SANJUAN-MW09-12132016 (600-141139-1), SANJUAN-MW08-12132016 (600-141139-3), SANJUAN-MD08-12132016 (600-141139-4), SANJUAN-W02-12132016 (600-141139-5), SANJUAN-MW04-12132016 (600-141139-6) and SANJUAN-MW06-12132016 (600-141139-7) were analyzed for alkalinity in accordance with SM20 2320B. The samples were analyzed on 12/20/2016 and 12/23/2016.

Alkalinity failed the recovery criteria low for the MS/MSD of sample SANJUAN-W02-12132016 (600-141139-5) in batch 600-203236. Sample matrix interference is suspected because the associated laboratory control sample (LCS) met acceptance criteria.

Refer to the QC report for details.

Alkalinity exceeded the RPD limit for the MSD of sample SANJUAN-W02-12132016 (600-141139-5) in batch 600-203236.

Refer to the QC report for details.

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

TOTAL DISSOLVED SOLIDS

Samples SANJUAN-MW09-12132016 (600-141139-1), SANJUAN-MW08-12132016 (600-141139-3), SANJUAN-MD08-12132016 (600-141139-4), SANJUAN-W02-12132016 (600-141139-5), SANJUAN-MW04-12132016 (600-141139-6) and SANJUAN-MW06-12132016 (600-141139-7) were analyzed for total dissolved solids in accordance with SM20 2540C. The samples were analyzed on 12/19/2016.

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

NITRATE-NITRITE AS NITROGEN

Samples SANJUAN-MW09-12132016 (600-141139-1), SANJUAN-MW08-12132016 (600-141139-3), SANJUAN-MD08-12132016 (600-141139-4), SANJUAN-W02-12132016 (600-141139-5), SANJUAN-MW04-12132016 (600-141139-6) and SANJUAN-MW06-12132016 (600-141139-7) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 12/16/2016.

Samples SANJUAN-W02-12132016 (600-141139-5) [10X] and SANJUAN-MW06-12132016 (600-141139-7) [40X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

Method Summary

Client: CH2M Hill Constructors, Inc.

TestAmerica Job ID: 600-141139-1

Project/Site: Kinder Morgan Bloomfield, NM San Juan

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU
6010C	Metals (ICP)	SW846	TAL HOU
7470A	Mercury in Liquid Waste (Manual Cold Vapor Technique)	SW846	TAL HOU
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL HOU
SM 2320B	Alkalinity	SM	TAL HOU
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL HOU

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

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

Laboratory References:

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

Sample Summary

Client: CH2M Hill Constructors, Inc.

TestAmerica Job ID: 600-141139-1

Project/Site: Kinder Morgan Bloomfield, NM San Juan

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-141139-1	SANJUAN-MW09-12132016	Water	12/13/16 11:50	12/14/16 10:18
600-141139-2	SANJUAN-TB01-12132016	Water	12/13/16 12:10	12/14/16 10:18
600-141139-3	SANJUAN-MW08-12132016	Water	12/13/16 12:25	12/14/16 10:18
600-141139-4	SANJUAN-MD08-12132016	Water	12/13/16 12:35	12/14/16 10:18
600-141139-5	SANJUAN-W02-12132016	Water	12/13/16 13:10	12/14/16 10:18
600-141139-6	SANJUAN-MW04-12132016	Water	12/13/16 13:45	12/14/16 10:18
600-141139-7	SANJUAN-MW06-12132016	Water	12/13/16 14:10	12/14/16 10:18

Detection Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: Kinder Morgan Bloomfield, NM San Juan

TestAmerica Job ID: 600-141139-1

Client Sample ID: SANJUAN-MW09-12132016

Lab Sample ID: 600-141139-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	0.0374		0.00100	0.000212	mg/L	1		8260B	Total/NA
Xylenes, Total	0.0103		0.00200	0.000366	mg/L	1		8260B	Total/NA
Benzene - DL	0.0971		0.0100	0.00176	mg/L	10		8260B	Total/NA
Chloride	419	B	80.0	10.7	mg/L	200		300.0	Total/NA
Sulfate	12100		250	47.9	mg/L	500		300.0	Total/NA
Aluminum, Dissolved	15.5		0.500	0.0926	mg/L	1		6010C	Dissolved
Barium, Dissolved	0.0134	J	0.0200	0.000530	mg/L	1		6010C	Dissolved
Cadmium, Dissolved	0.00840		0.00500	0.000280	mg/L	1		6010C	Dissolved
Calcium, Dissolved	379		1.00	0.0240	mg/L	1		6010C	Dissolved
Chromium, Dissolved	0.00230	J	0.0100	0.00159	mg/L	1		6010C	Dissolved
Cobalt, Dissolved	0.224		0.0100	0.000310	mg/L	1		6010C	Dissolved
Copper, Dissolved	0.0803		0.0100	0.000600	mg/L	1		6010C	Dissolved
Iron, Dissolved	31.4		0.400	0.0270	mg/L	1		6010C	Dissolved
Magnesium, Dissolved	239		1.00	0.0555	mg/L	1		6010C	Dissolved
Manganese, Dissolved	7.07		0.0100	0.000360	mg/L	1		6010C	Dissolved
Nickel, Dissolved	0.357		0.0100	0.000800	mg/L	1		6010C	Dissolved
Potassium, Dissolved	15.3		1.00	0.0374	mg/L	1		6010C	Dissolved
Zinc, Dissolved	1.10	B	0.0300	0.00143	mg/L	1		6010C	Dissolved
Sodium, Dissolved - DL2	4500	B	50.0	1.07	mg/L	50		6010C	Dissolved
Nitrate Nitrite as N	1.39		0.0500	0.0170	mg/L	1		353.2	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	16400		200	200	mg/L	1		SM 2540C	Total/NA

Client Sample ID: SANJUAN-TB01-12132016

Lab Sample ID: 600-141139-2

No Detections.

Client Sample ID: SANJUAN-MW08-12132016

Lab Sample ID: 600-141139-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.00184		0.00100	0.000176	mg/L	1		8260B	Total/NA
Chloride	283		100	13.4	mg/L	250		300.0	Total/NA
Sulfate	3840		125	23.9	mg/L	250		300.0	Total/NA
Aluminum, Dissolved	0.348	J	0.500	0.0926	mg/L	1		6010C	Dissolved
Barium, Dissolved	0.0555		0.0200	0.000530	mg/L	1		6010C	Dissolved
Cadmium, Dissolved	0.000500	J	0.00500	0.000280	mg/L	1		6010C	Dissolved
Calcium, Dissolved	73.5		1.00	0.0240	mg/L	1		6010C	Dissolved
Cobalt, Dissolved	0.00120	J	0.0100	0.000310	mg/L	1		6010C	Dissolved
Copper, Dissolved	0.00170	J	0.0100	0.000600	mg/L	1		6010C	Dissolved
Iron, Dissolved	2.35		0.400	0.0270	mg/L	1		6010C	Dissolved
Magnesium, Dissolved	79.4		1.00	0.0555	mg/L	1		6010C	Dissolved
Manganese, Dissolved	0.966		0.0100	0.000360	mg/L	1		6010C	Dissolved
Molybdenum, Dissolved	0.00850	J B	0.0100	0.000540	mg/L	1		6010C	Dissolved
Potassium, Dissolved	26.7		1.00	0.0374	mg/L	1		6010C	Dissolved
Sodium, Dissolved	2600	B	20.0	0.428	mg/L	20		6010C	Dissolved
Zinc, Dissolved	0.0589	B	0.0300	0.00143	mg/L	1		6010C	Dissolved
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	2090		5.00	5.00	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	2090		5.00	5.00	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	6600		100	100	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Houston

Detection Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: Kinder Morgan Bloomfield, NM San Juan

TestAmerica Job ID: 600-141139-1

Client Sample ID: SANJUAN-MD08-12132016

Lab Sample ID: 600-141139-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.00171		0.00100	0.000176	mg/L	1		8260B	Total/NA
Chloride	286		100	13.4	mg/L	250		300.0	Total/NA
Sulfate	3500		125	23.9	mg/L	250		300.0	Total/NA
Aluminum, Dissolved	1.81		0.500	0.0926	mg/L	1		6010C	Dissolved
Barium, Dissolved	0.0595		0.0200	0.000530	mg/L	1		6010C	Dissolved
Cadmium, Dissolved	0.000600	J	0.00500	0.000280	mg/L	1		6010C	Dissolved
Calcium, Dissolved	70.9		1.00	0.0240	mg/L	1		6010C	Dissolved
Cobalt, Dissolved	0.00190	J	0.0100	0.000310	mg/L	1		6010C	Dissolved
Copper, Dissolved	0.00330	J	0.0100	0.000600	mg/L	1		6010C	Dissolved
Iron, Dissolved	4.10		0.400	0.0270	mg/L	1		6010C	Dissolved
Magnesium, Dissolved	77.5		1.00	0.0555	mg/L	1		6010C	Dissolved
Manganese, Dissolved	1.03		0.0100	0.000360	mg/L	1		6010C	Dissolved
Molybdenum, Dissolved	0.00880	J B	0.0100	0.000540	mg/L	1		6010C	Dissolved
Potassium, Dissolved	26.1		1.00	0.0374	mg/L	1		6010C	Dissolved
Zinc, Dissolved	0.0425	B	0.0300	0.00143	mg/L	1		6010C	Dissolved
Sodium, Dissolved - DL	2560	B	20.0	0.428	mg/L	20		6010C	Dissolved
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	2340		5.00	5.00	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	2340		5.00	5.00	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	7190		100	100	mg/L	1		SM 2540C	Total/NA

Client Sample ID: SANJUAN-W02-12132016

Lab Sample ID: 600-141139-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	206	B	80.0	10.7	mg/L	200		300.0	Total/NA
Sulfate	3290		100	19.1	mg/L	200		300.0	Total/NA
Barium, Dissolved	0.00780	J	0.0200	0.000530	mg/L	1		6010C	Dissolved
Cadmium, Dissolved	0.000600	J	0.00500	0.000280	mg/L	1		6010C	Dissolved
Calcium, Dissolved	284		1.00	0.0240	mg/L	1		6010C	Dissolved
Copper, Dissolved	0.00920	J	0.0100	0.000600	mg/L	1		6010C	Dissolved
Magnesium, Dissolved	84.5		1.00	0.0555	mg/L	1		6010C	Dissolved
Molybdenum, Dissolved	0.00290	J B	0.0100	0.000540	mg/L	1		6010C	Dissolved
Potassium, Dissolved	3.17		1.00	0.0374	mg/L	1		6010C	Dissolved
Selenium, Dissolved	0.0778		0.0400	0.00287	mg/L	1		6010C	Dissolved
Zinc, Dissolved	0.0141	J B	0.0300	0.00143	mg/L	1		6010C	Dissolved
Sodium, Dissolved - DL	1170	B	20.0	0.428	mg/L	20		6010C	Dissolved
Nitrate Nitrite as N	9.59		0.500	0.170	mg/L	10		353.2	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	169	F1 F2	5.00	5.00	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	169		5.00	5.00	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	4860		40.0	40.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: SANJUAN-MW04-12132016

Lab Sample ID: 600-141139-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.000176	J	0.00100	0.000176	mg/L	1		8260B	Total/NA
Chloride	284	B	80.0	10.7	mg/L	200		300.0	Total/NA
Sulfate	2560		100	19.1	mg/L	200		300.0	Total/NA
Barium, Dissolved	0.00740	J	0.0200	0.000530	mg/L	1		6010C	Dissolved
Cadmium, Dissolved	0.000800	J	0.00500	0.000280	mg/L	1		6010C	Dissolved

This Detection Summary does not include radiochemical test results.

TestAmerica Houston

Detection Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: Kinder Morgan Bloomfield, NM San Juan

TestAmerica Job ID: 600-141139-1

Client Sample ID: SANJUAN-MW04-12132016 (Continued)

Lab Sample ID: 600-141139-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium, Dissolved	280		1.00	0.0240	mg/L	1		6010C	Dissolved
Cobalt, Dissolved	0.0334		0.0100	0.000310	mg/L	1		6010C	Dissolved
Copper, Dissolved	0.00300	J	0.0100	0.000600	mg/L	1		6010C	Dissolved
Iron, Dissolved	5.09		0.400	0.0270	mg/L	1		6010C	Dissolved
Magnesium, Dissolved	116		1.00	0.0555	mg/L	1		6010C	Dissolved
Manganese, Dissolved	6.31		0.0100	0.000360	mg/L	1		6010C	Dissolved
Nickel, Dissolved	0.192		0.0100	0.000800	mg/L	1		6010C	Dissolved
Potassium, Dissolved	6.25		1.00	0.0374	mg/L	1		6010C	Dissolved
Zinc, Dissolved	0.00440	J B	0.0300	0.00143	mg/L	1		6010C	Dissolved
Sodium, Dissolved - DL	1250	B	20.0	0.428	mg/L	20		6010C	Dissolved
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	798		5.00	5.00	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	798		5.00	5.00	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	4900		40.0	40.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: SANJUAN-MW06-12132016

Lab Sample ID: 600-141139-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	738	B	80.0	10.7	mg/L	200		300.0	Total/NA
Sulfate	9670		250	47.9	mg/L	500		300.0	Total/NA
Aluminum, Dissolved	15.1		0.500	0.0926	mg/L	1		6010C	Dissolved
Barium, Dissolved	0.00550	J	0.0200	0.000530	mg/L	1		6010C	Dissolved
Cadmium, Dissolved	0.0123		0.00500	0.000280	mg/L	1		6010C	Dissolved
Calcium, Dissolved	386		1.00	0.0240	mg/L	1		6010C	Dissolved
Cobalt, Dissolved	0.228		0.0100	0.000310	mg/L	1		6010C	Dissolved
Copper, Dissolved	0.0657		0.0100	0.000600	mg/L	1		6010C	Dissolved
Iron, Dissolved	0.0696	J	0.400	0.0270	mg/L	1		6010C	Dissolved
Magnesium, Dissolved	320		1.00	0.0555	mg/L	1		6010C	Dissolved
Manganese, Dissolved	6.70		0.0100	0.000360	mg/L	1		6010C	Dissolved
Nickel, Dissolved	0.277		0.0100	0.000800	mg/L	1		6010C	Dissolved
Potassium, Dissolved	21.6		1.00	0.0374	mg/L	1		6010C	Dissolved
Selenium, Dissolved	0.350		0.0400	0.00287	mg/L	1		6010C	Dissolved
Zinc, Dissolved	0.665	B	0.0300	0.00143	mg/L	1		6010C	Dissolved
Sodium, Dissolved - DL2	4070	B	50.0	1.07	mg/L	50		6010C	Dissolved
Nitrate Nitrite as N	45.2		2.00	0.680	mg/L	40		353.2	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	15300		100	100	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Houston

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Kinder Morgan Bloomfield, NM San Juan

TestAmerica Job ID: 600-141139-1

Client Sample ID: SANJUAN-MW09-12132016

Lab Sample ID: 600-141139-1

Date Collected: 12/13/16 11:50

Matrix: Water

Date Received: 12/14/16 10:18

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	0.0374		0.00100	0.000212	mg/L	—		12/18/16 19:24	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			12/18/16 19:24	1
Xylenes, Total	0.0103		0.00200	0.000366	mg/L			12/18/16 19:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	74		50 - 134					12/18/16 19:24	1
Dibromofluoromethane	76		62 - 130					12/18/16 19:24	1
Toluene-d8 (Surr)	90		70 - 130					12/18/16 19:24	1
4-Bromofluorobenzene	119		67 - 139					12/18/16 19:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0971		0.0100	0.00176	mg/L	—		12/19/16 22:53	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	67		50 - 134					12/19/16 22:53	10
Dibromofluoromethane	79		62 - 130					12/19/16 22:53	10
Toluene-d8 (Surr)	88		70 - 130					12/19/16 22:53	10
4-Bromofluorobenzene	105		67 - 139					12/19/16 22:53	10

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	419	B	80.0	10.7	mg/L	—		12/28/16 16:03	200
Sulfate	12100		250	47.9	mg/L			12/28/16 16:16	500

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	15.5		0.500	0.0926	mg/L	—	12/28/16 04:20	12/28/16 15:03	1
Arsenic, Dissolved	0.00285	U	0.0100	0.00285	mg/L		12/28/16 04:20	12/28/16 15:03	1
Barium, Dissolved	0.0134	J	0.0200	0.000530	mg/L		12/28/16 04:20	12/28/16 15:03	1
Cadmium, Dissolved	0.00840		0.00500	0.000280	mg/L		12/28/16 04:20	12/28/16 15:03	1
Calcium, Dissolved	379		1.00	0.0240	mg/L		12/28/16 04:20	12/28/16 15:03	1
Chromium, Dissolved	0.00230	J	0.0100	0.00159	mg/L		12/28/16 04:20	12/28/16 15:03	1
Cobalt, Dissolved	0.224		0.0100	0.000310	mg/L		12/28/16 04:20	12/28/16 15:03	1
Copper, Dissolved	0.0803		0.0100	0.000600	mg/L		12/28/16 04:20	12/28/16 15:03	1
Iron, Dissolved	31.4		0.400	0.0270	mg/L		12/28/16 04:20	12/28/16 15:03	1
Lead, Dissolved	0.00219	U	0.0100	0.00219	mg/L		12/28/16 04:20	12/28/16 15:03	1
Magnesium, Dissolved	239		1.00	0.0555	mg/L		12/28/16 04:20	12/28/16 15:03	1
Manganese, Dissolved	7.07		0.0100	0.000360	mg/L		12/28/16 04:20	12/28/16 15:03	1
Molybdenum, Dissolved	0.000540	U ^	0.0100	0.000540	mg/L		12/28/16 04:20	12/28/16 15:03	1
Nickel, Dissolved	0.357		0.0100	0.000800	mg/L		12/28/16 04:20	12/28/16 15:03	1
Potassium, Dissolved	15.3		1.00	0.0374	mg/L		12/28/16 04:20	12/28/16 15:03	1
Selenium, Dissolved	0.00287	U	0.0400	0.00287	mg/L		12/28/16 04:20	12/28/16 15:03	1
Silver, Dissolved	0.00129	U	0.0100	0.00129	mg/L		12/28/16 04:20	12/28/16 15:03	1
Zinc, Dissolved	1.10	B	0.0300	0.00143	mg/L		12/28/16 04:20	12/28/16 15:03	1

Method: 6010C - Metals (ICP) - Dissolved - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium, Dissolved	4500	B	50.0	1.07	mg/L	—	12/28/16 04:20	12/29/16 16:44	50

TestAmerica Houston

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Kinder Morgan Bloomfield, NM San Juan

TestAmerica Job ID: 600-141139-1

Client Sample ID: SANJUAN-MW09-12132016

Lab Sample ID: 600-141139-1

Date Collected: 12/13/16 11:50

Matrix: Water

Date Received: 12/14/16 10:18

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	0.0000820	U	0.000200	0.0000820	mg/L	—	12/23/16 09:04	12/27/16 18:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	1.39		0.0500	0.0170	mg/L	—		12/16/16 17:23	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	5.00	U	5.00	5.00	mg/L	—		12/20/16 17:50	1
Bicarbonate Alkalinity as CaCO3	5.00	U	5.00	5.00	mg/L	—		12/20/16 17:50	1
Carbonate Alkalinity as CaCO3	5.00	U	5.00	5.00	mg/L	—		12/20/16 17:50	1
Total Dissolved Solids	16400		200	200	mg/L	—		12/19/16 13:51	1

Client Sample ID: SANJUAN-TB01-12132016

Lab Sample ID: 600-141139-2

Date Collected: 12/13/16 12:10

Matrix: Water

Date Received: 12/14/16 10:18

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L	—		12/18/16 15:54	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L	—		12/18/16 15:54	1
Toluene	0.000198	U	0.00100	0.000198	mg/L	—		12/18/16 15:54	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L	—		12/18/16 15:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	74		50 - 134		12/18/16 15:54	1
Dibromofluoromethane	82		62 - 130		12/18/16 15:54	1
Toluene-d8 (Surr)	84		70 - 130		12/18/16 15:54	1
4-Bromofluorobenzene	131		67 - 139		12/18/16 15:54	1

Client Sample ID: SANJUAN-MW08-12132016

Lab Sample ID: 600-141139-3

Date Collected: 12/13/16 12:25

Matrix: Water

Date Received: 12/14/16 10:18

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00184		0.00100	0.000176	mg/L	—		12/18/16 19:59	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L	—		12/18/16 19:59	1
Toluene	0.000198	U	0.00100	0.000198	mg/L	—		12/18/16 19:59	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L	—		12/18/16 19:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	74		50 - 134		12/18/16 19:59	1
Dibromofluoromethane	78		62 - 130		12/18/16 19:59	1
Toluene-d8 (Surr)	90		70 - 130		12/18/16 19:59	1
4-Bromofluorobenzene	128		67 - 139		12/18/16 19:59	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	283		100	13.4	mg/L	—		12/23/16 23:23	250
Sulfate	3840		125	23.9	mg/L	—		12/23/16 23:23	250

TestAmerica Houston

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Kinder Morgan Bloomfield, NM San Juan

TestAmerica Job ID: 600-141139-1

Client Sample ID: SANJUAN-MW08-12132016

Lab Sample ID: 600-141139-3

Date Collected: 12/13/16 12:25

Matrix: Water

Date Received: 12/14/16 10:18

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	0.348	J	0.500	0.0926	mg/L		12/28/16 04:20	12/28/16 15:05	1
Arsenic, Dissolved	0.00285	U	0.0100	0.00285	mg/L		12/28/16 04:20	12/28/16 15:05	1
Barium, Dissolved	0.0555		0.0200	0.000530	mg/L		12/28/16 04:20	12/28/16 15:05	1
Cadmium, Dissolved	0.000500	J	0.00500	0.000280	mg/L		12/28/16 04:20	12/28/16 15:05	1
Calcium, Dissolved	73.5		1.00	0.0240	mg/L		12/28/16 04:20	12/28/16 15:05	1
Chromium, Dissolved	0.00159	U	0.0100	0.00159	mg/L		12/28/16 04:20	12/28/16 15:05	1
Cobalt, Dissolved	0.00120	J	0.0100	0.000310	mg/L		12/28/16 04:20	12/28/16 15:05	1
Copper, Dissolved	0.00170	J	0.0100	0.000600	mg/L		12/28/16 04:20	12/28/16 15:05	1
Iron, Dissolved	2.35		0.400	0.0270	mg/L		12/28/16 04:20	12/28/16 15:05	1
Lead, Dissolved	0.00219	U	0.0100	0.00219	mg/L		12/28/16 04:20	12/28/16 15:05	1
Magnesium, Dissolved	79.4		1.00	0.0555	mg/L		12/28/16 04:20	12/28/16 15:05	1
Manganese, Dissolved	0.966		0.0100	0.000360	mg/L		12/28/16 04:20	12/28/16 15:05	1
Molybdenum, Dissolved	0.00850	J B	0.0100	0.000540	mg/L		12/28/16 04:20	12/29/16 16:15	1
Nickel, Dissolved	0.000800	U	0.0100	0.000800	mg/L		12/28/16 04:20	12/28/16 15:05	1
Potassium, Dissolved	26.7		1.00	0.0374	mg/L		12/28/16 04:20	12/28/16 15:05	1
Selenium, Dissolved	0.00287	U	0.0400	0.00287	mg/L		12/28/16 04:20	12/28/16 15:05	1
Silver, Dissolved	0.00129	U	0.0100	0.00129	mg/L		12/28/16 04:20	12/28/16 15:05	1
Sodium, Dissolved	2600	B	20.0	0.428	mg/L		12/28/16 04:20	12/29/16 16:18	20
Zinc, Dissolved	0.0589	B	0.0300	0.00143	mg/L		12/28/16 04:20	12/28/16 15:05	1

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	0.0000820	U	0.000200	0.0000820	mg/L		12/23/16 09:04	12/27/16 18:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	0.0170	U	0.0500	0.0170	mg/L			12/16/16 17:25	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	2090		5.00	5.00	mg/L			12/23/16 13:32	1
Bicarbonate Alkalinity as CaCO3	2090		5.00	5.00	mg/L			12/23/16 13:32	1
Carbonate Alkalinity as CaCO3	5.00	U	5.00	5.00	mg/L			12/23/16 13:32	1
Total Dissolved Solids	6600		100	100	mg/L			12/19/16 13:51	1

Client Sample ID: SANJUAN-MD08-12132016

Lab Sample ID: 600-141139-4

Date Collected: 12/13/16 12:35

Matrix: Water

Date Received: 12/14/16 10:18

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00171		0.00100	0.000176	mg/L			12/18/16 20:34	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			12/18/16 20:34	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			12/18/16 20:34	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			12/18/16 20:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	74		50 - 134					12/18/16 20:34	1
Dibromofluoromethane	82		62 - 130					12/18/16 20:34	1
Toluene-d8 (Surr)	89		70 - 130					12/18/16 20:34	1
4-Bromofluorobenzene	113		67 - 139					12/18/16 20:34	1

TestAmerica Houston

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Kinder Morgan Bloomfield, NM San Juan

TestAmerica Job ID: 600-141139-1

Client Sample ID: SANJUAN-MD08-12132016

Lab Sample ID: 600-141139-4

Date Collected: 12/13/16 12:35

Matrix: Water

Date Received: 12/14/16 10:18

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	286		100	13.4	mg/L			12/24/16 01:03	250
Sulfate	3500		125	23.9	mg/L			12/24/16 01:03	250

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	1.81		0.500	0.0926	mg/L		12/28/16 04:20	12/28/16 15:08	1
Arsenic, Dissolved	0.00285	U	0.0100	0.00285	mg/L		12/28/16 04:20	12/28/16 15:08	1
Barium, Dissolved	0.0595		0.0200	0.000530	mg/L		12/28/16 04:20	12/28/16 15:08	1
Cadmium, Dissolved	0.000600	J	0.00500	0.000280	mg/L		12/28/16 04:20	12/28/16 15:08	1
Calcium, Dissolved	70.9		1.00	0.0240	mg/L		12/28/16 04:20	12/28/16 15:08	1
Chromium, Dissolved	0.00159	U	0.0100	0.00159	mg/L		12/28/16 04:20	12/28/16 15:08	1
Cobalt, Dissolved	0.00190	J	0.0100	0.000310	mg/L		12/28/16 04:20	12/28/16 15:08	1
Copper, Dissolved	0.00330	J	0.0100	0.000600	mg/L		12/28/16 04:20	12/28/16 15:08	1
Iron, Dissolved	4.10		0.400	0.0270	mg/L		12/28/16 04:20	12/28/16 15:08	1
Lead, Dissolved	0.00219	U	0.0100	0.00219	mg/L		12/28/16 04:20	12/28/16 15:08	1
Magnesium, Dissolved	77.5		1.00	0.0555	mg/L		12/28/16 04:20	12/28/16 15:08	1
Manganese, Dissolved	1.03		0.0100	0.000360	mg/L		12/28/16 04:20	12/28/16 15:08	1
Molybdenum, Dissolved	0.00880	J B	0.0100	0.000540	mg/L		12/28/16 04:20	12/29/16 16:27	1
Nickel, Dissolved	0.000800	U	0.0100	0.000800	mg/L		12/28/16 04:20	12/28/16 15:08	1
Potassium, Dissolved	26.1		1.00	0.0374	mg/L		12/28/16 04:20	12/28/16 15:08	1
Selenium, Dissolved	0.00287	U	0.0400	0.00287	mg/L		12/28/16 04:20	12/28/16 15:08	1
Silver, Dissolved	0.00129	U	0.0100	0.00129	mg/L		12/28/16 04:20	12/28/16 15:08	1
Zinc, Dissolved	0.0425	B	0.0300	0.00143	mg/L		12/28/16 04:20	12/28/16 15:08	1

Method: 6010C - Metals (ICP) - Dissolved - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium, Dissolved	2560	B	20.0	0.428	mg/L		12/28/16 04:20	12/29/16 16:30	20

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	0.0000820	U	0.000200	0.0000820	mg/L		12/23/16 09:04	12/27/16 18:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	0.0170	U	0.0500	0.0170	mg/L			12/16/16 17:26	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	2340		5.00	5.00	mg/L			12/23/16 13:43	1
Bicarbonate Alkalinity as CaCO3	2340		5.00	5.00	mg/L			12/23/16 13:43	1
Carbonate Alkalinity as CaCO3	5.00	U	5.00	5.00	mg/L			12/23/16 13:43	1
Total Dissolved Solids	7190		100	100	mg/L			12/19/16 13:51	1

Client Sample ID: SANJUAN-W02-12132016

Lab Sample ID: 600-141139-5

Date Collected: 12/13/16 13:10

Matrix: Water

Date Received: 12/14/16 10:18

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			12/18/16 21:09	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			12/18/16 21:09	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			12/18/16 21:09	1

TestAmerica Houston

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Kinder Morgan Bloomfield, NM San Juan

TestAmerica Job ID: 600-141139-1

Client Sample ID: SANJUAN-W02-12132016

Lab Sample ID: 600-141139-5

Date Collected: 12/13/16 13:10

Matrix: Water

Date Received: 12/14/16 10:18

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			12/18/16 21:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	78		50 - 134					12/18/16 21:09	1
Dibromofluoromethane	86		62 - 130					12/18/16 21:09	1
Toluene-d8 (Surr)	88		70 - 130					12/18/16 21:09	1
4-Bromofluorobenzene	133		67 - 139					12/18/16 21:09	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	206	B	80.0	10.7	mg/L			12/28/16 16:30	200
Sulfate	3290		100	19.1	mg/L			12/28/16 01:34	200

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	0.0926	U	0.500	0.0926	mg/L		12/28/16 04:20	12/28/16 15:10	1
Arsenic, Dissolved	0.00285	U	0.0100	0.00285	mg/L		12/28/16 04:20	12/28/16 15:10	1
Barium, Dissolved	0.00780	J	0.0200	0.000530	mg/L		12/28/16 04:20	12/28/16 15:10	1
Cadmium, Dissolved	0.000600	J	0.00500	0.000280	mg/L		12/28/16 04:20	12/28/16 15:10	1
Calcium, Dissolved	284		1.00	0.0240	mg/L		12/28/16 04:20	12/28/16 15:10	1
Chromium, Dissolved	0.00159	U	0.0100	0.00159	mg/L		12/28/16 04:20	12/28/16 15:10	1
Cobalt, Dissolved	0.000310	U	0.0100	0.000310	mg/L		12/28/16 04:20	12/28/16 15:10	1
Copper, Dissolved	0.00920	J	0.0100	0.000600	mg/L		12/28/16 04:20	12/28/16 15:10	1
Iron, Dissolved	0.0270	U	0.400	0.0270	mg/L		12/28/16 04:20	12/28/16 15:10	1
Lead, Dissolved	0.00219	U	0.0100	0.00219	mg/L		12/28/16 04:20	12/28/16 15:10	1
Magnesium, Dissolved	84.5		1.00	0.0555	mg/L		12/28/16 04:20	12/28/16 15:10	1
Manganese, Dissolved	0.000360	U	0.0100	0.000360	mg/L		12/28/16 04:20	12/28/16 15:10	1
Molybdenum, Dissolved	0.00290	J B	0.0100	0.000540	mg/L		12/28/16 04:20	12/29/16 16:32	1
Nickel, Dissolved	0.000800	U	0.0100	0.000800	mg/L		12/28/16 04:20	12/28/16 15:10	1
Potassium, Dissolved	3.17		1.00	0.0374	mg/L		12/28/16 04:20	12/28/16 15:10	1
Selenium, Dissolved	0.0778		0.0400	0.00287	mg/L		12/28/16 04:20	12/28/16 15:10	1
Silver, Dissolved	0.00129	U	0.0100	0.00129	mg/L		12/28/16 04:20	12/28/16 15:10	1
Zinc, Dissolved	0.0141	J B	0.0300	0.00143	mg/L		12/28/16 04:20	12/28/16 15:10	1

Method: 6010C - Metals (ICP) - Dissolved - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium, Dissolved	1170	B	20.0	0.428	mg/L		12/28/16 04:20	12/29/16 16:35	20

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	0.0000820	U	0.000200	0.0000820	mg/L		12/23/16 09:04	12/27/16 18:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	9.59		0.500	0.170	mg/L			12/16/16 17:38	10
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	169	F1 F2	5.00	5.00	mg/L			12/20/16 18:49	1
Bicarbonate Alkalinity as CaCO3	169		5.00	5.00	mg/L			12/20/16 18:49	1
Carbonate Alkalinity as CaCO3	5.00	U	5.00	5.00	mg/L			12/20/16 18:49	1
Total Dissolved Solids	4860		40.0	40.0	mg/L			12/19/16 13:51	1

TestAmerica Houston

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Kinder Morgan Bloomfield, NM San Juan

TestAmerica Job ID: 600-141139-1

Client Sample ID: SANJUAN-MW04-12132016

Lab Sample ID: 600-141139-6

Date Collected: 12/13/16 13:45

Matrix: Water

Date Received: 12/14/16 10:18

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	J	0.00100	0.000176	mg/L	—		12/18/16 21:44	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L	—		12/18/16 21:44	1
Toluene	0.000198	U	0.00100	0.000198	mg/L	—		12/18/16 21:44	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L	—		12/18/16 21:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	71		50 - 134					12/18/16 21:44	1
Dibromofluoromethane	82		62 - 130					12/18/16 21:44	1
Toluene-d8 (Surr)	91		70 - 130					12/18/16 21:44	1
4-Bromofluorobenzene	127		67 - 139					12/18/16 21:44	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	284	B	80.0	10.7	mg/L	—		12/28/16 16:44	200
Sulfate	2560		100	19.1	mg/L	—		12/28/16 01:54	200

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	0.0926	U	0.500	0.0926	mg/L	—	12/28/16 04:20	12/28/16 15:13	1
Arsenic, Dissolved	0.00285	U	0.0100	0.00285	mg/L	—	12/28/16 04:20	12/28/16 15:13	1
Barium, Dissolved	0.00740	J	0.0200	0.000530	mg/L	—	12/28/16 04:20	12/28/16 15:13	1
Cadmium, Dissolved	0.000800	J	0.00500	0.000280	mg/L	—	12/28/16 04:20	12/28/16 15:13	1
Calcium, Dissolved	280		1.00	0.0240	mg/L	—	12/28/16 04:20	12/28/16 15:13	1
Chromium, Dissolved	0.00159	U	0.0100	0.00159	mg/L	—	12/28/16 04:20	12/28/16 15:13	1
Cobalt, Dissolved	0.0334		0.0100	0.000310	mg/L	—	12/28/16 04:20	12/28/16 15:13	1
Copper, Dissolved	0.00300	J	0.0100	0.000600	mg/L	—	12/28/16 04:20	12/28/16 15:13	1
Iron, Dissolved	5.09		0.400	0.0270	mg/L	—	12/28/16 04:20	12/28/16 15:13	1
Lead, Dissolved	0.00219	U	0.0100	0.00219	mg/L	—	12/28/16 04:20	12/28/16 15:13	1
Magnesium, Dissolved	116		1.00	0.0555	mg/L	—	12/28/16 04:20	12/28/16 15:13	1
Manganese, Dissolved	6.31		0.0100	0.000360	mg/L	—	12/28/16 04:20	12/28/16 15:13	1
Molybdenum, Dissolved	0.000540	U ^	0.0100	0.000540	mg/L	—	12/28/16 04:20	12/28/16 15:13	1
Nickel, Dissolved	0.192		0.0100	0.000800	mg/L	—	12/28/16 04:20	12/28/16 15:13	1
Potassium, Dissolved	6.25		1.00	0.0374	mg/L	—	12/28/16 04:20	12/28/16 15:13	1
Selenium, Dissolved	0.00287	U	0.0400	0.00287	mg/L	—	12/28/16 04:20	12/28/16 15:13	1
Silver, Dissolved	0.00129	U	0.0100	0.00129	mg/L	—	12/28/16 04:20	12/28/16 15:13	1
Zinc, Dissolved	0.00440	J B	0.0300	0.00143	mg/L	—	12/28/16 04:20	12/28/16 15:13	1

Method: 6010C - Metals (ICP) - Dissolved - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium, Dissolved	1250	B	20.0	0.428	mg/L	—	12/28/16 04:20	12/29/16 16:37	20

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	0.0000820	U	0.000200	0.0000820	mg/L	—	12/23/16 09:10	12/27/16 18:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	0.0170	U	0.0500	0.0170	mg/L	—		12/16/16 17:27	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	798		5.00	5.00	mg/L	—		12/20/16 19:02	1
Bicarbonate Alkalinity as CaCO3	798		5.00	5.00	mg/L	—		12/20/16 19:02	1

TestAmerica Houston

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Kinder Morgan Bloomfield, NM San Juan

TestAmerica Job ID: 600-141139-1

Client Sample ID: SANJUAN-MW04-12132016

Lab Sample ID: 600-141139-6

Date Collected: 12/13/16 13:45

Matrix: Water

Date Received: 12/14/16 10:18

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbonate Alkalinity as CaCO3	5.00	U	5.00	5.00	mg/L			12/20/16 19:02	1
Total Dissolved Solids	4900		40.0	40.0	mg/L			12/19/16 13:51	1

Client Sample ID: SANJUAN-MW06-12132016

Lab Sample ID: 600-141139-7

Date Collected: 12/13/16 14:10

Matrix: Water

Date Received: 12/14/16 10:18

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			12/18/16 22:20	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			12/18/16 22:20	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			12/18/16 22:20	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			12/18/16 22:20	1

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	73		50 - 134					12/18/16 22:20	1
Dibromofluoromethane	87		62 - 130					12/18/16 22:20	1
Toluene-d8 (Surr)	94		70 - 130					12/18/16 22:20	1
4-Bromofluorobenzene	134		67 - 139					12/18/16 22:20	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	738	B	80.0	10.7	mg/L			12/28/16 16:58	200
Sulfate	9670		250	47.9	mg/L			12/28/16 17:12	500

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	15.1		0.500	0.0926	mg/L		12/28/16 04:20	12/28/16 15:15	1
Arsenic, Dissolved	0.00285	U	0.0100	0.00285	mg/L		12/28/16 04:20	12/28/16 15:15	1
Barium, Dissolved	0.00550	J	0.0200	0.000530	mg/L		12/28/16 04:20	12/28/16 15:15	1
Cadmium, Dissolved	0.0123		0.00500	0.000280	mg/L		12/28/16 04:20	12/28/16 15:15	1
Calcium, Dissolved	386		1.00	0.0240	mg/L		12/28/16 04:20	12/28/16 15:15	1
Chromium, Dissolved	0.00159	U	0.0100	0.00159	mg/L		12/28/16 04:20	12/28/16 15:15	1
Cobalt, Dissolved	0.228		0.0100	0.000310	mg/L		12/28/16 04:20	12/28/16 15:15	1
Copper, Dissolved	0.0657		0.0100	0.000600	mg/L		12/28/16 04:20	12/28/16 15:15	1
Iron, Dissolved	0.0696	J	0.400	0.0270	mg/L		12/28/16 04:20	12/28/16 15:15	1
Lead, Dissolved	0.00219	U	0.0100	0.00219	mg/L		12/28/16 04:20	12/28/16 15:15	1
Magnesium, Dissolved	320		1.00	0.0555	mg/L		12/28/16 04:20	12/28/16 15:15	1
Manganese, Dissolved	6.70		0.0100	0.000360	mg/L		12/28/16 04:20	12/28/16 15:15	1
Molybdenum, Dissolved	0.000540	U ^	0.0100	0.000540	mg/L		12/28/16 04:20	12/28/16 15:15	1
Nickel, Dissolved	0.277		0.0100	0.000800	mg/L		12/28/16 04:20	12/28/16 15:15	1
Potassium, Dissolved	21.6		1.00	0.0374	mg/L		12/28/16 04:20	12/28/16 15:15	1
Selenium, Dissolved	0.350		0.0400	0.00287	mg/L		12/28/16 04:20	12/28/16 15:15	1
Silver, Dissolved	0.00129	U	0.0100	0.00129	mg/L		12/28/16 04:20	12/28/16 15:15	1
Zinc, Dissolved	0.665	B	0.0300	0.00143	mg/L		12/28/16 04:20	12/28/16 15:15	1

Method: 6010C - Metals (ICP) - Dissolved - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium, Dissolved	4070	B	50.0	1.07	mg/L		12/28/16 04:20	12/29/16 17:11	50

TestAmerica Houston

Client Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Kinder Morgan Bloomfield, NM San Juan

TestAmerica Job ID: 600-141139-1

Client Sample ID: SANJUAN-MW06-12132016

Lab Sample ID: 600-141139-7

Date Collected: 12/13/16 14:10

Matrix: Water

Date Received: 12/14/16 10:18

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	0.0000820	U	0.000200	0.0000820	mg/L	—	12/23/16 09:10	12/27/16 18:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	45.2		2.00	0.680	mg/L	—		12/16/16 17:41	40

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	5.00	U	5.00	5.00	mg/L	—		12/20/16 19:07	1
Bicarbonate Alkalinity as CaCO3	5.00	U	5.00	5.00	mg/L	—		12/20/16 19:07	1
Carbonate Alkalinity as CaCO3	5.00	U	5.00	5.00	mg/L	—		12/20/16 19:07	1
Total Dissolved Solids	15300		100	100	mg/L	—		12/19/16 13:51	1

Definitions/Glossary

Client: CH2M Hill Constructors, Inc.
Project/Site: Kinder Morgan Bloomfield, NM San Juan

TestAmerica Job ID: 600-141139-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

HPLC/IC

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
B	Compound was found in the blank and sample.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Surrogate Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: Kinder Morgan Bloomfield, NM San Juan

TestAmerica Job ID: 600-141139-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (50-134)	DBFM (62-130)	TOL (70-130)	BFB (67-139)
600-141139-1	SANJUAN-MW09-12132016	74	76	90	119
600-141139-1 - DL	SANJUAN-MW09-12132016	67	79	88	105
600-141139-2	SANJUAN-TB01-12132016	74	82	84	131
600-141139-3	SANJUAN-MW08-12132016	74	78	90	128
600-141139-4	SANJUAN-MD08-12132016	74	82	89	113
600-141139-5	SANJUAN-W02-12132016	78	86	88	133
600-141139-6	SANJUAN-MW04-12132016	71	82	91	127
600-141139-7	SANJUAN-MW06-12132016	73	87	94	134
LCS 600-203037/4	Lab Control Sample	73	83	91	122
LCS 600-203087/4	Lab Control Sample	81	86	85	111
LCSD 600-203037/5	Lab Control Sample Dup	79	85	87	114
LCSD 600-203087/5	Lab Control Sample Dup	77	89	94	111
MB 600-203037/7	Method Blank	79	87	92	112
MB 600-203087/7	Method Blank	81	88	91	98

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Kinder Morgan Bloomfield, NM San Juan

TestAmerica Job ID: 600-141139-1

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

Lab Sample ID: MB 600-203037/7

Matrix: Water

Analysis Batch: 203037

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			12/18/16 14:44	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			12/18/16 14:44	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			12/18/16 14:44	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			12/18/16 14:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	79		50 - 134		12/18/16 14:44	1
Dibromofluoromethane	87		62 - 130		12/18/16 14:44	1
Toluene-d8 (Surr)	92		70 - 130		12/18/16 14:44	1
4-Bromofluorobenzene	112		67 - 139		12/18/16 14:44	1

Lab Sample ID: LCS 600-203037/4

Matrix: Water

Analysis Batch: 203037

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0100	0.009333		mg/L		93	70 - 130
Ethylbenzene	0.0100	0.009768		mg/L		98	70 - 130
Toluene	0.0100	0.01024		mg/L		102	70 - 130
Xylenes, Total	0.0200	0.01946		mg/L		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	73		50 - 134
Dibromofluoromethane	83		62 - 130
Toluene-d8 (Surr)	91		70 - 130
4-Bromofluorobenzene	122		67 - 139

Lab Sample ID: LCSD 600-203037/5

Matrix: Water

Analysis Batch: 203037

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0100	0.008923		mg/L		89	70 - 130	4	20
Ethylbenzene	0.0100	0.008414		mg/L		84	70 - 130	15	20
Toluene	0.0100	0.008902		mg/L		89	70 - 130	14	20
Xylenes, Total	0.0200	0.01675		mg/L		84	70 - 130	15	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	79		50 - 134
Dibromofluoromethane	85		62 - 130
Toluene-d8 (Surr)	87		70 - 130
4-Bromofluorobenzene	114		67 - 139

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Kinder Morgan Bloomfield, NM San Juan

TestAmerica Job ID: 600-141139-1

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

Lab Sample ID: MB 600-203087/7

Matrix: Water

Analysis Batch: 203087

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000176	U	0.00100	0.000176	mg/L			12/19/16 14:44	1
Ethylbenzene	0.000212	U	0.00100	0.000212	mg/L			12/19/16 14:44	1
Toluene	0.000198	U	0.00100	0.000198	mg/L			12/19/16 14:44	1
Xylenes, Total	0.000366	U	0.00200	0.000366	mg/L			12/19/16 14:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		50 - 134		12/19/16 14:44	1
Dibromofluoromethane	88		62 - 130		12/19/16 14:44	1
Toluene-d8 (Surr)	91		70 - 130		12/19/16 14:44	1
4-Bromofluorobenzene	98		67 - 139		12/19/16 14:44	1

Lab Sample ID: LCS 600-203087/4

Matrix: Water

Analysis Batch: 203087

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0100	0.009934		mg/L		99	70 - 130
Ethylbenzene	0.0100	0.009108		mg/L		91	70 - 130
Toluene	0.0100	0.009548		mg/L		95	70 - 130
Xylenes, Total	0.0200	0.01859		mg/L		93	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	81		50 - 134
Dibromofluoromethane	86		62 - 130
Toluene-d8 (Surr)	85		70 - 130
4-Bromofluorobenzene	111		67 - 139

Lab Sample ID: LCSD 600-203087/5

Matrix: Water

Analysis Batch: 203087

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0100	0.008855		mg/L		89	70 - 130	11	20
Ethylbenzene	0.0100	0.009008		mg/L		90	70 - 130	1	20
Toluene	0.0100	0.009217		mg/L		92	70 - 130	4	20
Xylenes, Total	0.0200	0.01708		mg/L		85	70 - 130	8	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	77		50 - 134
Dibromofluoromethane	89		62 - 130
Toluene-d8 (Surr)	94		70 - 130
4-Bromofluorobenzene	111		67 - 139

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Kinder Morgan Bloomfield, NM San Juan

TestAmerica Job ID: 600-141139-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-203350/4

Matrix: Water

Analysis Batch: 203350

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.0534	U	0.400	0.0534	mg/L			12/22/16 23:54	1
Sulfate	0.0957	U	0.500	0.0957	mg/L			12/22/16 23:54	1

Lab Sample ID: LCS 600-203350/5

Matrix: Water

Analysis Batch: 203350

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	20.0	19.86		mg/L		99	90 - 110
Sulfate	20.0	20.18		mg/L		101	90 - 110

Lab Sample ID: MB 600-203580/4

Matrix: Water

Analysis Batch: 203580

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	0.0957	U	0.500	0.0957	mg/L			12/27/16 11:49	1

Lab Sample ID: LCS 600-203580/5

Matrix: Water

Analysis Batch: 203580

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	20.0	20.45		mg/L		102	90 - 110

Lab Sample ID: MB 600-203607/4

Matrix: Water

Analysis Batch: 203607

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.1909	J	0.400	0.0534	mg/L			12/28/16 11:58	1
Sulfate	0.0957	U	0.500	0.0957	mg/L			12/28/16 11:58	1

Lab Sample ID: LCS 600-203607/5

Matrix: Water

Analysis Batch: 203607

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	20.0	21.23		mg/L		106	90 - 110
Sulfate	20.0	18.96		mg/L		95	90 - 110

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 600-203516/1-A

Matrix: Water

Analysis Batch: 203574

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 203516

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	0.0926	U	0.500	0.0926	mg/L		12/28/16 04:20	12/28/16 14:09	1

TestAmerica Houston

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Kinder Morgan Bloomfield, NM San Juan

TestAmerica Job ID: 600-141139-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 600-203516/1-A

Matrix: Water

Analysis Batch: 203574

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 203516

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	0.00285	U	0.0100	0.00285	mg/L		12/28/16 04:20	12/28/16 14:09	1
Barium, Dissolved	0.000530	U	0.0200	0.000530	mg/L		12/28/16 04:20	12/28/16 14:09	1
Cadmium, Dissolved	0.000280	U	0.00500	0.000280	mg/L		12/28/16 04:20	12/28/16 14:09	1
Calcium, Dissolved	0.0240	U	1.00	0.0240	mg/L		12/28/16 04:20	12/28/16 14:09	1
Chromium, Dissolved	0.00159	U	0.0100	0.00159	mg/L		12/28/16 04:20	12/28/16 14:09	1
Cobalt, Dissolved	0.000310	U	0.0100	0.000310	mg/L		12/28/16 04:20	12/28/16 14:09	1
Copper, Dissolved	0.000600	U	0.0100	0.000600	mg/L		12/28/16 04:20	12/28/16 14:09	1
Iron, Dissolved	0.0270	U	0.400	0.0270	mg/L		12/28/16 04:20	12/28/16 14:09	1
Lead, Dissolved	0.00219	U	0.0100	0.00219	mg/L		12/28/16 04:20	12/28/16 14:09	1
Magnesium, Dissolved	0.0555	U	1.00	0.0555	mg/L		12/28/16 04:20	12/28/16 14:09	1
Manganese, Dissolved	0.000360	U	0.0100	0.000360	mg/L		12/28/16 04:20	12/28/16 14:09	1
Molybdenum, Dissolved	0.000540	U ^	0.0100	0.000540	mg/L		12/28/16 04:20	12/28/16 14:09	1
Nickel, Dissolved	0.000800	U	0.0100	0.000800	mg/L		12/28/16 04:20	12/28/16 14:09	1
Potassium, Dissolved	0.0374	U	1.00	0.0374	mg/L		12/28/16 04:20	12/28/16 14:09	1
Selenium, Dissolved	0.00287	U	0.0400	0.00287	mg/L		12/28/16 04:20	12/28/16 14:09	1
Silver, Dissolved	0.00129	U	0.0100	0.00129	mg/L		12/28/16 04:20	12/28/16 14:09	1
Sodium, Dissolved	0.1824	J	1.00	0.0214	mg/L		12/28/16 04:20	12/28/16 14:09	1
Zinc, Dissolved	0.002500	J	0.0300	0.00143	mg/L		12/28/16 04:20	12/28/16 14:09	1

Lab Sample ID: MB 600-203516/1-A

Matrix: Water

Analysis Batch: 203675

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 203516

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum, Dissolved	0.001300	J	0.0100	0.000540	mg/L		12/28/16 04:20	12/29/16 16:01	1
Sodium, Dissolved	0.1268	J	1.00	0.0214	mg/L		12/28/16 04:20	12/29/16 16:01	1

Lab Sample ID: LCS 600-203516/2-A

Matrix: Water

Analysis Batch: 203574

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 203516

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum, Dissolved	10.0	10.49		mg/L		105	80 - 120
Arsenic, Dissolved	1.00	1.085		mg/L		109	80 - 120
Barium, Dissolved	1.00	1.008		mg/L		101	80 - 120
Cadmium, Dissolved	0.500	0.5320		mg/L		106	80 - 120
Calcium, Dissolved	10.0	9.964		mg/L		100	80 - 120
Chromium, Dissolved	1.00	1.033		mg/L		103	80 - 120
Cobalt, Dissolved	1.00	1.018		mg/L		102	80 - 120
Copper, Dissolved	1.00	1.136		mg/L		114	80 - 120
Iron, Dissolved	10.0	10.26		mg/L		103	80 - 120
Lead, Dissolved	1.00	1.022		mg/L		102	80 - 120
Magnesium, Dissolved	10.0	9.653		mg/L		97	80 - 120
Manganese, Dissolved	1.00	1.063		mg/L		106	80 - 120
Molybdenum, Dissolved	1.00	1.086	^	mg/L		109	80 - 120
Nickel, Dissolved	1.00	1.020		mg/L		102	80 - 120
Potassium, Dissolved	10.0	10.45		mg/L		105	80 - 120
Selenium, Dissolved	1.00	1.104		mg/L		110	80 - 120
Silver, Dissolved	0.500	0.5531		mg/L		111	80 - 120

TestAmerica Houston

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Kinder Morgan Bloomfield, NM San Juan

TestAmerica Job ID: 600-141139-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 600-203516/2-A
Matrix: Water
Analysis Batch: 203574

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 203516
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Sodium, Dissolved	10.0	10.71		mg/L		107	80 - 120
Zinc, Dissolved	1.00	0.9566		mg/L		96	80 - 120

Lab Sample ID: LCS 600-203516/2-A
Matrix: Water
Analysis Batch: 203675

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 203516
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Molybdenum, Dissolved	1.00	1.065		mg/L		107	80 - 120
Sodium, Dissolved	10.0	10.56		mg/L		106	80 - 120

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 600-203401/7-A
Matrix: Water
Analysis Batch: 203577

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 203401

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	0.0000820	U	0.000200	0.0000820	mg/L		12/23/16 09:04	12/27/16 17:35	1

Lab Sample ID: LCS 600-203401/8-A
Matrix: Water
Analysis Batch: 203577

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 203401
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury, Dissolved	0.00300	0.002639		mg/L		88	70 - 130

Lab Sample ID: 600-141139-7 MS
Matrix: Water
Analysis Batch: 203577

Client Sample ID: SANJUAN-MW06-12132016
Prep Type: Dissolved
Prep Batch: 203401
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury, Dissolved	0.0000820	U	0.00300	0.002530		mg/L		84	75 - 125

Lab Sample ID: 600-141139-7 DU
Matrix: Water
Analysis Batch: 203577

Client Sample ID: SANJUAN-MW06-12132016
Prep Type: Dissolved
Prep Batch: 203401
RPD

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Mercury, Dissolved	0.0000820	U	0.0000820	U	mg/L		NC	20

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 600-203009/10
Matrix: Water
Analysis Batch: 203009

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	0.0170	U	0.0500	0.0170	mg/L			12/16/16 16:59	1

TestAmerica Houston

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Kinder Morgan Bloomfield, NM San Juan

TestAmerica Job ID: 600-141139-1

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: LCS 600-203009/11
Matrix: Water
Analysis Batch: 203009

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	1.00	1.071		mg/L		107	90 - 110

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 600-203236/2
Matrix: Water
Analysis Batch: 203236

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	5.00	U	5.00	5.00	mg/L			12/20/16 16:38	1
Bicarbonate Alkalinity as CaCO3	5.00	U	5.00	5.00	mg/L			12/20/16 16:38	1
Carbonate Alkalinity as CaCO3	5.00	U	5.00	5.00	mg/L			12/20/16 16:38	1

Lab Sample ID: LCS 600-203236/3
Matrix: Water
Analysis Batch: 203236

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	100	97.32		mg/L		97	90 - 110

Lab Sample ID: 600-141139-5 MS
Matrix: Water
Analysis Batch: 203236

Client Sample ID: SANJUAN-W02-12132016
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	169	F1 F2	250	310.6	F1	mg/L		57	75 - 125

Lab Sample ID: 600-141139-5 MSD
Matrix: Water
Analysis Batch: 203236

Client Sample ID: SANJUAN-W02-12132016
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Alkalinity	169	F1 F2	250	201.2	F1 F2	mg/L		13	75 - 125	43	20

Lab Sample ID: MB 600-203444/2
Matrix: Water
Analysis Batch: 203444

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	5.00	U	5.00	5.00	mg/L			12/23/16 12:54	1
Bicarbonate Alkalinity as CaCO3	5.00	U	5.00	5.00	mg/L			12/23/16 12:54	1
Carbonate Alkalinity as CaCO3	5.00	U	5.00	5.00	mg/L			12/23/16 12:54	1

Lab Sample ID: LCS 600-203444/3
Matrix: Water
Analysis Batch: 203444

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	100	105.4		mg/L		105	90 - 110

TestAmerica Houston

QC Sample Results

Client: CH2M Hill Constructors, Inc.
Project/Site: Kinder Morgan Bloomfield, NM San Juan

TestAmerica Job ID: 600-141139-1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCSD 600-203444/4

Matrix: Water

Analysis Batch: 203444

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Alkalinity	100	101.9		mg/L		102	90 - 110	3	

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 600-203172/25

Matrix: Water

Analysis Batch: 203172

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10.0	U	10.0	10.0 mg/L			12/19/16 13:51	1

Lab Sample ID: LCS 600-203172/26

Matrix: Water

Analysis Batch: 203172

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1800	1761		mg/L		98	90 - 110

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: Kinder Morgan Bloomfield, NM San Juan

TestAmerica Job ID: 600-141139-1

GC/MS VOA

Analysis Batch: 203037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-141139-1	SANJUAN-MW09-12132016	Total/NA	Water	8260B	
600-141139-2	SANJUAN-TB01-12132016	Total/NA	Water	8260B	
600-141139-3	SANJUAN-MW08-12132016	Total/NA	Water	8260B	
600-141139-4	SANJUAN-MD08-12132016	Total/NA	Water	8260B	
600-141139-5	SANJUAN-W02-12132016	Total/NA	Water	8260B	
600-141139-6	SANJUAN-MW04-12132016	Total/NA	Water	8260B	
600-141139-7	SANJUAN-MW06-12132016	Total/NA	Water	8260B	
MB 600-203037/7	Method Blank	Total/NA	Water	8260B	
LCS 600-203037/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-203037/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 203087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-141139-1 - DL	SANJUAN-MW09-12132016	Total/NA	Water	8260B	
MB 600-203087/7	Method Blank	Total/NA	Water	8260B	
LCS 600-203087/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 600-203087/5	Lab Control Sample Dup	Total/NA	Water	8260B	

HPLC/IC

Analysis Batch: 203350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-141139-3	SANJUAN-MW08-12132016	Total/NA	Water	300.0	
600-141139-4	SANJUAN-MD08-12132016	Total/NA	Water	300.0	
MB 600-203350/4	Method Blank	Total/NA	Water	300.0	
LCS 600-203350/5	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 203580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-141139-5	SANJUAN-W02-12132016	Total/NA	Water	300.0	
600-141139-6	SANJUAN-MW04-12132016	Total/NA	Water	300.0	
MB 600-203580/4	Method Blank	Total/NA	Water	300.0	
LCS 600-203580/5	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 203607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-141139-1	SANJUAN-MW09-12132016	Total/NA	Water	300.0	
600-141139-1	SANJUAN-MW09-12132016	Total/NA	Water	300.0	
600-141139-5	SANJUAN-W02-12132016	Total/NA	Water	300.0	
600-141139-6	SANJUAN-MW04-12132016	Total/NA	Water	300.0	
600-141139-7	SANJUAN-MW06-12132016	Total/NA	Water	300.0	
600-141139-7	SANJUAN-MW06-12132016	Total/NA	Water	300.0	
MB 600-203607/4	Method Blank	Total/NA	Water	300.0	
LCS 600-203607/5	Lab Control Sample	Total/NA	Water	300.0	

Metals

Prep Batch: 203401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-141139-1	SANJUAN-MW09-12132016	Dissolved	Water	7470A	

TestAmerica Houston

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: Kinder Morgan Bloomfield, NM San Juan

TestAmerica Job ID: 600-141139-1

Metals (Continued)

Prep Batch: 203401 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-141139-3	SANJUAN-MW08-12132016	Dissolved	Water	7470A	
600-141139-4	SANJUAN-MD08-12132016	Dissolved	Water	7470A	
600-141139-5	SANJUAN-W02-12132016	Dissolved	Water	7470A	
600-141139-6	SANJUAN-MW04-12132016	Dissolved	Water	7470A	
600-141139-7	SANJUAN-MW06-12132016	Dissolved	Water	7470A	
MB 600-203401/7-A	Method Blank	Total/NA	Water	7470A	
LCS 600-203401/8-A	Lab Control Sample	Total/NA	Water	7470A	
600-141139-7 MS	SANJUAN-MW06-12132016	Dissolved	Water	7470A	
600-141139-7 DU	SANJUAN-MW06-12132016	Dissolved	Water	7470A	

Prep Batch: 203516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-141139-1 - DL2	SANJUAN-MW09-12132016	Dissolved	Water	3010A	
600-141139-1	SANJUAN-MW09-12132016	Dissolved	Water	3010A	
600-141139-3	SANJUAN-MW08-12132016	Dissolved	Water	3010A	
600-141139-4 - DL	SANJUAN-MD08-12132016	Dissolved	Water	3010A	
600-141139-4	SANJUAN-MD08-12132016	Dissolved	Water	3010A	
600-141139-5	SANJUAN-W02-12132016	Dissolved	Water	3010A	
600-141139-5 - DL	SANJUAN-W02-12132016	Dissolved	Water	3010A	
600-141139-6	SANJUAN-MW04-12132016	Dissolved	Water	3010A	
600-141139-6 - DL	SANJUAN-MW04-12132016	Dissolved	Water	3010A	
600-141139-7	SANJUAN-MW06-12132016	Dissolved	Water	3010A	
600-141139-7 - DL2	SANJUAN-MW06-12132016	Dissolved	Water	3010A	
MB 600-203516/1-A	Method Blank	Total/NA	Water	3010A	
LCS 600-203516/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 203574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-141139-1	SANJUAN-MW09-12132016	Dissolved	Water	6010C	203516
600-141139-3	SANJUAN-MW08-12132016	Dissolved	Water	6010C	203516
600-141139-4	SANJUAN-MD08-12132016	Dissolved	Water	6010C	203516
600-141139-5	SANJUAN-W02-12132016	Dissolved	Water	6010C	203516
600-141139-6	SANJUAN-MW04-12132016	Dissolved	Water	6010C	203516
600-141139-7	SANJUAN-MW06-12132016	Dissolved	Water	6010C	203516
MB 600-203516/1-A	Method Blank	Total/NA	Water	6010C	203516
LCS 600-203516/2-A	Lab Control Sample	Total/NA	Water	6010C	203516

Analysis Batch: 203577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-141139-1	SANJUAN-MW09-12132016	Dissolved	Water	7470A	203401
600-141139-3	SANJUAN-MW08-12132016	Dissolved	Water	7470A	203401
600-141139-4	SANJUAN-MD08-12132016	Dissolved	Water	7470A	203401
600-141139-5	SANJUAN-W02-12132016	Dissolved	Water	7470A	203401
600-141139-6	SANJUAN-MW04-12132016	Dissolved	Water	7470A	203401
600-141139-7	SANJUAN-MW06-12132016	Dissolved	Water	7470A	203401
MB 600-203401/7-A	Method Blank	Total/NA	Water	7470A	203401
LCS 600-203401/8-A	Lab Control Sample	Total/NA	Water	7470A	203401
600-141139-7 MS	SANJUAN-MW06-12132016	Dissolved	Water	7470A	203401
600-141139-7 DU	SANJUAN-MW06-12132016	Dissolved	Water	7470A	203401

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: Kinder Morgan Bloomfield, NM San Juan

TestAmerica Job ID: 600-141139-1

Metals (Continued)

Analysis Batch: 203675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-141139-1 - DL2	SANJUAN-MW09-12132016	Dissolved	Water	6010C	203516
600-141139-3	SANJUAN-MW08-12132016	Dissolved	Water	6010C	203516
600-141139-3	SANJUAN-MW08-12132016	Dissolved	Water	6010C	203516
600-141139-4	SANJUAN-MD08-12132016	Dissolved	Water	6010C	203516
600-141139-4 - DL	SANJUAN-MD08-12132016	Dissolved	Water	6010C	203516
600-141139-5	SANJUAN-W02-12132016	Dissolved	Water	6010C	203516
600-141139-5 - DL	SANJUAN-W02-12132016	Dissolved	Water	6010C	203516
600-141139-6 - DL	SANJUAN-MW04-12132016	Dissolved	Water	6010C	203516
600-141139-7 - DL2	SANJUAN-MW06-12132016	Dissolved	Water	6010C	203516
MB 600-203516/1-A	Method Blank	Total/NA	Water	6010C	203516
LCS 600-203516/2-A	Lab Control Sample	Total/NA	Water	6010C	203516

General Chemistry

Analysis Batch: 203009

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-141139-1	SANJUAN-MW09-12132016	Total/NA	Water	353.2	
600-141139-3	SANJUAN-MW08-12132016	Total/NA	Water	353.2	
600-141139-4	SANJUAN-MD08-12132016	Total/NA	Water	353.2	
600-141139-5	SANJUAN-W02-12132016	Total/NA	Water	353.2	
600-141139-6	SANJUAN-MW04-12132016	Total/NA	Water	353.2	
600-141139-7	SANJUAN-MW06-12132016	Total/NA	Water	353.2	
MB 600-203009/10	Method Blank	Total/NA	Water	353.2	
LCS 600-203009/11	Lab Control Sample	Total/NA	Water	353.2	

Analysis Batch: 203172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-141139-1	SANJUAN-MW09-12132016	Total/NA	Water	SM 2540C	
600-141139-3	SANJUAN-MW08-12132016	Total/NA	Water	SM 2540C	
600-141139-4	SANJUAN-MD08-12132016	Total/NA	Water	SM 2540C	
600-141139-5	SANJUAN-W02-12132016	Total/NA	Water	SM 2540C	
600-141139-6	SANJUAN-MW04-12132016	Total/NA	Water	SM 2540C	
600-141139-7	SANJUAN-MW06-12132016	Total/NA	Water	SM 2540C	
MB 600-203172/25	Method Blank	Total/NA	Water	SM 2540C	
LCS 600-203172/26	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 203236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-141139-1	SANJUAN-MW09-12132016	Total/NA	Water	SM 2320B	
600-141139-5	SANJUAN-W02-12132016	Total/NA	Water	SM 2320B	
600-141139-6	SANJUAN-MW04-12132016	Total/NA	Water	SM 2320B	
600-141139-7	SANJUAN-MW06-12132016	Total/NA	Water	SM 2320B	
MB 600-203236/2	Method Blank	Total/NA	Water	SM 2320B	
LCS 600-203236/3	Lab Control Sample	Total/NA	Water	SM 2320B	
600-141139-5 MS	SANJUAN-W02-12132016	Total/NA	Water	SM 2320B	
600-141139-5 MSD	SANJUAN-W02-12132016	Total/NA	Water	SM 2320B	

Analysis Batch: 203444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-141139-3	SANJUAN-MW08-12132016	Total/NA	Water	SM 2320B	

TestAmerica Houston

QC Association Summary

Client: CH2M Hill Constructors, Inc.
Project/Site: Kinder Morgan Bloomfield, NM San Juan

TestAmerica Job ID: 600-141139-1

General Chemistry (Continued)

Analysis Batch: 203444 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-141139-4	SANJUAN-MD08-12132016	Total/NA	Water	SM 2320B	
MB 600-203444/2	Method Blank	Total/NA	Water	SM 2320B	
LCS 600-203444/3	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 600-203444/4	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: Kinder Morgan Bloomfield, NM San Juan

TestAmerica Job ID: 600-141139-1

Client Sample ID: SANJUAN-MW09-12132016

Lab Sample ID: 600-141139-1

Date Collected: 12/13/16 11:50

Matrix: Water

Date Received: 12/14/16 10:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	203037	12/18/16 19:24	KLV	TAL HOU
Total/NA	Analysis	8260B	DL	10	203087	12/19/16 22:53	KLV	TAL HOU
Total/NA	Analysis	300.0		200	203607	12/28/16 16:03	BDG	TAL HOU
Total/NA	Analysis	300.0		500	203607	12/28/16 16:16	BDG	TAL HOU
Dissolved	Prep	3010A			203516	12/28/16 04:20	DCL	TAL HOU
Dissolved	Analysis	6010C		1	203574	12/28/16 15:03	DCL	TAL HOU
Dissolved	Prep	3010A	DL2		203516	12/28/16 04:20	DCL	TAL HOU
Dissolved	Analysis	6010C	DL2	50	203675	12/29/16 16:44	DCL	TAL HOU
Dissolved	Prep	7470A			203401	12/23/16 09:04	DDE	TAL HOU
Dissolved	Analysis	7470A		1	203577	12/27/16 18:26	DDE	TAL HOU
Total/NA	Analysis	353.2		1	203009	12/16/16 17:23	EAS	TAL HOU
Total/NA	Analysis	SM 2320B		1	203236	12/20/16 17:50	KRD	TAL HOU
Total/NA	Analysis	SM 2540C		1	203172	12/19/16 13:51	EC1	TAL HOU

Client Sample ID: SANJUAN-TB01-12132016

Lab Sample ID: 600-141139-2

Date Collected: 12/13/16 12:10

Matrix: Water

Date Received: 12/14/16 10:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	203037	12/18/16 15:54	KLV	TAL HOU

Client Sample ID: SANJUAN-MW08-12132016

Lab Sample ID: 600-141139-3

Date Collected: 12/13/16 12:25

Matrix: Water

Date Received: 12/14/16 10:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	203037	12/18/16 19:59	KLV	TAL HOU
Total/NA	Analysis	300.0		250	203350	12/23/16 23:23	DAW	TAL HOU
Dissolved	Prep	3010A			203516	12/28/16 04:20	DCL	TAL HOU
Dissolved	Analysis	6010C		1	203574	12/28/16 15:05	DCL	TAL HOU
Dissolved	Prep	3010A			203516	12/28/16 04:20	DCL	TAL HOU
Dissolved	Analysis	6010C		1	203675	12/29/16 16:15	DCL	TAL HOU
Dissolved	Prep	3010A			203516	12/28/16 04:20	DCL	TAL HOU
Dissolved	Analysis	6010C		20	203675	12/29/16 16:18	DCL	TAL HOU
Dissolved	Prep	7470A			203401	12/23/16 09:04	DDE	TAL HOU
Dissolved	Analysis	7470A		1	203577	12/27/16 18:28	DDE	TAL HOU
Total/NA	Analysis	353.2		1	203009	12/16/16 17:25	EAS	TAL HOU
Total/NA	Analysis	SM 2320B		1	203444	12/23/16 13:32	KRD	TAL HOU
Total/NA	Analysis	SM 2540C		1	203172	12/19/16 13:51	EC1	TAL HOU

TestAmerica Houston

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: Kinder Morgan Bloomfield, NM San Juan

TestAmerica Job ID: 600-141139-1

Client Sample ID: SANJUAN-MD08-12132016

Lab Sample ID: 600-141139-4

Date Collected: 12/13/16 12:35

Matrix: Water

Date Received: 12/14/16 10:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	203037	12/18/16 20:34	KLV	TAL HOU
Total/NA	Analysis	300.0		250	203350	12/24/16 01:03	DAW	TAL HOU
Dissolved	Prep	3010A			203516	12/28/16 04:20	DCL	TAL HOU
Dissolved	Analysis	6010C		1	203574	12/28/16 15:08	DCL	TAL HOU
Dissolved	Prep	3010A			203516	12/28/16 04:20	DCL	TAL HOU
Dissolved	Analysis	6010C		1	203675	12/29/16 16:27	DCL	TAL HOU
Dissolved	Prep	3010A	DL		203516	12/28/16 04:20	DCL	TAL HOU
Dissolved	Analysis	6010C	DL	20	203675	12/29/16 16:30	DCL	TAL HOU
Dissolved	Prep	7470A			203401	12/23/16 09:04	DDE	TAL HOU
Dissolved	Analysis	7470A		1	203577	12/27/16 18:34	DDE	TAL HOU
Total/NA	Analysis	353.2		1	203009	12/16/16 17:26	EAS	TAL HOU
Total/NA	Analysis	SM 2320B		1	203444	12/23/16 13:43	KRD	TAL HOU
Total/NA	Analysis	SM 2540C		1	203172	12/19/16 13:51	EC1	TAL HOU

Client Sample ID: SANJUAN-W02-12132016

Lab Sample ID: 600-141139-5

Date Collected: 12/13/16 13:10

Matrix: Water

Date Received: 12/14/16 10:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	203037	12/18/16 21:09	KLV	TAL HOU
Total/NA	Analysis	300.0		200	203580	12/28/16 01:34	BDG	TAL HOU
Total/NA	Analysis	300.0		200	203607	12/28/16 16:30	BDG	TAL HOU
Dissolved	Prep	3010A			203516	12/28/16 04:20	DCL	TAL HOU
Dissolved	Analysis	6010C		1	203574	12/28/16 15:10	DCL	TAL HOU
Dissolved	Prep	3010A			203516	12/28/16 04:20	DCL	TAL HOU
Dissolved	Analysis	6010C		1	203675	12/29/16 16:32	DCL	TAL HOU
Dissolved	Prep	3010A	DL		203516	12/28/16 04:20	DCL	TAL HOU
Dissolved	Analysis	6010C	DL	20	203675	12/29/16 16:35	DCL	TAL HOU
Dissolved	Prep	7470A			203401	12/23/16 09:04	DDE	TAL HOU
Dissolved	Analysis	7470A		1	203577	12/27/16 18:36	DDE	TAL HOU
Total/NA	Analysis	353.2		10	203009	12/16/16 17:38	EAS	TAL HOU
Total/NA	Analysis	SM 2320B		1	203236	12/20/16 18:49	KRD	TAL HOU
Total/NA	Analysis	SM 2540C		1	203172	12/19/16 13:51	EC1	TAL HOU

Client Sample ID: SANJUAN-MW04-12132016

Lab Sample ID: 600-141139-6

Date Collected: 12/13/16 13:45

Matrix: Water

Date Received: 12/14/16 10:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	203037	12/18/16 21:44	KLV	TAL HOU
Total/NA	Analysis	300.0		200	203580	12/28/16 01:54	BDG	TAL HOU
Total/NA	Analysis	300.0		200	203607	12/28/16 16:44	BDG	TAL HOU

TestAmerica Houston

Lab Chronicle

Client: CH2M Hill Constructors, Inc.
Project/Site: Kinder Morgan Bloomfield, NM San Juan

TestAmerica Job ID: 600-141139-1

Client Sample ID: SANJUAN-MW04-12132016

Lab Sample ID: 600-141139-6

Date Collected: 12/13/16 13:45

Matrix: Water

Date Received: 12/14/16 10:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3010A			203516	12/28/16 04:20	DCL	TAL HOU
Dissolved	Analysis	6010C		1	203574	12/28/16 15:13	DCL	TAL HOU
Dissolved	Prep	3010A	DL		203516	12/28/16 04:20	DCL	TAL HOU
Dissolved	Analysis	6010C	DL	20	203675	12/29/16 16:37	DCL	TAL HOU
Dissolved	Prep	7470A			203401	12/23/16 09:10	DDE	TAL HOU
Dissolved	Analysis	7470A		1	203577	12/27/16 18:38	DDE	TAL HOU
Total/NA	Analysis	353.2		1	203009	12/16/16 17:27	EAS	TAL HOU
Total/NA	Analysis	SM 2320B		1	203236	12/20/16 19:02	KRD	TAL HOU
Total/NA	Analysis	SM 2540C		1	203172	12/19/16 13:51	EC1	TAL HOU

Client Sample ID: SANJUAN-MW06-12132016

Lab Sample ID: 600-141139-7

Date Collected: 12/13/16 14:10

Matrix: Water

Date Received: 12/14/16 10:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	203037	12/18/16 22:20	KLV	TAL HOU
Total/NA	Analysis	300.0		200	203607	12/28/16 16:58	BDG	TAL HOU
Total/NA	Analysis	300.0		500	203607	12/28/16 17:12	BDG	TAL HOU
Dissolved	Prep	3010A			203516	12/28/16 04:20	DCL	TAL HOU
Dissolved	Analysis	6010C		1	203574	12/28/16 15:15	DCL	TAL HOU
Dissolved	Prep	3010A	DL2		203516	12/28/16 04:20	DCL	TAL HOU
Dissolved	Analysis	6010C	DL2	50	203675	12/29/16 17:11	DCL	TAL HOU
Dissolved	Prep	7470A			203401	12/23/16 09:10	DDE	TAL HOU
Dissolved	Analysis	7470A		1	203577	12/27/16 18:40	DDE	TAL HOU
Total/NA	Analysis	353.2		40	203009	12/16/16 17:41	EAS	TAL HOU
Total/NA	Analysis	SM 2320B		1	203236	12/20/16 19:07	KRD	TAL HOU
Total/NA	Analysis	SM 2540C		1	203172	12/19/16 13:51	EC1	TAL HOU

Laboratory References:

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

Default Detection Limits

Client: CH2M Hill Constructors, Inc.
Project/Site: Kinder Morgan Bloomfield, NM San Juan

TestAmerica Job ID: 600-141139-1

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

Analyte	RL	MDL	Units	Method
Benzene	0.00100	0.000176	mg/L	8260B
Ethylbenzene	0.00100	0.000212	mg/L	8260B
Toluene	0.00100	0.000198	mg/L	8260B
Xylenes, Total	0.00200	0.000366	mg/L	8260B

Method: 300.0 - Anions, Ion Chromatography

Analyte	RL	MDL	Units	Method
Chloride	0.400	0.0534	mg/L	300.0
Sulfate	0.500	0.0957	mg/L	300.0

Method: 6010C - Metals (ICP) - Dissolved

Prep: 3010A

Analyte	RL	MDL	Units	Method
Aluminum, Dissolved	0.500	0.0926	mg/L	6010C
Arsenic, Dissolved	0.0100	0.00285	mg/L	6010C
Barium, Dissolved	0.0200	0.000530	mg/L	6010C
Cadmium, Dissolved	0.00500	0.000280	mg/L	6010C
Calcium, Dissolved	1.00	0.0240	mg/L	6010C
Chromium, Dissolved	0.0100	0.00159	mg/L	6010C
Cobalt, Dissolved	0.0100	0.000310	mg/L	6010C
Copper, Dissolved	0.0100	0.000600	mg/L	6010C
Iron, Dissolved	0.400	0.0270	mg/L	6010C
Lead, Dissolved	0.0100	0.00219	mg/L	6010C
Magnesium, Dissolved	1.00	0.0555	mg/L	6010C
Manganese, Dissolved	0.0100	0.000360	mg/L	6010C
Molybdenum, Dissolved	0.0100	0.000540	mg/L	6010C
Nickel, Dissolved	0.0100	0.000800	mg/L	6010C
Potassium, Dissolved	1.00	0.0374	mg/L	6010C
Selenium, Dissolved	0.0400	0.00287	mg/L	6010C
Silver, Dissolved	0.0100	0.00129	mg/L	6010C
Sodium, Dissolved	1.00	0.0214	mg/L	6010C
Zinc, Dissolved	0.0300	0.00143	mg/L	6010C

Method: 7470A - Mercury in Liquid Waste (Manual Cold Vapor Technique) - Dissolved

Prep: 7470A

Analyte	RL	MDL	Units	Method
Mercury, Dissolved	0.000200	0.0000820	mg/L	7470A

General Chemistry

Analyte	RL	MDL	Units	Method
Nitrate Nitrite as N	0.0500	0.0170	mg/L	353.2
Alkalinity	5.00	5.00	mg/L	SM 2320B
Bicarbonate Alkalinity as CaCO ₃	5.00	5.00	mg/L	SM 2320B
Carbonate Alkalinity as CaCO ₃	5.00	5.00	mg/L	SM 2320B
Total Dissolved Solids	10.0	10.0	mg/L	SM 2540C

Certification Summary

Client: CH2M Hill Constructors, Inc.

TestAmerica Job ID: 600-141139-1

Project/Site: Kinder Morgan Bloomfield, NM San Juan

Laboratory: TestAmerica Houston

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	16-046-0	08-04-17
Louisiana	NELAP	6	01967	06-30-17
Oklahoma	State Program	6	2015-050	08-31-17
Texas	NELAP	6	T104704223-16-20	10-31-17
USDA	Federal		P330-14-00192	06-06-17

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Instrument ID: CHVOAMS06 Analysis Batch Number: 202687Lab Sample ID: IC 600-202687/3 Client Sample ID: _____Date Analyzed: 12/13/16 13:18 Lab File ID: J34801.D GC Column: DB-VRX 60 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	4.04	Incomplete Integration	velak	12/13/16 16:41
Vinyl chloride	4.51	Incomplete Integration	velak	12/13/16 16:41
Butadiene	4.65	Incomplete Integration	velak	12/13/16 16:41
Bromomethane	4.98	Incomplete Integration	velak	12/13/16 16:41
Chloroethane	5.13	Incomplete Integration	velak	12/13/16 16:41
Acetonitrile	5.61	Incomplete Integration	velak	12/13/16 16:41
Acrolein	5.67	Incomplete Integration	velak	12/13/16 16:41
Trichlorofluoromethane	5.69	Incomplete Integration	velak	12/13/16 16:41
Isopropyl alcohol	5.70	Incomplete Integration	velak	12/13/16 16:41
t-Butanol	6.16	Incomplete Integration	velak	12/13/16 16:41
1,1-Dichloroethene	6.18	Incomplete Integration	velak	12/13/16 16:41
Acrylonitrile	6.20	Incomplete Integration	velak	12/13/16 16:41
Iodomethane	6.21	Incomplete Integration	velak	12/13/16 16:41
Methylene Chloride	6.28	Incomplete Integration	velak	12/13/16 16:41
Methyl acetate	6.31	Incomplete Integration	velak	12/13/16 16:41
1,1,2-Trichloro-1,2,2-trifluoroethane	6.34	Incomplete Integration	velak	12/13/16 16:41
Methyl tert-butyl ether	6.92	Incomplete Integration	velak	12/13/16 16:41
Propionitrile	7.06	Incomplete Integration	velak	12/13/16 16:41
Isobutyl alcohol	7.68	Incomplete Integration	velak	12/13/16 16:41
1,2-Dichloroethane-d4 (Surr)	8.11	Incomplete Integration	velak	12/13/16 16:41
1,2-Dichloroethane	8.16	Incomplete Integration	velak	12/13/16 16:41
2-Nitropropane	8.64	Incomplete Integration	velak	12/13/16 16:41
Ethyl acrylate	8.92	Incomplete Integration	velak	12/13/16 16:41
Trichloroethene	9.05	Incomplete Integration	velak	12/13/16 16:41
Bromodichloromethane	9.10	Incomplete Integration	velak	12/13/16 16:41
1,4-Dioxane	9.17	Incomplete Integration	velak	12/13/16 16:41
2-Chloroethyl vinyl ether	9.39	Incomplete Integration	velak	12/13/16 16:41
Methylcyclohexane	9.52	Incomplete Integration	velak	12/13/16 16:41
4-Methyl-2-pentanone (MIBK)	9.68	Incomplete Integration	velak	12/13/16 16:41

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Instrument ID: CHVOAMS06 Analysis Batch Number: 202687Lab Sample ID: IC 600-202687/3 Client Sample ID: _____Date Analyzed: 12/13/16 13:18 Lab File ID: J34801.D GC Column: DB-VRX 60 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
trans-1,3-Dichloropropene	9.98	Incomplete Integration	velak	12/13/16 16:41
n-Butyl acetate	10.11	Incomplete Integration	velak	12/13/16 16:41
1,1,2-Trichloroethane	10.15	Incomplete Integration	velak	12/13/16 16:41
Toluene-d8 (Surr)	10.26	Incomplete Integration	velak	12/13/16 16:41
Ethyl methacrylate	10.31	Incomplete Integration	velak	12/13/16 16:41
1,3-Dichloropropane	10.37	Incomplete Integration	velak	12/13/16 16:41
2-Hexanone	10.47	Incomplete Integration	velak	12/13/16 16:41
1,2-Dibromoethane	10.94	Incomplete Integration	velak	12/13/16 16:41
1-Chlorohexane	11.64	Incomplete Integration	velak	12/13/16 16:41
1,1,1,2-Tetrachloroethane	11.69	Incomplete Integration	velak	12/13/16 16:41
Chlorobenzene	11.78	Incomplete Integration	velak	12/13/16 16:41
Bromoform	12.34	Incomplete Integration	velak	12/13/16 16:41
1,1,2,2-Tetrachloroethane	12.58	Incomplete Integration	velak	12/13/16 16:41
trans-1,4-Dichloro-2-butene	12.72	Incomplete Integration	velak	12/13/16 16:41
1,2,3-Trichloropropane	12.75	Incomplete Integration	velak	12/13/16 16:41
Bromobenzene	13.27	Incomplete Integration	velak	12/13/16 16:41
1,2-Dichlorobenzene	14.71	Incomplete Integration	velak	12/13/16 16:41
1,2-Dibromo-3-Chloropropane	15.19	Incomplete Integration	velak	12/13/16 16:41

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Instrument ID: CHVOAMS06 Analysis Batch Number: 202687Lab Sample ID: IC 600-202687/4 Client Sample ID: _____Date Analyzed: 12/13/16 13:46 Lab File ID: J34802.D GC Column: DB-VRX 60 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	4.02	Incomplete Integration	velak	12/13/16 16:46
Butadiene	4.65	Incomplete Integration	velak	12/13/16 16:46
Dichlorofluoromethane	5.16	Incomplete Integration	velak	12/13/16 16:46
Acetonitrile	5.59	Incomplete Integration	velak	12/13/16 16:46
Acrolein	5.66	Incomplete Integration	velak	12/13/16 16:46
Acetone	5.78	Incomplete Integration	velak	12/13/16 16:46
1,1-Dichloroethene	6.17	Incomplete Integration	velak	12/13/16 16:46
Carbon disulfide	6.53	Incomplete Integration	velak	12/13/16 16:46
trans-1,2-Dichloroethene	6.84	Incomplete Integration	velak	12/13/16 16:46
Propionitrile	7.05	Incomplete Integration	velak	12/13/16 16:46
2-Butanone (MEK)	7.36	Incomplete Integration	velak	12/13/16 16:46
Methacrylonitrile	7.45	Incomplete Integration	velak	12/13/16 16:46
Ethyl acetate	7.60	Incomplete Integration	velak	12/13/16 16:46
Isobutyl alcohol	7.69	Incomplete Integration	velak	12/13/16 16:46
Tetrahydrofuran	7.92	Incomplete Integration	velak	12/13/16 16:46
1,2-Dichloroethane-d4 (Surr)	8.11	Incomplete Integration	velak	12/13/16 16:46
n-Butanol	8.27	Incomplete Integration	velak	12/13/16 16:46
Ethyl acrylate	8.90	Incomplete Integration	velak	12/13/16 16:46
1,4-Dioxane	9.18	Incomplete Integration	velak	12/13/16 16:46
Methylcyclohexane	9.51	Incomplete Integration	velak	12/13/16 16:46
4-Methyl-2-pentanone (MIBK)	9.68	Incomplete Integration	velak	12/13/16 16:46
trans-1,3-Dichloropropene	9.98	Incomplete Integration	velak	12/13/16 16:46
n-Butyl acetate	10.10	Incomplete Integration	velak	12/13/16 16:46
Ethyl methacrylate	10.31	Incomplete Integration	velak	12/13/16 16:46
2-Hexanone	10.48	Incomplete Integration	velak	12/13/16 16:46
Dibromochloromethane	10.70	Incomplete Integration	velak	12/13/16 16:46
1,2-Dibromoethane	10.94	Incomplete Integration	velak	12/13/16 16:46
Tetrachloroethene	11.07	Incomplete Integration	velak	12/13/16 16:46
Chlorobenzene	11.78	Incomplete Integration	velak	12/13/16 16:46
Bromoform	12.35	Incomplete Integration	velak	12/13/16 16:46

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Instrument ID: CHVOAMS06 Analysis Batch Number: 202687Lab Sample ID: IC 600-202687/4 Client Sample ID: _____Date Analyzed: 12/13/16 13:46 Lab File ID: J34802.D GC Column: DB-VRX 60 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
trans-1,4-Dichloro-2-butene	12.74	Incomplete Integration	velak	12/13/16 16:46
1,2,3-Trichloropropane	12.75	Incomplete Integration	velak	12/13/16 16:46
1,2-Dibromo-3-Chloropropane	15.20	Incomplete Integration	velak	12/13/16 16:46
1,3,5-Trichlorobenzene	16.05	Incomplete Integration	velak	12/13/16 16:46
Naphthalene	17.00	Incomplete Integration	velak	12/13/16 16:46
1,2,3-Trichlorobenzene	17.22	Incomplete Integration	velak	12/13/16 16:46

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Instrument ID: CHVOAMS06 Analysis Batch Number: 202687Lab Sample ID: IC 600-202687/5 Client Sample ID: _____Date Analyzed: 12/13/16 14:14 Lab File ID: J34803.D GC Column: DB-VRX 60 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	4.04	Incomplete Integration	velak	12/13/16 16:50
Chloromethane	4.27	Incomplete Integration	velak	12/13/16 16:50
Vinyl chloride	4.51	Incomplete Integration	velak	12/13/16 16:50
Acrolein	5.67	Incomplete Integration	velak	12/13/16 16:50
Trichlorofluoromethane	5.69	Incomplete Integration	velak	12/13/16 16:50
Isopropyl alcohol	5.71	Incomplete Integration	velak	12/13/16 16:50
Acetone	5.77	Incomplete Integration	velak	12/13/16 16:50
1,1-Dichloroethene	6.18	Incomplete Integration	velak	12/13/16 16:50
1,1,2-Trichloro-1,2,2-trifluoroethane	6.34	Incomplete Integration	velak	12/13/16 16:50
2-Butanone (MEK)	7.39	Incomplete Integration	velak	12/13/16 16:50
Isobutyl alcohol	7.66	Incomplete Integration	velak	12/13/16 16:50
1,2-Dichloroethane-d4 (Surr)	8.11	Incomplete Integration	velak	12/13/16 16:50
n-Butanol	8.26	Incomplete Integration	velak	12/13/16 16:50
Ethyl acrylate	8.90	Incomplete Integration	velak	12/13/16 16:50
1,4-Dioxane	9.18	Incomplete Integration	velak	12/13/16 16:50
Methyl methacrylate	9.51	Incomplete Integration	velak	12/13/16 16:50
1,1,2-Trichloroethane	10.16	Incomplete Integration	velak	12/13/16 16:50
Tetrachloroethene	11.08	Incomplete Integration	velak	12/13/16 16:50
1,2-Dibromo-3-Chloropropane	15.19	Incomplete Integration	velak	12/13/16 16:50
Naphthalene	17.00	Incomplete Integration	velak	12/13/16 16:50

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Instrument ID: CHVOAMS06 Analysis Batch Number: 202687Lab Sample ID: IC 600-202687/6 Client Sample ID: _____Date Analyzed: 12/13/16 14:42 Lab File ID: J34804.D GC Column: DB-VRX 60 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	5.77	Incomplete Integration	velak	12/13/16 16:52
1,1-Dichloroethene	6.17	Incomplete Integration	velak	12/13/16 16:52
1,1,2-Trichloro-1,2,2-trifluoroethane	6.34	Incomplete Integration	velak	12/13/16 16:52
2-Butanone (MEK)	7.37	Incomplete Integration	velak	12/13/16 16:52
Ethyl acrylate	8.90	Incomplete Integration	velak	12/13/16 16:52
1,4-Dioxane	9.19	Incomplete Integration	velak	12/13/16 16:52
1,1,2-Trichloroethane	10.16	Incomplete Integration	velak	12/13/16 16:52
1,2,3-Trichloropropane	12.75	Incomplete Integration	velak	12/13/16 16:52
1,2-Dibromo-3-Chloropropane	15.20	Incomplete Integration	velak	12/13/16 16:52
Naphthalene	16.97	Incomplete Integration	velak	12/13/16 16:52
1,2,3-Trichlorobenzene	17.22	Incomplete Integration	velak	12/13/16 16:52

Lab Sample ID: ICIS 600-202687/7 Client Sample ID: _____Date Analyzed: 12/13/16 15:10 Lab File ID: J34805.D GC Column: DB-VRX 60 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	5.78	Incomplete Integration	velak	12/13/16 16:34
1,1,2-Trichloro-1,2,2-trifluoroethane	6.34	Incomplete Integration	velak	12/13/16 16:34
1,4-Dioxane	9.18	Incomplete Integration	velak	12/13/16 16:34
Naphthalene	16.99	Incomplete Integration	velak	12/13/16 16:34
1,2,3-Trichlorobenzene	17.23	Incomplete Integration	velak	12/13/16 16:34

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Instrument ID: CHVOAMS06 Analysis Batch Number: 202687Lab Sample ID: IC 600-202687/8 Client Sample ID: _____Date Analyzed: 12/13/16 15:39 Lab File ID: J34806.D GC Column: DB-VRX 60 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	5.77	Incomplete Integration	velak	12/13/16 16:54
2-Butanone (MEK)	7.36	Incomplete Integration	velak	12/13/16 16:54
1,4-Dioxane	9.17	Incomplete Integration	velak	12/13/16 16:54
1,2,3-Trichlorobenzene	17.23	Incomplete Integration	velak	12/13/16 16:54

Lab Sample ID: IC 600-202687/9 Client Sample ID: _____Date Analyzed: 12/13/16 16:07 Lab File ID: J34807.D GC Column: DB-VRX 60 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluorobenzene	8.71	Incomplete Integration	velak	12/13/16 16:56
1,4-Dioxane	9.18	Incomplete Integration	velak	12/13/16 16:56
1,2-Dibromo-3-Chloropropane	15.20	Incomplete Integration	velak	12/13/16 16:56

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Instrument ID: CHVOAMS06 Analysis Batch Number: 203037Lab Sample ID: CCVIS 600-203037/3 Client Sample ID: _____Date Analyzed: 12/18/16 12:16 Lab File ID: J35301A.D GC Column: DB-VRX 60 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Isopropyl alcohol	5.70	Incomplete Integration	velak	12/18/16 12:39
Acetone	5.76	Incomplete Integration	velak	12/18/16 12:39
2-Butanone (MEK)	7.34	Incomplete Integration	velak	12/18/16 12:39
Isobutyl alcohol	7.67	Incomplete Integration	velak	12/18/16 12:39
Ethyl acrylate	8.88	Incomplete Integration	velak	12/18/16 12:39
1,2-Dichloropropane	9.01	Incomplete Integration	velak	12/18/16 12:39
1,4-Dioxane	9.16	Incomplete Integration	velak	12/18/16 12:39

Lab Sample ID: MB 600-203037/7 Client Sample ID: _____Date Analyzed: 12/18/16 14:44 Lab File ID: J35305.D GC Column: DB-VRX 60 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzene	8.55	Incomplete Integration	velak	12/19/16 10:25

Lab Sample ID: 600-141139-1 Client Sample ID: SANJUAN-MW09-12132016Date Analyzed: 12/18/16 19:24 Lab File ID: J35313.D GC Column: DB-VRX 60 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toluene	10.31	Incomplete Integration	velak	12/19/16 10:31

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Instrument ID: CHVOAMS06 Analysis Batch Number: 203087Lab Sample ID: CCVIS 600-203087/3 Client Sample ID: _____Date Analyzed: 12/19/16 12:14 Lab File ID: J35401.D GC Column: DB-VRX 60 ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Isopropyl alcohol	5.69	Incomplete Integration	velak	12/19/16 12:39
Acetone	5.76	Incomplete Integration	velak	12/19/16 12:39
1,1-Dichloroethene	6.17	Incomplete Integration	velak	12/19/16 12:39
1,1,2-Trichloro-1,2,2-trifluoroethane	6.31	Incomplete Integration	velak	12/19/16 12:39
2-Butanone (MEK)	7.35	Incomplete Integration	velak	12/19/16 12:39
1,4-Dioxane	9.18	Incomplete Integration	velak	12/19/16 12:39
1,2-Dibromo-3-Chloropropane	15.19	Incomplete Integration	velak	12/19/16 12:39

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Instrument ID: CHWC11 Analysis Batch Number: 202659Lab Sample ID: IC 600-202659/2 Client Sample ID: _____Date Analyzed: 12/13/16 13:08 Lab File ID: CAL121316-2.d GC Column: AS-18 ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloride	5.27	Incomplete Integration	watson	12/13/16 15:47
Bromide	9.76	Incomplete Integration	watson	12/13/16 15:47
Sulfate	10.57	Incomplete Integration	watson	12/13/16 15:47

Lab Sample ID: IC 600-202659/3 Client Sample ID: _____Date Analyzed: 12/13/16 13:28 Lab File ID: CAL121316-3.d GC Column: AS-18 ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.28	Incomplete Integration	watson	12/13/16 15:53
Chloride	5.28	Incomplete Integration	watson	12/13/16 15:50
Bromide	9.75	Incomplete Integration	watson	12/13/16 15:50
Sulfate	10.57	Incomplete Integration	watson	12/13/16 15:53

Lab Sample ID: IC 600-202659/4 Client Sample ID: _____Date Analyzed: 12/13/16 13:48 Lab File ID: CAL121316-4.d GC Column: AS-18 ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.28	Incomplete Integration	watson	12/13/16 15:56
Chloride	5.28	Incomplete Integration	watson	12/13/16 15:56
Sulfate	10.56	Incomplete Integration	watson	12/13/16 15:56

Lab Sample ID: IC 600-202659/5 Client Sample ID: _____Date Analyzed: 12/13/16 14:08 Lab File ID: CAL121316-5.d GC Column: AS-18 ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloride	5.28	Incomplete Integration	watson	12/13/16 15:58
Bromide	9.78	Incomplete Integration	watson	12/13/16 15:58

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Instrument ID: CHWC11 Analysis Batch Number: 202659Lab Sample ID: IC 600-202659/6 Client Sample ID: _____Date Analyzed: 12/13/16 14:28 Lab File ID: CAL121316-6.d GC Column: AS-18 ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.29	Incomplete Integration	watson	12/13/16 16:05
Bromide	9.84	Incomplete Integration	watson	12/13/16 15:59
Sulfate	10.69	Incomplete Integration	watson	12/13/16 15:59

Lab Sample ID: IC 600-202659/7 Client Sample ID: _____Date Analyzed: 12/13/16 14:48 Lab File ID: CAL121316-7.d GC Column: AS-18 ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.58	Incomplete Integration	watson	12/13/16 16:00

Lab Sample ID: IC 600-202659/8 Client Sample ID: _____Date Analyzed: 12/13/16 15:08 Lab File ID: CAL121316-8.d GC Column: AS-18 ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromide	9.75	Incomplete Integration	watson	12/13/16 16:01
Sulfate	10.48	Incomplete Integration	watson	12/13/16 16:01

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Instrument ID: CHWC11 Analysis Batch Number: 203350Lab Sample ID: CCV 600-203350/2 Client Sample ID: _____Date Analyzed: 12/22/16 23:14 Lab File ID: 122216-10.d GC Column: AS-18 ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromide	9.65	Incomplete Integration	watson	12/23/16 09:25

Lab Sample ID: CCV 600-203350/14 Client Sample ID: _____Date Analyzed: 12/23/16 03:14 Lab File ID: 122216-22.d GC Column: AS-18 ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromide	9.64	Incomplete Integration	watson	12/23/16 09:29

Lab Sample ID: CCV 600-203350/50 Client Sample ID: _____Date Analyzed: 12/23/16 19:43 Lab File ID: 122216-58.d GC Column: AS-18 ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.26	Shouldering	grimb	12/27/16 11:53

Lab Sample ID: CCV 600-203350/62 Client Sample ID: _____Date Analyzed: 12/23/16 23:43 Lab File ID: 122216-70.d GC Column: AS-18 ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.17	Shouldering	grimb	12/27/16 11:48

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Instrument ID: CHWC11 Analysis Batch Number: 203580Lab Sample ID: CCV 600-203580/13 Client Sample ID: _____Date Analyzed: 12/27/16 15:34 Lab File ID: 122716-21.d GC Column: AS-18 ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.33	Peak Tail	grimmb	12/28/16 10:07

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Instrument ID: CHWC16 Analysis Batch Number: 203247Lab Sample ID: IC 600-203247/2 Client Sample ID: _____Date Analyzed: 12/20/16 17:58 Lab File ID: CAL122016-3.d GC Column: AS-14 ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.82	Incomplete Integration	watson	12/23/16 11:17
Chloride	3.75	Incomplete Integration	watson	12/23/16 11:35
Sulfate	8.44	Incomplete Integration	watson	12/23/16 11:17

Lab Sample ID: IC 600-203247/3 Client Sample ID: _____Date Analyzed: 12/20/16 18:12 Lab File ID: CAL122016-4.d GC Column: AS-14 ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.83	Incomplete Integration	watson	12/23/16 11:19
Chloride	3.78	Incomplete Integration	watson	12/23/16 11:19
Sulfate	8.47	Incomplete Integration	watson	12/23/16 11:19

Lab Sample ID: IC 600-203247/4 Client Sample ID: _____Date Analyzed: 12/20/16 18:26 Lab File ID: CAL122016-5.d GC Column: AS-14 ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.82	Incomplete Integration	watson	12/23/16 11:22
Chloride	3.75	Incomplete Integration	watson	12/23/16 11:22
Sulfate	8.45	Incomplete Integration	watson	12/23/16 11:22

Lab Sample ID: IC 600-203247/5 Client Sample ID: _____Date Analyzed: 12/20/16 18:40 Lab File ID: CAL122016-6.d GC Column: AS-14 ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.83	Peak not integrated	watson	12/23/16 11:24
Chloride	3.78	Incomplete Integration	watson	12/23/16 11:24
Sulfate	8.46	Unspecified	grimb	12/28/16 10:58

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Instrument ID: CHWC16 Analysis Batch Number: 203247Lab Sample ID: IC 600-203247/6 Client Sample ID: _____Date Analyzed: 12/20/16 18:54 Lab File ID: CAL122016-7.d GC Column: AS-14 ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.89	Incomplete Integration	watson	12/23/16 11:29
Chloride	3.85	Incomplete Integration	watson	12/23/16 11:29
Bromide	5.51	Incomplete Integration	watson	12/23/16 11:29

Lab Sample ID: IC 600-203247/7 Client Sample ID: _____Date Analyzed: 12/20/16 19:08 Lab File ID: CAL122016-8.d GC Column: AS-14 ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.88	Incomplete Integration	watson	12/23/16 11:30
Chloride	3.83	Incomplete Integration	watson	12/23/16 11:30

Lab Sample ID: IC 600-203247/8 Client Sample ID: _____Date Analyzed: 12/20/16 19:21 Lab File ID: CAL122016-9.d GC Column: AS-14 ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.83	Peak not integrated	watson	12/23/16 11:32
Chloride	3.79	Incomplete Integration	watson	12/23/16 11:32

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Instrument ID: CHWC16 Analysis Batch Number: 203607Lab Sample ID: CCB 600-203607/15 Client Sample ID: _____Date Analyzed: 12/28/16 15:35 Lab File ID: 122816-24.d GC Column: AS-14 ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloride	3.64	Shouldering	grimmb	12/29/16 10:33

Method 8260B Low Level

Volatile Organic Compounds (GC/MS)
by Method 8260B Low Level

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Matrix: Water Level: Low
 GC Column (1): DB-VRX 60 ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
SANJUAN-MW09-12132 016	600-141139-1	76	74	90	119
SANJUAN-MW09-12132 016 DL	600-141139-1 DL	79	67	88	105
SANJUAN-TB01-12132 016	600-141139-2	82	74	84	131
SANJUAN-MW08-12132 016	600-141139-3	78	74	90	128
SANJUAN-MD08-12132 016	600-141139-4	82	74	89	113
SANJUAN-W02-121320 16	600-141139-5	86	78	88	133
SANJUAN-MW04-12132 016	600-141139-6	82	71	91	127
SANJUAN-MW06-12132 016	600-141139-7	87	73	94	134
	MB 600-203037/7	87	79	92	112
	MB 600-203087/7	88	81	91	98
	LCS 600-203037/4	83	73	91	122
	LCS 600-203087/4	86	81	85	111
	LCSD 600-203037/5	85	79	87	114
	LCSD 600-203087/5	89	77	94	111

	<u>QC LIMITS</u>
DBFM = Dibromofluoromethane	62-130
DCA = 1,2-Dichloroethane-d4 (Surr)	50-134
TOL = Toluene-d8 (Surr)	70-130
BFB = 4-Bromofluorobenzene	67-139

Column to be used to flag recovery values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Houston Job No.: 600-141139-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: J35302.D
Lab ID: LCS 600-203037/4 Client ID: _____

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Benzene	0.0100	0.009333	93	70-130	
Ethylbenzene	0.0100	0.009768	98	70-130	
Toluene	0.0100	0.01024	102	70-130	
Xylenes, Total	0.0200	0.01946	97	70-130	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Houston Job No.: 600-141139-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: J35402.D
Lab ID: LCS 600-203087/4 Client ID: _____

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Benzene	0.0100	0.009934	99	70-130	
Ethylbenzene	0.0100	0.009108	91	70-130	
Toluene	0.0100	0.009548	95	70-130	
Xylenes, Total	0.0200	0.01859	93	70-130	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: J35303.D
 Lab ID: LCSD 600-203037/5 Client ID: _____

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Benzene	0.0100	0.008923	89	4	20	70-130	
Ethylbenzene	0.0100	0.008414	84	15	20	70-130	
Toluene	0.0100	0.008902	89	14	20	70-130	
Xylenes, Total	0.0200	0.01675	84	15	20	70-130	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: J35403.D
 Lab ID: LCSD 600-203087/5 Client ID: _____

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Benzene	0.0100	0.008855	89	11	20	70-130	
Ethylbenzene	0.0100	0.009008	90	1	20	70-130	
Toluene	0.0100	0.009217	92	4	20	70-130	
Xylenes, Total	0.0200	0.01708	85	8	20	70-130	

Column to be used to flag recovery and RPD values

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Houston Job No.: 600-141139-1
SDG No.: _____
Lab File ID: J35305.D Lab Sample ID: MB 600-203037/7
Matrix: Water Heated Purge: (Y/N) N
Instrument ID: CHVOAMS06 Date Analyzed: 12/18/2016 14:44
GC Column: DB-VRX 60 ID: 0.25 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 600-203037/4	J35302.D	12/18/2016 12:58
	LCSD 600-203037/5	J35303.D	12/18/2016 13:33
SANJUAN-TB01-12132016	600-141139-2	J35307.D	12/18/2016 15:54
SANJUAN-MW09-12132016	600-141139-1	J35313.D	12/18/2016 19:24
SANJUAN-MW08-12132016	600-141139-3	J35314.D	12/18/2016 19:59
SANJUAN-MD08-12132016	600-141139-4	J35315.D	12/18/2016 20:34
SANJUAN-W02-12132016	600-141139-5	J35316.D	12/18/2016 21:09
SANJUAN-MW04-12132016	600-141139-6	J35317.D	12/18/2016 21:44
SANJUAN-MW06-12132016	600-141139-7	J35318.D	12/18/2016 22:20

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Houston Job No.: 600-141139-1
SDG No.: _____
Lab File ID: J35405.D Lab Sample ID: MB 600-203087/7
Matrix: Water Heated Purge: (Y/N) N
Instrument ID: CHVOAMS06 Date Analyzed: 12/19/2016 14:44
GC Column: DB-VRX 60 ID: 0.25 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 600-203087/4	J35402.D	12/19/2016 12:58
	LCSD 600-203087/5	J35403.D	12/19/2016 13:33
SANJUAN-MW09-12132016 DL	600-141139-1 DL	J35419.D	12/19/2016 22:53

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Lab File ID: J34800AA.D BFB Injection Date: 12/13/2016
 Instrument ID: CHVOAMS06 BFB Injection Time: 12:50
 Analysis Batch No.: 202687

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	31.1
75	30.0 - 60.0 % of mass 95	57.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.2
173	Less than 2.0 % of mass 174	1.0 (1.2) 1
174	50.0 - 120.00 % of mass 95	85.7
175	5.0 - 9.0 % of mass 174	6.0 (7.0) 1
176	95.0 - 101.0 % of mass 174	81.7 (95.3) 1
177	5.0 - 9.0 % of mass 176	4.3 (5.3) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 600-202687/3	J34801.D	12/13/2016	13:18
	IC 600-202687/4	J34802.D	12/13/2016	13:46
	IC 600-202687/5	J34803.D	12/13/2016	14:14
	IC 600-202687/6	J34804.D	12/13/2016	14:42
	ICIS 600-202687/7	J34805.D	12/13/2016	15:10
	IC 600-202687/8	J34806.D	12/13/2016	15:39
	IC 600-202687/9	J34807.D	12/13/2016	16:07

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Houston Job No.: 600-141139-1
SDG No.: _____
Lab File ID: J35300B.D BFB Injection Date: 12/18/2016
Instrument ID: CHVOAMS06 BFB Injection Time: 11:07
Analysis Batch No.: 203037

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	33.4
75	30.0 - 60.0 % of mass 95	56.0
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.1
173	Less than 2.0 % of mass 174	0.6 (0.8) 1
174	50.0 - 120.00 % of mass 95	78.3
175	5.0 - 9.0 % of mass 174	6.9 (8.8) 1
176	95.0 - 101.0 % of mass 174	75.3 (96.2) 1
177	5.0 - 9.0 % of mass 176	5.2 (7.0) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 600-203037/3	J35301A.D	12/18/2016	12:16
	LCS 600-203037/4	J35302.D	12/18/2016	12:58
	LCSD 600-203037/5	J35303.D	12/18/2016	13:33
	MB 600-203037/7	J35305.D	12/18/2016	14:44
SANJUAN-TB01-12132016	600-141139-2	J35307.D	12/18/2016	15:54
SANJUAN-MW09-12132016	600-141139-1	J35313.D	12/18/2016	19:24
SANJUAN-MW08-12132016	600-141139-3	J35314.D	12/18/2016	19:59
SANJUAN-MD08-12132016	600-141139-4	J35315.D	12/18/2016	20:34
SANJUAN-W02-12132016	600-141139-5	J35316.D	12/18/2016	21:09
SANJUAN-MW04-12132016	600-141139-6	J35317.D	12/18/2016	21:44
SANJUAN-MW06-12132016	600-141139-7	J35318.D	12/18/2016	22:20

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Lab File ID: J35400C.D BFB Injection Date: 12/19/2016
 Instrument ID: CHVOAMS06 BFB Injection Time: 11:43
 Analysis Batch No.: 203087

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	29.8
75	30.0 - 60.0 % of mass 95	55.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	5.4
173	Less than 2.0 % of mass 174	0.4 (0.5) 1
174	50.0 - 120.00 % of mass 95	84.7
175	5.0 - 9.0 % of mass 174	5.1 (6.0) 1
176	95.0 - 101.0 % of mass 174	80.8 (95.4) 1
177	5.0 - 9.0 % of mass 176	5.2 (6.4) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 600-203087/3	J35401.D	12/19/2016	12:14
	LCS 600-203087/4	J35402.D	12/19/2016	12:58
	LCSD 600-203087/5	J35403.D	12/19/2016	13:33
	MB 600-203087/7	J35405.D	12/19/2016	14:44
SANJUAN-MW09-12132016 DL	600-141139-1 DL	J35419.D	12/19/2016	22:53

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Sample No.: CCVIS 600-203037/3 Date Analyzed: 12/18/2016 12:16
 Instrument ID: CHVOAMS06 GC Column: DB-VRX 60 ID: 0.25 (mm)
 Lab File ID (Standard): J35301A.D Heated Purge: (Y/N) N
 Calibration ID: 10770

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		410946	8.69	181628	11.73	97227	14.31
UPPER LIMIT		821892	9.19	363256	12.23	194454	14.81
LOWER LIMIT		205473	8.19	90814	11.23	48614	13.81
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 600-203037/4		429149	8.70	190648	11.73	106403	14.31
LCSD 600-203037/5		426741	8.70	200264	11.74	110230	14.32
MB 600-203037/7		429473	8.70	192715	11.73	124915	14.31
600-141139-2	SANJUAN-TB01-12132016	430794	8.70	208735	11.74	111284	14.31
600-141139-1	SANJUAN-MW09-12132016	445701	8.70	207073	11.73	125590	14.31
600-141139-3	SANJUAN-MW08-12132016	435574	8.69	195913	11.73	111994	14.31
600-141139-4	SANJUAN-MD08-12132016	417478	8.70	191641	11.74	121776	14.31
600-141139-5	SANJUAN-W02-12132016	445794	8.69	204455	11.73	106677	14.32
600-141139-6	SANJUAN-MW04-12132016	441059	8.70	201743	11.73	110700	14.31
600-141139-7	SANJUAN-MW06-12132016	444530	8.70	200462	11.74	102827	14.32

FB = Fluorobenzene

CBNZd5 = Chlorobenzene-d5

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area

RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Sample No.: CCVIS 600-203087/3 Date Analyzed: 12/19/2016 12:14
 Instrument ID: CHVOAMS06 GC Column: DB-VRX 60 ID: 0.25 (mm)
 Lab File ID (Standard): J35401.D Heated Purge: (Y/N) N
 Calibration ID: 10770

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		437843	8.70	207253	11.73	123303	14.31
UPPER LIMIT		875686	9.20	414506	12.23	246606	14.81
LOWER LIMIT		218922	8.20	103627	11.23	61652	13.81
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 600-203087/4		434250	8.69	215243	11.73	141755	14.31
LCSD 600-203087/5		421667	8.69	203847	11.73	135898	14.31
MB 600-203087/7		389954	8.70	189925	11.73	146997	14.31
600-141139-1 DL	SANJUAN-MW09-12132016 DL	404547	8.70	196944	11.74	131035	14.32

FB = Fluorobenzene

CBNZd5 = Chlorobenzene-d5

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area

RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Client Sample ID: SANJUAN-MW09-12132016 Lab Sample ID: 600-141139-1
 Matrix: Water Lab File ID: J35313.D
 Analysis Method: 8260B Date Collected: 12/13/2016 11:50
 Sample wt/vol: 20 (mL) Date Analyzed: 12/18/2016 19:24
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX 60 ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 203037 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-41-4	Ethylbenzene	0.0374		0.00100	0.000212
108-88-3	Toluene	0.000198	U	0.00100	0.000198
1330-20-7	Xylenes, Total	0.0103		0.00200	0.000366

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	74		50-134
1868-53-7	Dibromofluoromethane	76		62-130
2037-26-5	Toluene-d8 (Surr)	90		70-130
460-00-4	4-Bromofluorobenzene	119		67-139

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Client Sample ID: SANJUAN-MW09-12132016 DL Lab Sample ID: 600-141139-1 DL
 Matrix: Water Lab File ID: J35419.D
 Analysis Method: 8260B Date Collected: 12/13/2016 11:50
 Sample wt/vol: 20 (mL) Date Analyzed: 12/19/2016 22:53
 Soil Aliquot Vol: _____ Dilution Factor: 10
 Soil Extract Vol.: _____ GC Column: DB-VRX 60 ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 203087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	0.0971		0.0100	0.00176

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	67		50-134
1868-53-7	Dibromofluoromethane	79		62-130
2037-26-5	Toluene-d8 (Surr)	88		70-130
460-00-4	4-Bromofluorobenzene	105		67-139

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Client Sample ID: SANJUAN-TB01-12132016 Lab Sample ID: 600-141139-2
 Matrix: Water Lab File ID: J35307.D
 Analysis Method: 8260B Date Collected: 12/13/2016 12:10
 Sample wt/vol: 20 (mL) Date Analyzed: 12/18/2016 15:54
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX 60 ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 203037 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	0.000176	U	0.00100	0.000176
100-41-4	Ethylbenzene	0.000212	U	0.00100	0.000212
108-88-3	Toluene	0.000198	U	0.00100	0.000198
1330-20-7	Xylenes, Total	0.000366	U	0.00200	0.000366

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	74		50-134
1868-53-7	Dibromofluoromethane	82		62-130
2037-26-5	Toluene-d8 (Surr)	84		70-130
460-00-4	4-Bromofluorobenzene	131		67-139

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Client Sample ID: SANJUAN-MW08-12132016 Lab Sample ID: 600-141139-3
 Matrix: Water Lab File ID: J35314.D
 Analysis Method: 8260B Date Collected: 12/13/2016 12:25
 Sample wt/vol: 20 (mL) Date Analyzed: 12/18/2016 19:59
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX 60 ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 203037 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	0.00184		0.00100	0.000176
100-41-4	Ethylbenzene	0.000212	U	0.00100	0.000212
108-88-3	Toluene	0.000198	U	0.00100	0.000198
1330-20-7	Xylenes, Total	0.000366	U	0.00200	0.000366

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	74		50-134
1868-53-7	Dibromofluoromethane	78		62-130
2037-26-5	Toluene-d8 (Surr)	90		70-130
460-00-4	4-Bromofluorobenzene	128		67-139

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Client Sample ID: SANJUAN-MD08-12132016 Lab Sample ID: 600-141139-4

Matrix: Water Lab File ID: J35315.D

Analysis Method: 8260B Date Collected: 12/13/2016 12:35

Sample wt/vol: 20 (mL) Date Analyzed: 12/18/2016 20:34

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: DB-VRX 60 ID: 0.25 (mm)

% Moisture: _____ Level: (low/med) Low

Analysis Batch No.: 203037 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	0.00171		0.00100	0.000176
100-41-4	Ethylbenzene	0.000212	U	0.00100	0.000212
108-88-3	Toluene	0.000198	U	0.00100	0.000198
1330-20-7	Xylenes, Total	0.000366	U	0.00200	0.000366

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	74		50-134
1868-53-7	Dibromofluoromethane	82		62-130
2037-26-5	Toluene-d8 (Surr)	89		70-130
460-00-4	4-Bromofluorobenzene	113		67-139

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Client Sample ID: SANJUAN-W02-12132016 Lab Sample ID: 600-141139-5
 Matrix: Water Lab File ID: J35316.D
 Analysis Method: 8260B Date Collected: 12/13/2016 13:10
 Sample wt/vol: 20 (mL) Date Analyzed: 12/18/2016 21:09
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX 60 ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 203037 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	0.000176	U	0.00100	0.000176
100-41-4	Ethylbenzene	0.000212	U	0.00100	0.000212
108-88-3	Toluene	0.000198	U	0.00100	0.000198
1330-20-7	Xylenes, Total	0.000366	U	0.00200	0.000366

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	78		50-134
1868-53-7	Dibromofluoromethane	86		62-130
2037-26-5	Toluene-d8 (Surr)	88		70-130
460-00-4	4-Bromofluorobenzene	133		67-139

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Client Sample ID: SANJUAN-MW04-12132016 Lab Sample ID: 600-141139-6
 Matrix: Water Lab File ID: J35317.D
 Analysis Method: 8260B Date Collected: 12/13/2016 13:45
 Sample wt/vol: 20 (mL) Date Analyzed: 12/18/2016 21:44
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX 60 ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 203037 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	0.000176	J	0.00100	0.000176
100-41-4	Ethylbenzene	0.000212	U	0.00100	0.000212
108-88-3	Toluene	0.000198	U	0.00100	0.000198
1330-20-7	Xylenes, Total	0.000366	U	0.00200	0.000366

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	71		50-134
1868-53-7	Dibromofluoromethane	82		62-130
2037-26-5	Toluene-d8 (Surr)	91		70-130
460-00-4	4-Bromofluorobenzene	127		67-139

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Client Sample ID: SANJUAN-MW06-12132016 Lab Sample ID: 600-141139-7
 Matrix: Water Lab File ID: J35318.D
 Analysis Method: 8260B Date Collected: 12/13/2016 14:10
 Sample wt/vol: 20 (mL) Date Analyzed: 12/18/2016 22:20
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX 60 ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 203037 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	0.000176	U	0.00100	0.000176
100-41-4	Ethylbenzene	0.000212	U	0.00100	0.000212
108-88-3	Toluene	0.000198	U	0.00100	0.000198
1330-20-7	Xylenes, Total	0.000366	U	0.00200	0.000366

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	73		50-134
1868-53-7	Dibromofluoromethane	87		62-130
2037-26-5	Toluene-d8 (Surr)	94		70-130
460-00-4	4-Bromofluorobenzene	134		67-139

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Houston Job No.: 600-141139-1 Analy Batch No.: 202687

SDG No.: _____

Instrument ID: CHVOAMS06 GC Column: DB-VRX 60 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/13/2016 13:18 Calibration End Date: 12/13/2016 16:07 Calibration ID: 10770

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 600-202687/3	J34801.D
Level 2	IC 600-202687/4	J34802.D
Level 3	IC 600-202687/5	J34803.D
Level 4	IC 600-202687/6	J34804.D
Level 5	ICIS 600-202687/7	J34805.D
Level 6	IC 600-202687/8	J34806.D
Level 7	IC 600-202687/9	J34807.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.1332 0.2561	0.2123 0.2704	0.2070	0.2573	0.2616	Lin2	-0.065	0.2642							0.9970		0.9900
Chloromethane	0.3384 0.4061	0.3548 0.4159	0.3453	0.3953	0.4003	Ave		0.3794			0.1000	8.5		15.0			
Vinyl chloride	0.2217 0.2829	0.2615 0.2990	0.2440	0.2814	0.3067	Ave		0.2710				11.2		15.0			
Butadiene	0.2910 0.4141	0.4256 0.4031	0.3134	0.3952	0.3997	Ave		0.3774				14.0		15.0			
Bromomethane	0.1061 0.1380	0.1199 0.1444	0.1241	0.1350	0.1282	Ave		0.1280				10.0		15.0			
Chloroethane	0.0917 0.1510	0.1387 0.1617	0.1285	0.1629	0.1602	Lin2	-0.033	0.1603							0.9950		0.9900
Dichlorofluoromethane	0.2624 0.4213	0.3459 0.4402	0.3120	0.4081	0.4006	Lin2	-0.080	0.4145							0.9930		0.9900
Acetonitrile	0.0225 0.0222	0.0194 0.0218	0.0189	0.0221	0.0216	Ave		0.0212				6.8		15.0			
Acrolein	0.0185 0.0137	0.0158 0.0160	0.0191	0.0186	0.0131	Ave		0.0164				14.8		15.0			
Trichlorofluoromethane	0.2845 0.5080	0.3684 0.5224	0.3712	0.4982	0.5069	Lin2	-0.121	0.5039							0.9930		0.9900
Isopropyl alcohol	0.0270 0.0112	0.0128 0.0168	0.0184	0.0162	0.0140	Qua	0.1924	0.0079	0.0000168						0.9970		0.9900
Acetone	0.1429 0.0961	0.1231 0.0885	0.1228	0.1136	0.0803	Lin1	0.0737	0.0892							0.9930		0.9900
Ethyl ether	0.3646 0.3103	0.3306 0.3049	0.3505	0.3225	0.3156	Ave		0.3284				6.7		15.0			
t-Butanol	0.0508 0.0272	0.0272 0.0325	0.0317	0.0342	0.0325	Lin1	0.0485	0.0310							0.9920		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Houston Job No.: 600-141139-1 Analy Batch No.: 202687
SDG No.: _____
Instrument ID: CHVOAMS06 GC Column: DB-VRX 60 ID: 0.25 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 12/13/2016 13:18 Calibration End Date: 12/13/2016 16:07 Calibration ID: 10770

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,1-Dichloroethene	0.2410 0.2335	0.2856 0.2244	0.2827	0.2731	0.2427	Ave		0.2547				9.9		15.0			
Acrylonitrile	0.0932 0.0817	0.0662 0.0816	0.0774	0.0847	0.0825	Ave		0.0810				10.1		15.0			
Iodomethane	0.4752 0.4486	0.4763 0.4223	0.4946	0.4444	0.4206	Ave		0.4546				6.2		15.0			
Methylene Chloride	0.6136 0.2694	0.3628 0.2553	0.3040	0.3132	0.2862	Lin1	0.1560	0.2572							0.9980		0.9900
Methyl acetate	0.2622 0.2403	0.2114 0.2260	0.2370	0.2430	0.2306	Ave		0.2358				6.7		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2621 0.2181	0.2086 0.1979	0.2365	0.2405	0.1933	Ave		0.2224				11.3		15.0			
3-Chloro-1-propene	0.1897 0.1476	0.1806 0.1276	0.1709	0.1667	0.1499	Ave		0.1619				13.2		15.0			
Carbon disulfide	0.8897 0.7380	0.8134 0.6932	0.7774	0.7622	0.7291	Ave		0.7719				8.3		15.0			
trans-1,2-Dichloroethene	0.3043 0.2888	0.3355 0.2770	0.2992	0.3069	0.2905	Ave		0.3003				6.2		15.0			
Methyl tert-butyl ether	1.0329 0.9644	0.9957 0.9245	1.0399	0.9982	0.9698	Ave		0.9893				4.1		15.0			
Propionitrile	0.0296 0.0326	0.0271 0.0311	0.0256	0.0303	0.0302	Ave		0.0295				8.1		15.0			
1,1-Dichloroethane	0.6989 0.6400	0.6682 0.6189	0.6774	0.6840	0.6717	Ave		0.6656		0.1000		4.1		15.0			
Vinyl acetate	0.8296 0.8429	0.7174 0.7772	0.8834	0.8924	0.7999	Ave		0.8204				7.5		15.0			
2-Chloro-1,3-butadiene	1.0143 1.0109	1.0006 0.9605	1.0385	1.0696	1.0408	Ave		1.0193				3.4		15.0			
Hexane	0.7544 0.6596	0.7459 0.6109	0.7702	0.7383	0.6821	Ave		0.7088				8.3		15.0			
Isopropyl ether	1.9131 1.7484	1.9961 1.7023	1.9038	1.8466	1.8180	Ave		1.8469				5.5		15.0			
2-Butanone (MEK)	0.0068 0.0266	0.0103 0.0262	0.0239	0.0286	0.0228	Lin1	-0.021	0.0265							0.9960		0.9900
Methacrylonitrile	0.0226 0.0274	0.0284 0.0270	0.0270	0.0286	0.0258	Ave		0.0267				7.7		15.0			
cis-1,2-Dichloroethene	0.3656 0.3114	0.3694 0.3009	0.3086	0.3138	0.3134	Ave		0.3262				8.8		15.0			
Ethyl acetate	0.3271 0.3441	0.3632 0.3367	0.3615	0.3610	0.3490	Ave		0.3489				4.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Houston Job No.: 600-141139-1 Analy Batch No.: 202687
SDG No.: _____
Instrument ID: CHVOAMS06 GC Column: DB-VRX 60 ID: 0.25 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 12/13/2016 13:18 Calibration End Date: 12/13/2016 16:07 Calibration ID: 10770

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Chlorobromomethane	0.1082 0.1390	0.1603 0.1359	0.1440	0.1439	0.1362	Ave		0.1382				11.3		15.0			
Chloroform	0.6882 0.5957	0.6277 0.5787	0.6582	0.6113	0.5940	Ave		0.6220				6.3		15.0			
Tert-butyl ethyl ether	1.5252 1.4177	1.5693 1.3807	1.4760	1.4389	1.4159	Ave		1.4605				4.6		15.0			
Isobutyl alcohol	0.0332 0.0208	0.0270 0.0266	0.0231	0.0184	0.0238	Lin	-0.593	0.0263							0.9920		0.9900
2,2-Dichloropropane	0.4386 0.3680	0.4812 0.3133	0.4379	0.4237	0.3830	Ave		0.4065				13.7		15.0			
Tetrahydrofuran	0.1351 0.0988	0.1075 0.0855	0.1078	0.1110	0.1000	Ave		0.1065				14.2		15.0			
1,2-Dichloroethane	0.6861 0.5950	0.6141 0.5762	0.6446	0.6227	0.5895	Ave		0.6183				6.1		15.0			
1,1,1-Trichloroethane	0.7180 0.6146	0.6816 0.5787	0.7029	0.6448	0.6056	Ave		0.6495				8.1		15.0			
n-Butanol	0.0068 0.0075	0.0072 0.0081	0.0086	0.0081	0.0073	Ave		0.0077				8.1		15.0			
1,1-Dichloropropene	0.3964 0.4295	0.4854 0.3981	0.4298	0.4554	0.4229	Ave		0.4311				7.3		15.0			
Cyclohexane	0.4617 0.4204	0.4364 0.3589	0.4260	0.4159	0.3770	Ave		0.4138				8.5		15.0			
Carbon tetrachloride	0.6675 0.5771	0.5921 0.5371	0.6030	0.6069	0.5720	Ave		0.5937				6.8		15.0			
Benzene	1.2888 1.0686	1.1415 1.0290	1.1603	1.1153	1.0737	Ave		1.1253				7.6		15.0			
2-Nitropropane	0.2929 0.2656	0.2975 0.2580	0.2871	0.2837	0.2711	Ave		0.2794				5.3		15.0			
Tert-amyl methyl ether	0.9184 0.8357	0.9423 0.8154	0.9168	0.9078	0.8522	Ave		0.8841				5.5		15.0			
Isooctane	1.5859 1.2810	1.4935 1.1766	1.4860	1.4187	1.3004	Ave		1.3917				10.4		15.0			
Ethyl acrylate	0.6607 0.6316	0.6399 0.6203	0.6967	0.6597	0.5841	Ave		0.6419				5.5		15.0			
n-Heptane	0.8648 0.7726	0.8322 0.6899	0.8649	0.7963	0.8029	Ave		0.8034				7.6		15.0			
Dibromomethane	0.2057 0.1535	0.1524 0.1540	0.1752	0.1670	0.1486	Ave		0.1652				12.2		15.0			
1,2-Dichloropropane	0.3471 0.3009	0.3715 0.2857	0.3274	0.3126	0.2998	Ave		0.3207				9.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Houston Job No.: 600-141139-1 Analy Batch No.: 202687
SDG No.: _____
Instrument ID: CHVOAMS06 GC Column: DB-VRX 60 ID: 0.25 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 12/13/2016 13:18 Calibration End Date: 12/13/2016 16:07 Calibration ID: 10770

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Trichloroethene	0.3359 0.3157	0.3370 0.3051	0.3530	0.3365	0.3092	Ave		0.3275				5.4		15.0			
Bromodichloromethane	0.4529 0.4445	0.5017 0.4340	0.4482	0.4706	0.4537	Ave		0.4580				4.9		15.0			
1,4-Dioxane	0.0005 0.0017	0.0006 0.0017	0.0005	0.0009	0.0019	Lin	-0.035	0.0018							0.9970		0.9900
2-Chloroethyl vinyl ether	0.3774 0.3779	0.3731 0.3800	0.3988	0.3596	0.3551	Ave		0.3746				3.8		15.0			
Methyl methacrylate	0.2453 0.1976	0.2196 0.1804	0.2236	0.2215	0.2060	Ave		0.2134				9.8		15.0			
Methylcyclohexane	0.5043 0.4694	0.5174 0.4252	0.4946	0.5189	0.4663	Ave		0.4852				7.0		15.0			
cis-1,3-Dichloropropene	0.9108 1.0801	1.1991 1.0649	1.0849	1.0595	1.0379	Ave		1.0624				8.0		15.0			
4-Methyl-2-pentanone (MIBK)	0.4816 0.4345	0.5103 0.4464	0.4682	0.4812	0.4022	Ave		0.4606				7.8		15.0			
trans-1,3-Dichloropropene	0.9629 1.0830	1.1444 1.0631	1.0621	1.0385	1.0549	Ave		1.0584				5.1		15.0			
n-Butyl acetate	0.4948 0.4416	0.4479 0.4300	0.4544	0.4312	0.4254	Ave		0.4465				5.3		15.0			
1,1,2-Trichloroethane	0.4924 0.5062	0.5554 0.4760	0.4938	0.5088	0.4798	Ave		0.5018				5.3		15.0			
Ethyl methacrylate	0.7011 0.7387	0.6967 0.7140	0.7304	0.7188	0.6501	Ave		0.7071				4.1		15.0			
Toluene	1.6224 1.7282	1.8264 1.6068	1.8304	1.7172	1.6537	Ave		1.7122				5.3		15.0			
1,3-Dichloropropane	0.9177 0.8897	0.9072 0.8463	0.8765	0.9262	0.8461	Ave		0.8871				3.7		15.0			
2-Hexanone	0.7383 0.7308	0.8013 0.6952	0.7334	0.7377	0.7148	Ave		0.7359				4.4		15.0			
Dibromochloromethane	0.6628 0.7267	0.7522 0.7090	0.7389	0.7695	0.6909	Ave		0.7214				5.1		15.0			
1,2-Dibromoethane	0.5647 0.5294	0.5191 0.5077	0.5534	0.5262	0.4949	Ave		0.5279				4.6		15.0			
Tetrachloroethene	0.6094 0.6305	0.7206 0.5827	0.6878	0.6371	0.6293	Ave		0.6425				7.3		15.0			
1-Chlorohexane	1.0225 1.1174	1.1779 1.0386	1.2347	1.1772	1.1382	Ave		1.1295				6.8		15.0			
1,1,1,2-Tetrachloroethane	0.8179 0.7676	0.8547 0.7400	0.8230	0.8040	0.7448	Ave		0.7931				5.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Houston Job No.: 600-141139-1 Analy Batch No.: 202687
SDG No.: _____
Instrument ID: CHVOAMS06 GC Column: DB-VRX 60 ID: 0.25 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 12/13/2016 13:18 Calibration End Date: 12/13/2016 16:07 Calibration ID: 10770

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Chlorobenzene	2.0553 1.9055	2.1712 1.8363	2.2083	1.9808	1.9015	Ave		2.0084			0.3000	7.1		15.0			
Ethylbenzene	1.1424 1.0777	1.2059 1.0098	1.2227	1.1083	1.0564	Ave		1.1176				7.0		15.0			
m-Xylene & p-Xylene	3.1762 2.7553	2.9824 2.6911	3.2086	2.9418	2.8007	Ave		2.9366				6.9		15.0			
Bromoform	0.3926 0.5635	0.4751 0.5812	0.4839	0.5000	0.5149	Ave		0.5016			0.1000	12.4		15.0			
Styrene	2.2926 2.0837	2.2342 2.0521	2.3081	2.2448	2.1196	Ave		2.1907				4.7		15.0			
1,1,2,2-Tetrachloroethane	0.6574 0.6313	0.6778 0.6030	0.6590	0.5966	0.5574	Ave		0.6261			0.3000	6.8		15.0			
o-Xylene	1.3598 1.1910	1.4258 1.1855	1.4377	1.3497	1.2576	Ave		1.3153				8.0		15.0			
trans-1,4-Dichloro-2-butene	0.2831 0.3756	0.2202 0.3661	0.2031	0.2860	0.3028	Lin1	-0.126	0.3608							0.9920		0.9900
1,2,3-Trichloropropane	0.2625 0.2534	0.2638 0.2579	0.3115	0.2432	0.2294	Ave		0.2602				9.8		15.0			
Isopropylbenzene	4.5680 4.4426	4.2798 4.4511	4.5109	4.1347	4.0310	Ave		4.3454				4.7		15.0			
Bromobenzene	1.1648 1.1349	1.0567 1.1185	1.0256	1.0281	1.0086	Ave		1.0767				5.7		15.0			
N-Propylbenzene	1.3664 1.2068	1.2242 1.1713	1.2041	1.1127	1.0725	Ave		1.1940				7.9		15.0			
2-Chlorotoluene	0.9784 0.9685	1.0544 0.9353	1.0431	0.9510	0.8530	Ave		0.9691				7.0		15.0			
4-Chlorotoluene	2.9875 3.2210	3.3286 3.1360	3.1878	2.9960	2.9452	Ave		3.1146				4.6		15.0			
1,3,5-Trimethylbenzene	4.1726 3.3414	3.9541 3.4168	3.7366	3.3840	3.1864	Ave		3.5989				10.1		15.0			
tert-Butylbenzene	3.1076 2.7781	3.2629 2.7228	3.1730	2.8658	2.6709	Ave		2.9401				8.1		15.0			
1,2,4-Trimethylbenzene	3.9346 3.3849	3.8096 3.4506	3.8274	3.3864	3.2675	Ave		3.5801				7.5		15.0			
sec-Butylbenzene	4.3333 3.8087	4.5288 3.7720	4.4605	4.1219	3.7868	Ave		4.1160				8.0		15.0			
Benzyl chloride	1.0432 1.2617	1.2814 1.2190	1.3305	1.2749	1.3117	Ave		1.2460				7.7		15.0			
1,3-Dichlorobenzene	1.9983 1.7987	1.8156 1.7299	2.0057	1.8071	1.7365	Ave		1.8417				6.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Houston Job No.: 600-141139-1 Analy Batch No.: 202687
SDG No.: _____
Instrument ID: CHVOAMS06 GC Column: DB-VRX 60 ID: 0.25 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 12/13/2016 13:18 Calibration End Date: 12/13/2016 16:07 Calibration ID: 10770

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,4-Dichlorobenzene	1.9577 1.7966	2.0452 1.6737	1.8746	1.8433	1.7416	Ave		1.8475				6.8		15.0			
4-Isopropyltoluene	3.8941 3.2094	4.0927 3.1855	4.0665	3.5838	3.2480	Ave		3.6115				11.3		15.0			
1,2,3-Trimethylbenzene	3.5085 3.0095	3.8475 3.0702	3.7796	3.4525	2.9305	Ave		3.3712				11.1		15.0			
1,2-Dichlorobenzene	1.4216 1.3741	1.6078 1.3036	1.6439	1.5195	1.3840	Ave		1.4649				8.7		15.0			
n-Butylbenzene	3.1266 2.4930	3.3205 2.4228	3.1772	2.8560	2.5999	Ave		2.8566				12.6		15.0			
1,2-Dibromo-3-Chloropropane	0.0088 0.0398	0.0678 0.0341	0.0643	0.0386	0.0515	Qua	0.0129	0.0457	-0.000238						0.9960		0.9900
1,3,5-Trichlorobenzene	0.4143 0.3219	0.5882 0.2998	0.7012	0.5161	0.4226	Lin	0.6950	0.2889							0.9930		0.9900
Naphthalene	++++ 0.1388	0.1266 0.1187	0.1427	0.1456	0.1484	Ave		0.1368				8.5		15.0			
1,2,3-Trichlorobenzene	++++ 0.0443	0.0393 0.0357	0.0598	0.0552	0.0517	Qua	0.0151	0.0507	-0.000306						0.9990		0.9900
Dibromofluoromethane	0.2758 0.2723	0.2851 0.2614	0.2764	0.2755	0.2747	Ave		0.2745				2.6		15.0			
1,2-Dichloroethane-d4 (Surr)	0.4265 0.4162	0.4456 0.4037	0.4767	0.4335	0.4203	Ave		0.4318				5.5		15.0			
Toluene-d8 (Surr)	2.5129 2.1503	2.3198 2.1139	2.3578	2.1939	2.2430	Ave		2.2702				6.1		15.0			
4-Bromofluorobenzene	1.3097 1.2032	1.2165 1.1950	1.0698	1.1112	1.1059	Ave		1.1730				7.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Houston Job No.: 600-141139-1 Analy Batch No.: 202687

SDG No.: _____

Instrument ID: CHVOAMS06 GC Column: DB-VRX 60 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/13/2016 13:18 Calibration End Date: 12/13/2016 16:07 Calibration ID: 10770

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 600-202687/3	J34801.D
Level 2	IC 600-202687/4	J34802.D
Level 3	IC 600-202687/5	J34803.D
Level 4	IC 600-202687/6	J34804.D
Level 5	ICIS 600-202687/7	J34805.D
Level 6	IC 600-202687/8	J34806.D
Level 7	IC 600-202687/9	J34807.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Lin2	2083 155350	6481 415863	12803	38694	81448	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Chloromethane	FB	Ave	5293 246373	10829 639666	21354	59437	124632	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Vinyl chloride	FB	Ave	3468 171612	7981 459890	15093	42316	95477	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Butadiene	FB	Ave	4552 251218	12989 619943	19381	59429	124442	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Bromomethane	FB	Ave	1659 83712	3661 222145	7677	20293	39929	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Chloroethane	FB	Lin2	1435 91580	4232 248762	7945	24501	49888	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Dichlorofluoromethane	FB	Lin2	4104 255589	10559 677032	19299	61365	124717	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Acetonitrile	FB	Ave	3515 134562	5936 334531	11675	33286	67120	5.00 200	10.0 500	20.0	50.0	100
Acrolein	FB	Ave	1444 41645	2416 122720	5895	13998	20325	2.50 100	5.00 250	10.0	25.0	50.0
Trichlorofluoromethane	FB	Lin2	4450 308181	11245 803423	22957	74914	157837	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Isopropyl alcohol	FB	Qua	4228 67695	3912 257923	11406	24311	43572	5.00 200	10.0 500	20.0	50.0	100
Acetone	FB	Lin1	4472 116589	7517 272154	15186	34168	49977	1.00 40.0	2.00 100	4.00	10.0	20.0
Ethyl ether	FB	Ave	5704 188223	10091 468960	21680	48495	98270	0.500 20.0	1.00 50.0	2.00	5.00	10.0
t-Butanol	FB	Lin1	7951 164760	8314 500277	19576	51418	101053	5.00 200	10.0 500	20.0	50.0	100
1,1-Dichloroethene	FB	Ave	3770 141646	8717 345104	17483	41067	75567	0.500 20.0	1.00 50.0	2.00	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Houston Job No.: 600-141139-1 Analy Batch No.: 202687
SDG No.: _____
Instrument ID: CHVOAMS06 GC Column: DB-VRX 60 ID: 0.25 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 12/13/2016 13:18 Calibration End Date: 12/13/2016 16:07 Calibration ID: 10770

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Acrylonitrile	FB	Ave	14581 495738	20201 1254542	47860	127430	256904	5.00 200	10.0 500	20.0	50.0	100
Iodomethane	FB	Ave	7434 272135	14537 649465	30589	66822	130950	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Methylene Chloride	FB	Lin1	9599 163411	11074 392662	18802	47092	89120	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Methyl acetate	FB	Ave	20508 728771	32264 1738011	73283	182710	358980	2.50 100	5.00 250	10.0	25.0	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	4100 132313	6368 304321	14629	36161	60174	0.500 20.0	1.00 50.0	2.00	5.00	10.0
3-Chloro-1-propene	FB	Ave	2967 89527	5511 196286	10571	25071	46674	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Carbon disulfide	FB	Ave	13918 447715	24828 1066140	48081	114604	227014	0.500 20.0	1.00 50.0	2.00	5.00	10.0
trans-1,2-Dichloroethene	FB	Ave	4760 175210	10241 425993	18508	46139	90457	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Methyl tert-butyl ether	FB	Ave	16157 585103	30392 1421897	64315	150096	301930	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Propionitrile	FB	Ave	4628 197516	8273 479091	15828	45629	93947	5.00 200	10.0 500	20.0	50.0	100
1,1-Dichloroethane	FB	Ave	10933 388271	20394 951888	41895	102845	209124	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Vinyl acetate	FB	Ave	25956 1022719	43794 2390679	109272	268367	498069	1.00 40.0	2.00 100	4.00	10.0	20.0
2-Chloro-1,3-butadiene	FB	Ave	15867 613262	30540 1477344	64228	160831	324053	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Hexane	FB	Ave	11801 400162	22768 939607	47638	111015	212370	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Isopropyl ether	FB	Ave	29926 1060705	60925 2618124	117747	277652	566037	0.500 20.0	1.00 50.0	2.00	5.00	10.0
2-Butanone (MEK)	FB	Lin1	212 32251	626 80500	2956	8594	14219	1.00 40.0	2.00 100	4.00	10.0	20.0
Methacrylonitrile	FB	Ave	3533 166437	8662 415236	16675	43040	80211	5.00 200	10.0 500	20.0	50.0	100
cis-1,2-Dichloroethene	FB	Ave	5719 188921	11275 462800	19087	47183	97568	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Ethyl acetate	FB	Ave	10233 417491	22172 1035833	44717	108546	217346	1.00 40.0	2.00 100	4.00	10.0	20.0
Chlorobromomethane	FB	Ave	1692 84298	4892 209029	8905	21632	42414	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Chloroform	FB	Ave	10766 361418	19160 890002	40711	91922	184950	0.500 20.0	1.00 50.0	2.00	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Houston Job No.: 600-141139-1 Analy Batch No.: 202687
SDG No.: _____
Instrument ID: CHVOAMS06 GC Column: DB-VRX 60 ID: 0.25 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 12/13/2016 13:18 Calibration End Date: 12/13/2016 16:07 Calibration ID: 10770

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Tert-butyl ethyl ether	FB	Ave	23858 860053	47899 2123534	91289	216355	440850	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Isobutyl alcohol	FB	Lin	13003 315531	20584 1021217	35689	69284	185471	12.5 500	25.0 1250	50.0	125	250
2,2-Dichloropropane	FB	Ave	6861 223274	14688 481795	27083	63715	119234	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Tetrahydrofuran	FB	Ave	4226 119851	6560 263043	13330	33382	62272	1.00 40.0	2.00 100	4.00	10.0	20.0
1,2-Dichloroethane	FB	Ave	10733 360948	18745 886168	39870	93634	183525	0.500 20.0	1.00 50.0	2.00	5.00	10.0
1,1,1-Trichloroethane	FB	Ave	11232 372840	20803 890052	43475	96957	188545	0.500 20.0	1.00 50.0	2.00	5.00	10.0
n-Butanol	FB	Ave	2659 113232	5531 311362	13221	30524	56685	12.5 500	25.0 1250	50.0	125	250
1,1-Dichloropropene	FB	Ave	6201 260589	14816 612228	26580	68479	131677	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Cyclohexane	FB	Ave	7223 255069	13320 551966	26348	62535	117365	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Carbon tetrachloride	FB	Ave	10441 350114	18072 826143	37294	91252	178077	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Benzene	FB	Ave	20161 648271	34841 1582576	71761	167697	334299	0.500 20.0	1.00 50.0	2.00	5.00	10.0
2-Nitropropane	FB	Ave	9163 322217	18159 793616	35513	85308	168842	1.00 40.0	2.00 100	4.00	10.0	20.0
Tert-amyl methyl ether	FB	Ave	14366 507022	28761 1254085	56704	136494	265317	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Isooctane	FB	Ave	24808 777171	45585 1809704	91906	213319	404883	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Ethyl acrylate	FB	Ave	10336 383191	19530 954073	43087	99191	181858	0.500 20.0	1.00 50.0	2.00	5.00	10.0
n-Heptane	FB	Ave	13528 468706	25401 1061098	53494	119735	249996	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Dibromomethane	FB	Ave	3217 93103	4653 236876	10837	25115	46252	0.500 20.0	1.00 50.0	2.00	5.00	10.0
1,2-Dichloropropane	FB	Ave	5429 182573	11340 439450	20247	46999	93345	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Trichloroethene	FB	Ave	5254 191515	10286 469278	21830	50598	96276	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Bromodichloromethane	FB	Ave	7085 269676	15313 667545	27720	70767	141258	0.500 20.0	1.00 50.0	2.00	5.00	10.0
1,4-Dioxane	FB	Lin	170 20108	346 53742	637	2602	11697	10.0 400	20.0 1000	40.0	100	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Houston Job No.: 600-141139-1 Analy Batch No.: 202687

SDG No.: _____

Instrument ID: CHVOAMS06 GC Column: DB-VRX 60 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/13/2016 13:18 Calibration End Date: 12/13/2016 16:07 Calibration ID: 10770

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
2-Chloroethyl vinyl ether	CBNZ d5	Ave	5242 194862	9991 519461	21253	48655	92861	1.00 40.0	2.00 100	4.00	10.0	20.0
Methyl methacrylate	FB	Ave	7675 239780	13406 554771	27660	66609	128290	1.00 40.0	2.00 100	4.00	10.0	20.0
Methylcyclohexane	FB	Ave	7889 284793	15792 654014	30590	78023	145179	0.500 20.0	1.00 50.0	2.00	5.00	10.0
cis-1,3-Dichloropropene	CBNZ d5	Ave	6326 278457	16054 727746	28909	71674	135707	0.500 20.0	1.00 50.0	2.00	5.00	10.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	15067 527195	31154 1373039	57918	144708	250419	1.00 40.0	2.00 100	4.00	10.0	20.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	6688 279215	15321 726576	28302	70254	137929	0.500 20.0	1.00 50.0	2.00	5.00	10.0
n-Butyl acetate	CBNZ d5	Ave	3437 113851	5997 293892	12109	29170	55625	0.500 20.0	1.00 50.0	2.00	5.00	10.0
1,1,2-Trichloroethane	CBNZ d5	Ave	3420 130491	7436 325284	13158	34421	62736	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Ethyl methacrylate	CBNZ d5	Ave	4870 190430	9327 487956	19464	48628	85004	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Toluene	CBNZ d5	Ave	11269 445548	24452 1098095	48776	116168	216228	0.500 20.0	1.00 50.0	2.00	5.00	10.0
1,3-Dichloropropane	CBNZ d5	Ave	6374 229375	12146 578384	23357	62658	110633	0.500 20.0	1.00 50.0	2.00	5.00	10.0
2-Hexanone	CBNZ d5	Ave	10256 376811	21456 950241	39084	99814	186922	1.00 40.0	2.00 100	4.00	10.0	20.0
Dibromochloromethane	CBNZ d5	Ave	4604 187357	10071 484553	19689	52057	90340	0.500 20.0	1.00 50.0	2.00	5.00	10.0
1,2-Dibromoethane	CBNZ d5	Ave	3922 136489	6950 347005	14746	35601	64713	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Tetrachloroethene	CBNZ d5	Ave	4233 162555	9647 398205	18329	43101	82286	0.500 20.0	1.00 50.0	2.00	5.00	10.0
1-Chlorohexane	CBNZ d5	Ave	7102 288082	15770 709780	32901	79637	148825	0.500 20.0	1.00 50.0	2.00	5.00	10.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	5681 197904	11443 505697	21930	54394	97386	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Chlorobenzene	CBNZ d5	Ave	14276 491249	29068 1254951	58845	133999	248628	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Ethylbenzene	CBNZ d5	Ave	7935 277850	16145 690147	32581	74977	138126	0.500 20.0	1.00 50.0	2.00	5.00	10.0
m-Xylene & p-Xylene	CBNZ d5	Ave	22061 710341	39928 1839149	85500	199013	366207	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Bromoform	DCBd 4	Ave	2354 103911	5542 281341	11532	29955	55751	0.500 20.0	1.00 50.0	2.00	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Houston Job No.: 600-141139-1 Analy Batch No.: 202687

SDG No.: _____

Instrument ID: CHVOAMS06 GC Column: DB-VRX 60 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/13/2016 13:18 Calibration End Date: 12/13/2016 16:07 Calibration ID: 10770

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Styrene	CBNZ d5	Ave	15924 537203	29912 1402456	61505	151862	277154	0.500 20.0	1.00 50.0	2.00	5.00	10.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	3941 116411	7907 291882	15705	35748	60347	0.500 20.0	1.00 50.0	2.00	5.00	10.0
o-Xylene	CBNZ d5	Ave	9445 307041	19089 810166	38311	91309	164439	0.500 20.0	1.00 50.0	2.00	5.00	10.0
trans-1,4-Dichloro-2-butene	DCBd 4	Lin1	1697 69266	2569 177227	4841	17137	32781	0.500 20.0	1.00 50.0	2.00	5.00	10.0
1,2,3-Trichloropropane	DCBd 4	Ave	1574 46736	3077 124848	7423	14571	24838	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Isopropylbenzene	DCBd 4	Ave	27386 819217	49928 2154721	107505	247733	436436	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Bromobenzene	DCBd 4	Ave	6983 209272	12328 541462	24443	61601	109200	0.500 20.0	1.00 50.0	2.00	5.00	10.0
N-Propylbenzene	DCBd 4	Ave	8192 222528	14282 566991	28697	66666	116119	0.500 20.0	1.00 50.0	2.00	5.00	10.0
2-Chlorotoluene	DCBd 4	Ave	5866 178591	12301 452784	24860	56979	92353	0.500 20.0	1.00 50.0	2.00	5.00	10.0
4-Chlorotoluene	DCBd 4	Ave	17911 593965	38832 1518100	75973	179510	318869	0.500 20.0	1.00 50.0	2.00	5.00	10.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	25016 616168	46129 1654010	89053	202757	344992	0.500 20.0	1.00 50.0	2.00	5.00	10.0
tert-Butylbenzene	DCBd 4	Ave	18631 512288	38065 1318061	75619	171706	289172	0.500 20.0	1.00 50.0	2.00	5.00	10.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	23589 624177	44443 1670378	91215	202898	353766	0.500 20.0	1.00 50.0	2.00	5.00	10.0
sec-Butylbenzene	DCBd 4	Ave	25979 702336	52833 1825999	106303	246969	409991	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Benzyl chloride	DCBd 4	Ave	6254 232654	14949 590112	31708	76385	142020	0.500 20.0	1.00 50.0	2.00	5.00	10.0
1,3-Dichlorobenzene	DCBd 4	Ave	11980 331680	21181 837425	47800	108272	188005	0.500 20.0	1.00 50.0	2.00	5.00	10.0
1,4-Dichlorobenzene	DCBd 4	Ave	11737 331289	23859 810240	44676	110442	188566	0.500 20.0	1.00 50.0	2.00	5.00	10.0
4-Isopropyltoluene	DCBd 4	Ave	23346 591826	47746 1542071	96915	214727	351662	0.500 20.0	1.00 50.0	2.00	5.00	10.0
1,2,3-Trimethylbenzene	DCBd 4	Ave	21034 554950	44885 1486265	90076	206856	317277	0.500 20.0	1.00 50.0	2.00	5.00	10.0
1,2-Dichlorobenzene	DCBd 4	Ave	8523 253378	18757 631050	39177	91041	149848	0.500 20.0	1.00 50.0	2.00	5.00	10.0
n-Butylbenzene	DCBd 4	Ave	18745 459704	38737 1172846	75720	171117	281488	0.500 20.0	1.00 50.0	2.00	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Houston Job No.: 600-141139-1 Analy Batch No.: 202687

SDG No.: _____

Instrument ID: CHVOAMS06 GC Column: DB-VRX 60 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/13/2016 13:18 Calibration End Date: 12/13/2016 16:07 Calibration ID: 10770

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,2-Dibromo-3-Chloropropane	DCBd 4	Qua	53 7344	791 16491	1533	2313	5579	0.500 20.0	1.00 50.0	2.00	5.00	10.0
1,3,5-Trichlorobenzene	DCBd 4	Lin	2484 59356	6862 145144	16712	30923	45759	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Naphthalene	DCBd 4	Ave	++++ 25593	1477 57468	3402	8723	16069	++++ 20.0	1.00 50.0	2.00	5.00	10.0
1,2,3-Trichlorobenzene	DCBd 4	Qua	++++ 8160	459 17301	1426	3307	5600	++++ 20.0	1.00 50.0	2.00	5.00	10.0
Dibromofluoromethane	FB	Ave	4314 165222	8703 402017	17094	41427	85518	0.500 20.0	1.00 50.0	2.00	5.00	10.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	6672 252523	13602 620848	29485	65186	130868	0.500 20.0	1.00 50.0	2.00	5.00	10.0
Toluene-d8 (Surr)	CBNZ d5	Ave	17454 554354	31058 1444708	62830	148415	293283	0.500 20.0	1.00 50.0	2.00	5.00	10.0
4-Bromofluorobenzene	DCBd 4	Ave	7852 221874	14192 578464	25496	66576	119731	0.500 20.0	1.00 50.0	2.00	5.00	10.0

Curve Type Legend:

Ave = Average ISTD
Lin = Linear ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD
Qua = Quadratic ISTD

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Lab Sample ID: CCVIS 600-203037/3 Calibration Date: 12/18/2016 12:16
 Instrument ID: CHVOAMS06 Calib Start Date: 12/13/2016 13:18
 GC Column: DB-VRX 60 ID: 0.25 (mm) Calib End Date: 12/13/2016 16:07
 Lab File ID: J35301A.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Lin2		0.1901		7.44	10.0	-25.6	35.0
Chloromethane	Ave	0.3794	0.3691	0.1000	9.73	10.0	-2.7	35.0
Vinyl chloride	Ave	0.2710	0.2497		9.22	10.0	-7.9	20.0
Butadiene	Ave	0.3774	0.3387		8.98	10.0	-10.3	35.0
Bromomethane	Ave	0.1280	0.1338		10.5	10.0	4.6	35.0
Chloroethane	Lin2		0.1354		8.65	10.0	-13.5	35.0
Dichlorofluoromethane	Lin2		0.3873		9.54	10.0	-4.6	50.0
Acetonitrile	Ave	0.0212	0.0295		139	100	38.9	50.0
Acrolein	Ave	0.0164	0.0085		25.9	50.0	-48.3	50.0
Trichlorofluoromethane	Lin2		0.3513		7.21	10.0	-27.9	35.0
Isopropyl alcohol	Qua		0.0078		65.6	100	-34.4	50.0
Acetone	Lin1		0.0506		10.5	20.0	-47.4*	35.0
Ethyl ether	Ave	0.3284	0.2656		8.09	10.0	-19.1	35.0
t-Butanol	Lin1		0.0158		49.3	100	-50.7*	35.0
1,1-Dichloroethene	Ave	0.2547	0.2588		10.2	10.0	1.6	20.0
Acrylonitrile	Ave	0.0810	0.0477		58.9	100	-41.1	50.0
Iodomethane	Ave	0.4546	0.4504		9.91	10.0	-0.9	35.0
Methylene Chloride	Lin1		0.2438		8.87	10.0	-11.3	50.0
Methyl acetate	Ave	0.2358	0.1389		29.5	50.0	-41.1*	35.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2224	0.2502		11.3	10.0	12.5	35.0
3-Chloro-1-propene	Ave	0.1619	0.1389		8.58	10.0	-14.2	35.0
Carbon disulfide	Ave	0.7719	0.8528		11.1	10.0	10.5	35.0
trans-1,2-Dichloroethene	Ave	0.3003	0.2796		9.31	10.0	-6.9	35.0
Methyl tert-butyl ether	Ave	0.9893	0.8169		8.26	10.0	-17.4	35.0
Propionitrile	Ave	0.0295	0.0166		56.3	100	-43.7*	35.0
1,1-Dichloroethane	Ave	0.6656	0.6090	0.1000	9.15	10.0	-8.5	35.0
Vinyl acetate	Ave	0.8204	0.7020		17.1	20.0	-14.4	50.0
2-Chloro-1,3-butadiene	Ave	1.019	0.9686		9.50	10.0	-5.0	35.0
Hexane	Ave	0.7088	0.6649		9.38	10.0	-6.2	35.0
Isopropyl ether	Ave	1.847	1.543		8.36	10.0	-16.4	35.0
2-Butanone (MEK)	Lin1		0.0236		18.6	20.0	-7.2	50.0
Methacrylonitrile	Ave	0.0267	0.0172		64.6	100	-35.4*	35.0
cis-1,2-Dichloroethene	Ave	0.3262	0.2822		8.65	10.0	-13.5	35.0
Ethyl acetate	Ave	0.3489	0.2278		13.1	20.0	-34.7	35.0
Chlorobromomethane	Ave	0.1382	0.1250		9.04	10.0	-9.6	35.0
Chloroform	Ave	0.6220	0.5557		8.93	10.0	-10.7	20.0
Tert-butyl ethyl ether	Ave	1.461	1.190		8.15	10.0	-18.5	35.0
Isobutyl alcohol	Lin		0.0178		192	250	-23.4	50.0
2,2-Dichloropropane	Ave	0.4065	0.3289		8.09	10.0	-19.1	35.0
Tetrahydrofuran	Ave	0.1065	0.0717		13.5	20.0	-32.7	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Lab Sample ID: CCVIS 600-203037/3 Calibration Date: 12/18/2016 12:16

Instrument ID: CHVOAMS06 Calib Start Date: 12/13/2016 13:18

GC Column: DB-VRX 60 ID: 0.25 (mm) Calib End Date: 12/13/2016 16:07

Lab File ID: J35301A.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloroethane	Ave	0.6183	0.4907		7.94	10.0	-20.6	35.0
1,1,1-Trichloroethane	Ave	0.6495	0.5761		8.87	10.0	-11.3	35.0
1,1-Dichloropropene	Ave	0.4311	0.4347		10.1	10.0	0.8	35.0
Cyclohexane	Ave	0.4138	0.4323		10.5	10.0	4.5	35.0
Carbon tetrachloride	Ave	0.5937	0.3498		5.89	10.0	-41.1*	35.0
Benzene	Ave	1.125	1.048		9.31	10.0	-6.9	35.0
Tert-amyl methyl ether	Ave	0.8841	0.8632		9.76	10.0	-2.4	35.0
2-Nitropropane	Ave	0.2794	0.2364		16.9	20.0	-15.4	35.0
Isooctane	Ave	1.392	1.434		10.3	10.0	3.0	35.0
Ethyl acrylate	Ave	0.6419	0.6498		10.1	10.0	1.2	35.0
n-Heptane	Ave	0.8034	0.7186		8.94	10.0	-10.6	35.0
Dibromomethane	Ave	0.1652	0.1455		8.81	10.0	-11.9	35.0
1,2-Dichloropropane	Ave	0.3207	0.3204		9.99	10.0	-0.0	20.0
Trichloroethene	Ave	0.3275	0.3093		9.45	10.0	-5.5	35.0
Bromodichloromethane	Ave	0.4580	0.3826		8.35	10.0	-16.5	35.0
1,4-Dioxane	Lin		0.0020		247	200	23.4	50.0
2-Chloroethyl vinyl ether	Ave	0.3746	0.3131		16.7	20.0	-16.4	35.0
Methyl methacrylate	Ave	0.2134	0.2055		19.3	20.0	-3.7	50.0
Methylcyclohexane	Ave	0.4852	0.4818		9.93	10.0	-0.7	35.0
cis-1,3-Dichloropropene	Ave	1.062	1.083		10.2	10.0	2.0	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.4606	0.3666		15.9	20.0	-20.4	50.0
trans-1,3-Dichloropropene	Ave	1.058	1.019		9.62	10.0	-3.8	35.0
n-Butyl acetate	Ave	0.4465	0.3538		7.93	10.0	-20.8	35.0
1,1,2-Trichloroethane	Ave	0.5018	0.3994		7.96	10.0	-20.4	35.0
Ethyl methacrylate	Ave	0.7071	0.6408		9.06	10.0	-9.4	50.0
Toluene	Ave	1.712	1.673		9.77	10.0	-2.3	20.0
1,3-Dichloropropane	Ave	0.8871	0.7509		8.47	10.0	-15.3	35.0
2-Hexanone	Ave	0.7359	0.5904		16.0	20.0	-19.8	50.0
Dibromochloromethane	Ave	0.7214	0.6538		9.06	10.0	-9.4	35.0
1,2-Dibromoethane	Ave	0.5279	0.5097		9.66	10.0	-3.4	35.0
Tetrachloroethene	Ave	0.6425	0.6471		10.1	10.0	0.7	35.0
1-Chlorohexane	Ave	1.129	1.158		10.3	10.0	2.6	35.0
1,1,1,2-Tetrachloroethane	Ave	0.7931	0.7422		9.36	10.0	-6.4	35.0
Chlorobenzene	Ave	2.008	1.894	0.3000	9.43	10.0	-5.7	35.0
Ethylbenzene	Ave	1.118	1.110		9.93	10.0	-0.7	20.0
m-Xylene & p-Xylene	Ave	2.937	2.825		9.62	10.0	-3.8	35.0
Bromoform	Ave	0.5016	0.5374	0.1000	10.7	10.0	7.1	35.0
Styrene	Ave	2.191	1.948		8.89	10.0	-11.1	35.0
o-Xylene	Ave	1.315	1.209		9.19	10.0	-8.1	35.0
1,1,2,2-Tetrachloroethane	Ave	0.6261	0.7585	0.3000	12.1	10.0	21.2	35.0
trans-1,4-Dichloro-2-butene	Lin1		0.2332		6.81	10.0	-31.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Lab Sample ID: CCVIS 600-203037/3 Calibration Date: 12/18/2016 12:16
 Instrument ID: CHVOAMS06 Calib Start Date: 12/13/2016 13:18
 GC Column: DB-VRX 60 ID: 0.25 (mm) Calib End Date: 12/13/2016 16:07
 Lab File ID: J35301A.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichloropropane	Ave	0.2602	0.2847		10.9	10.0	9.4	35.0
Isopropylbenzene	Ave	4.345	6.454		14.9	10.0	48.5*	35.0
Bromobenzene	Ave	1.077	1.382		12.8	10.0	28.4	35.0
N-Propylbenzene	Ave	1.194	1.583		13.3	10.0	32.6	35.0
2-Chlorotoluene	Ave	0.9691	1.298		13.4	10.0	33.9	35.0
4-Chlorotoluene	Ave	3.115	4.063		13.1	10.0	30.5	35.0
1,3,5-Trimethylbenzene	Ave	3.599	4.939		13.7	10.0	37.2*	35.0
tert-Butylbenzene	Ave	2.940	4.167		14.2	10.0	41.7*	35.0
1,2,4-Trimethylbenzene	Ave	3.580	4.740		13.2	10.0	32.4	35.0
sec-Butylbenzene	Ave	4.116	5.678		13.8	10.0	37.9*	35.0
Benzyl chloride	Ave	1.246	1.010		8.11	10.0	-18.9	35.0
1,3-Dichlorobenzene	Ave	1.842	1.958		10.6	10.0	6.3	35.0
1,4-Dichlorobenzene	Ave	1.848	1.834		9.93	10.0	-0.7	35.0
4-Isopropyltoluene	Ave	3.611	4.693		13.0	10.0	30.0	35.0
1,2,3-Trimethylbenzene	Ave	3.371	4.267		12.7	10.0	26.6	35.0
1,2-Dichlorobenzene	Ave	1.465	1.255		8.57	10.0	-14.3	35.0
n-Butylbenzene	Ave	2.857	3.344		11.7	10.0	17.1	35.0
1,2-Dibromo-3-Chloropropane	Qua		0.0135		2.72	10.0	-72.8*	35.0
1,3,5-Trichlorobenzene	Lin		0.1446		2.60	10.0	-74.0*	35.0
Naphthalene	Ave	0.1368	0.0535		3.91	10.0	-60.9*	35.0
Hexachlorobutadiene	None		0.0256			10.0		35.0
1,2,3-Trichlorobenzene	Qua				0.570	10.0	-100.0*	35.0
1,2,4-Trichlorobenzene	None				0.177	10.0	-100.0*	35.0
Cyclohexanone	None				8.64	500	-100.0*	35.0
Dibromofluoromethane	Ave	0.2745	0.2466		8.99	10.0	-10.1	35.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.4318	0.3308		7.66	10.0	-23.4	35.0
Toluene-d8 (Surr)	Ave	2.270	2.280		10.0	10.0	0.4	35.0
4-Bromofluorobenzene	Ave	1.173	1.556		13.3	10.0	32.7	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Lab Sample ID: CCVIS 600-203087/3 Calibration Date: 12/19/2016 12:14
 Instrument ID: CHVOAMS06 Calib Start Date: 12/13/2016 13:18
 GC Column: DB-VRX 60 ID: 0.25 (mm) Calib End Date: 12/13/2016 16:07
 Lab File ID: J35401.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Lin2		0.1824		7.15	10.0	-28.5	35.0
Chloromethane	Ave	0.3794	0.3102	0.1000	8.18	10.0	-18.2	35.0
Vinyl chloride	Ave	0.2710	0.2293		8.46	10.0	-15.4	20.0
Butadiene	Ave	0.3774	0.3376		8.95	10.0	-10.5	35.0
Bromomethane	Ave	0.1280	0.1242		9.70	10.0	-3.0	35.0
Chloroethane	Lin2		0.1339		8.56	10.0	-14.4	35.0
Dichlorofluoromethane	Lin2		0.3462		8.55	10.0	-14.5	50.0
Acetonitrile	Ave	0.0212	0.0277		131	100	30.8	50.0
Acrolein	Ave	0.0164	0.0132		40.4	50.0	-19.3	50.0
Trichlorofluoromethane	Lin2		0.3406		7.00	10.0	-30.0	35.0
Isopropyl alcohol	Qua		0.0064		50.7	100	-49.3	50.0
Acetone	Lin1		0.0466		9.61	20.0	-52.0*	35.0
Ethyl ether	Ave	0.3284	0.2718		8.28	10.0	-17.2	35.0
t-Butanol	Lin1		0.0200		62.9	100	-37.2*	35.0
1,1-Dichloroethene	Ave	0.2547	0.2670		10.5	10.0	4.8	20.0
Acrylonitrile	Ave	0.0810	0.0509		62.9	100	-37.1	50.0
Iodomethane	Ave	0.4546	0.4347		9.56	10.0	-4.4	35.0
Methylene Chloride	Lin1		0.2539		9.26	10.0	-7.4	50.0
Methyl acetate	Ave	0.2358	0.1653		35.1	50.0	-29.9	35.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2224	0.2374		10.7	10.0	6.7	35.0
3-Chloro-1-propene	Ave	0.1619	0.1346		8.32	10.0	-16.8	35.0
Carbon disulfide	Ave	0.7719	0.8379		10.9	10.0	8.6	35.0
trans-1,2-Dichloroethene	Ave	0.3003	0.2632		8.76	10.0	-12.4	35.0
Methyl tert-butyl ether	Ave	0.9893	0.8288		8.38	10.0	-16.2	35.0
Propionitrile	Ave	0.0295	0.0176		59.6	100	-40.4*	35.0
1,1-Dichloroethane	Ave	0.6656	0.5844	0.1000	8.78	10.0	-12.2	35.0
Vinyl acetate	Ave	0.8204	0.7020		17.1	20.0	-14.4	50.0
2-Chloro-1,3-butadiene	Ave	1.019	0.8878		8.71	10.0	-12.9	35.0
Hexane	Ave	0.7088	0.6379		9.00	10.0	-10.0	35.0
Isopropyl ether	Ave	1.847	1.557		8.43	10.0	-15.7	35.0
2-Butanone (MEK)	Lin1		0.0240		18.9	20.0	-5.5	50.0
Methacrylonitrile	Ave	0.0267	0.0226		84.9	100	-15.1	35.0
cis-1,2-Dichloroethene	Ave	0.3262	0.2772		8.50	10.0	-15.0	35.0
Ethyl acetate	Ave	0.3489	0.2894		16.6	20.0	-17.1	35.0
Chlorobromomethane	Ave	0.1382	0.1215		8.79	10.0	-12.1	35.0
Chloroform	Ave	0.6220	0.5146		8.27	10.0	-17.3	20.0
Tert-butyl ethyl ether	Ave	1.461	1.244		8.52	10.0	-14.8	35.0
Isobutyl alcohol	Lin		0.0119		135	250	-45.9	50.0
2,2-Dichloropropane	Ave	0.4065	0.2703		6.65	10.0	-33.5	35.0
Tetrahydrofuran	Ave	0.1065	0.0685		12.9	20.0	-35.7*	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Lab Sample ID: CCVIS 600-203087/3 Calibration Date: 12/19/2016 12:14

Instrument ID: CHVOAMS06 Calib Start Date: 12/13/2016 13:18

GC Column: DB-VRX 60 ID: 0.25 (mm) Calib End Date: 12/13/2016 16:07

Lab File ID: J35401.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloroethane	Ave	0.6183	0.4775		7.72	10.0	-22.8	35.0
1,1,1-Trichloroethane	Ave	0.6495	0.5649		8.70	10.0	-13.0	35.0
1,1-Dichloropropene	Ave	0.4311	0.4112		9.54	10.0	-4.6	35.0
Cyclohexane	Ave	0.4138	0.4083		9.87	10.0	-1.3	35.0
Carbon tetrachloride	Ave	0.5937	0.4431		7.46	10.0	-25.4	35.0
Benzene	Ave	1.125	1.029		9.14	10.0	-8.6	35.0
Tert-amyl methyl ether	Ave	0.8841	0.7958		9.00	10.0	-10.0	35.0
2-Nitropropane	Ave	0.2794	0.2302		16.5	20.0	-17.6	35.0
Isooctane	Ave	1.392	1.222		8.78	10.0	-12.2	35.0
Ethyl acrylate	Ave	0.6419	0.5462		8.51	10.0	-14.9	35.0
n-Heptane	Ave	0.8034	0.6481		8.07	10.0	-19.3	35.0
Dibromomethane	Ave	0.1652	0.1405		8.50	10.0	-15.0	35.0
1,2-Dichloropropane	Ave	0.3207	0.2976		9.28	10.0	-7.2	20.0
Trichloroethene	Ave	0.3275	0.2880		8.79	10.0	-12.1	35.0
Bromodichloromethane	Ave	0.4580	0.4228		9.23	10.0	-7.7	35.0
1,4-Dioxane	Lin		0.0018		224	200	11.8	50.0
2-Chloroethyl vinyl ether	Ave	0.3746	0.3212		17.2	20.0	-14.2	35.0
Methyl methacrylate	Ave	0.2134	0.1915		17.9	20.0	-10.3	50.0
Methylcyclohexane	Ave	0.4852	0.4844		9.99	10.0	-0.2	35.0
cis-1,3-Dichloropropene	Ave	1.062	0.9615		9.05	10.0	-9.5	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.4606	0.4153		18.0	20.0	-9.8	50.0
trans-1,3-Dichloropropene	Ave	1.058	0.9746		9.21	10.0	-7.9	35.0
n-Butyl acetate	Ave	0.4465	0.3896		8.73	10.0	-12.7	35.0
1,1,2-Trichloroethane	Ave	0.5018	0.4148		8.27	10.0	-17.3	35.0
Ethyl methacrylate	Ave	0.7071	0.6484		9.17	10.0	-8.3	50.0
Toluene	Ave	1.712	1.579		9.22	10.0	-7.8	20.0
1,3-Dichloropropane	Ave	0.8871	0.8087		9.12	10.0	-8.8	35.0
2-Hexanone	Ave	0.7359	0.5960		16.2	20.0	-19.0	50.0
Dibromochloromethane	Ave	0.7214	0.5697		7.90	10.0	-21.0	35.0
1,2-Dibromoethane	Ave	0.5279	0.4217		7.99	10.0	-20.1	35.0
Tetrachloroethene	Ave	0.6425	0.5993		9.33	10.0	-6.7	35.0
1-Chlorohexane	Ave	1.129	1.049		9.28	10.0	-7.2	35.0
1,1,1,2-Tetrachloroethane	Ave	0.7931	0.7244		9.13	10.0	-8.7	35.0
Chlorobenzene	Ave	2.008	1.776	0.3000	8.85	10.0	-11.5	35.0
Ethylbenzene	Ave	1.118	0.9824		8.79	10.0	-12.1	20.0
m-Xylene & p-Xylene	Ave	2.937	2.596		8.84	10.0	-11.6	35.0
Bromoform	Ave	0.5016	0.5273	0.1000	10.5	10.0	5.1	35.0
Styrene	Ave	2.191	1.849		8.44	10.0	-15.6	35.0
o-Xylene	Ave	1.315	1.162		8.83	10.0	-11.7	35.0
1,1,2,2-Tetrachloroethane	Ave	0.6261	0.7000	0.3000	11.2	10.0	11.8	35.0
trans-1,4-Dichloro-2-butene	Lin1		0.1979		5.84	10.0	-41.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Lab Sample ID: CCVIS 600-203087/3 Calibration Date: 12/19/2016 12:14
 Instrument ID: CHVOAMS06 Calib Start Date: 12/13/2016 13:18
 GC Column: DB-VRX 60 ID: 0.25 (mm) Calib End Date: 12/13/2016 16:07
 Lab File ID: J35401.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichloropropane	Ave	0.2602	0.2459		9.45	10.0	-5.5	35.0
Isopropylbenzene	Ave	4.345	5.431		12.5	10.0	25.0	35.0
Bromobenzene	Ave	1.077	1.175		10.9	10.0	9.1	35.0
N-Propylbenzene	Ave	1.194	1.382		11.6	10.0	15.7	35.0
2-Chlorotoluene	Ave	0.9691	1.078		11.1	10.0	11.3	35.0
4-Chlorotoluene	Ave	3.115	3.496		11.2	10.0	12.3	35.0
1,3,5-Trimethylbenzene	Ave	3.599	4.232		11.8	10.0	17.6	35.0
tert-Butylbenzene	Ave	2.940	3.504		11.9	10.0	19.2	35.0
1,2,4-Trimethylbenzene	Ave	3.580	3.997		11.2	10.0	11.6	35.0
sec-Butylbenzene	Ave	4.116	4.764		11.6	10.0	15.7	35.0
Benzyl chloride	Ave	1.246	0.9306		7.47	10.0	-25.3	35.0
1,3-Dichlorobenzene	Ave	1.842	1.720		9.34	10.0	-6.6	35.0
1,4-Dichlorobenzene	Ave	1.848	1.536		8.32	10.0	-16.8	35.0
4-Isopropyltoluene	Ave	3.611	3.933		10.9	10.0	8.9	35.0
1,2,3-Trimethylbenzene	Ave	3.371	3.616		10.7	10.0	7.3	35.0
1,2-Dichlorobenzene	Ave	1.465	1.107		7.56	10.0	-24.5	35.0
n-Butylbenzene	Ave	2.857	2.743		9.60	10.0	-4.0	35.0
1,2-Dibromo-3-Chloropropane	Qua		0.0080		1.49	10.0	-85.1*	35.0
1,3,5-Trichlorobenzene	Lin		0.0822		0.441	10.0	-95.6*	35.0
Naphthalene	Ave	0.1368	0.0481		3.52	10.0	-64.8*	35.0
Hexachlorobutadiene	None		0.0116			10.0		35.0
1,2,3-Trichlorobenzene	Qua				0.570	10.0	-100.0*	35.0
1,2,4-Trichlorobenzene	None				0.177	10.0	-100.0*	35.0
Cyclohexanone	None				8.64	500	-100.0*	35.0
Dibromofluoromethane	Ave	0.2745	0.2403		8.76	10.0	-12.4	35.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.4318	0.3315		7.68	10.0	-23.2	35.0
Toluene-d8 (Surr)	Ave	2.270	2.041		8.99	10.0	-10.1	35.0
4-Bromofluorobenzene	Ave	1.173	1.343		11.5	10.0	14.5	35.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 600-203037/7
 Matrix: Water Lab File ID: J35305.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 20 (mL) Date Analyzed: 12/18/2016 14:44
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX 60 ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 203037 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	0.000176	U	0.00100	0.000176
100-41-4	Ethylbenzene	0.000212	U	0.00100	0.000212
108-88-3	Toluene	0.000198	U	0.00100	0.000198
1330-20-7	Xylenes, Total	0.000366	U	0.00200	0.000366

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	79		50-134
1868-53-7	Dibromofluoromethane	87		62-130
2037-26-5	Toluene-d8 (Surr)	92		70-130
460-00-4	4-Bromofluorobenzene	112		67-139

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 600-203087/7
 Matrix: Water Lab File ID: J35405.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 20 (mL) Date Analyzed: 12/19/2016 14:44
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX 60 ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 203087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	0.000176	U	0.00100	0.000176
100-41-4	Ethylbenzene	0.000212	U	0.00100	0.000212
108-88-3	Toluene	0.000198	U	0.00100	0.000198
1330-20-7	Xylenes, Total	0.000366	U	0.00200	0.000366

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		50-134
1868-53-7	Dibromofluoromethane	88		62-130
2037-26-5	Toluene-d8 (Surr)	91		70-130
460-00-4	4-Bromofluorobenzene	98		67-139

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 600-203037/4
 Matrix: Water Lab File ID: J35302.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 20 (mL) Date Analyzed: 12/18/2016 12:58
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX 60 ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 203037 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	0.009333		0.00100	0.000176
100-41-4	Ethylbenzene	0.009768		0.00100	0.000212
108-88-3	Toluene	0.01024		0.00100	0.000198
1330-20-7	Xylenes, Total	0.01946		0.00200	0.000366

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	73		50-134
1868-53-7	Dibromofluoromethane	83		62-130
2037-26-5	Toluene-d8 (Surr)	91		70-130
460-00-4	4-Bromofluorobenzene	122		67-139

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 600-203087/4
 Matrix: Water Lab File ID: J35402.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 20 (mL) Date Analyzed: 12/19/2016 12:58
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX 60 ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 203087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	0.009934		0.00100	0.000176
100-41-4	Ethylbenzene	0.009108		0.00100	0.000212
108-88-3	Toluene	0.009548		0.00100	0.000198
1330-20-7	Xylenes, Total	0.01859		0.00200	0.000366

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		50-134
1868-53-7	Dibromofluoromethane	86		62-130
2037-26-5	Toluene-d8 (Surr)	85		70-130
460-00-4	4-Bromofluorobenzene	111		67-139

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 600-203037/5
 Matrix: Water Lab File ID: J35303.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 20 (mL) Date Analyzed: 12/18/2016 13:33
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX 60 ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 203037 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	0.008923		0.00100	0.000176
100-41-4	Ethylbenzene	0.008414		0.00100	0.000212
108-88-3	Toluene	0.008902		0.00100	0.000198
1330-20-7	Xylenes, Total	0.01675		0.00200	0.000366

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	79		50-134
1868-53-7	Dibromofluoromethane	85		62-130
2037-26-5	Toluene-d8 (Surr)	87		70-130
460-00-4	4-Bromofluorobenzene	114		67-139

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 600-203087/5
 Matrix: Water Lab File ID: J35403.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 20 (mL) Date Analyzed: 12/19/2016 13:33
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-VRX 60 ID: 0.25 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 203087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	0.008855		0.00100	0.000176
100-41-4	Ethylbenzene	0.009008		0.00100	0.000212
108-88-3	Toluene	0.009217		0.00100	0.000198
1330-20-7	Xylenes, Total	0.01708		0.00200	0.000366

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	77		50-134
1868-53-7	Dibromofluoromethane	89		62-130
2037-26-5	Toluene-d8 (Surr)	94		70-130
460-00-4	4-Bromofluorobenzene	111		67-139

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica HoustonJob No.: 600-141139-1

SDG No.: _____

Instrument ID: CHVOAMS06Start Date: 12/13/2016 12:50Analysis Batch Number: 202687End Date: 12/14/2016 00:07

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 600-202687/2		12/13/2016 12:50	1	J34800AA.D	DB-VRX 60 0.25 (mm)
IC 600-202687/3		12/13/2016 13:18	1	J34801.D	DB-VRX 60 0.25 (mm)
IC 600-202687/4		12/13/2016 13:46	1	J34802.D	DB-VRX 60 0.25 (mm)
IC 600-202687/5		12/13/2016 14:14	1	J34803.D	DB-VRX 60 0.25 (mm)
IC 600-202687/6		12/13/2016 14:42	1	J34804.D	DB-VRX 60 0.25 (mm)
ICIS 600-202687/7		12/13/2016 15:10	1	J34805.D	DB-VRX 60 0.25 (mm)
IC 600-202687/8		12/13/2016 15:39	1	J34806.D	DB-VRX 60 0.25 (mm)
IC 600-202687/9		12/13/2016 16:07	1	J34807.D	DB-VRX 60 0.25 (mm)
ZZZZZ		12/13/2016 17:31	1		DB-VRX 60 0.25 (mm)
ZZZZZ		12/13/2016 18:00	1		DB-VRX 60 0.25 (mm)
ICV 600-202687/1013		12/13/2016 18:00	1		DB-VRX 60 0.25 (mm)
ZZZZZ		12/13/2016 18:57	1		DB-VRX 60 0.25 (mm)
ZZZZZ		12/13/2016 19:26	1		DB-VRX 60 0.25 (mm)
ZZZZZ		12/13/2016 19:53	1		DB-VRX 60 0.25 (mm)
ZZZZZ		12/13/2016 20:22	1		DB-VRX 60 0.25 (mm)
ZZZZZ		12/13/2016 20:50	1		DB-VRX 60 0.25 (mm)
ZZZZZ		12/13/2016 21:18	1		DB-VRX 60 0.25 (mm)
ZZZZZ		12/13/2016 21:46	1		DB-VRX 60 0.25 (mm)
ZZZZZ		12/13/2016 22:14	1		DB-VRX 60 0.25 (mm)
ZZZZZ		12/13/2016 22:43	1		DB-VRX 60 0.25 (mm)
ZZZZZ		12/13/2016 23:11	1		DB-VRX 60 0.25 (mm)
ZZZZZ		12/13/2016 23:39	1		DB-VRX 60 0.25 (mm)
ZZZZZ		12/14/2016 00:07	1		DB-VRX 60 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica HoustonJob No.: 600-141139-1

SDG No.: _____

Instrument ID: CHVOAMS06Start Date: 12/18/2016 11:07Analysis Batch Number: 203037End Date: 12/19/2016 01:16

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 600-203037/2		12/18/2016 11:07	1	J35300B.D	DB-VRX 60 0.25 (mm)
CCVIS 600-203037/3		12/18/2016 12:16	1	J35301A.D	DB-VRX 60 0.25 (mm)
LCS 600-203037/4		12/18/2016 12:58	1	J35302.D	DB-VRX 60 0.25 (mm)
LCSD 600-203037/5		12/18/2016 13:33	1	J35303.D	DB-VRX 60 0.25 (mm)
MB 600-203037/7		12/18/2016 14:44	1	J35305.D	DB-VRX 60 0.25 (mm)
ZZZZZ		12/18/2016 15:19	1		DB-VRX 60 0.25 (mm)
600-141139-2		12/18/2016 15:54	1	J35307.D	DB-VRX 60 0.25 (mm)
ZZZZZ		12/18/2016 16:28	1		DB-VRX 60 0.25 (mm)
ZZZZZ		12/18/2016 17:03	1		DB-VRX 60 0.25 (mm)
ZZZZZ		12/18/2016 17:39	1		DB-VRX 60 0.25 (mm)
ZZZZZ		12/18/2016 18:14	1		DB-VRX 60 0.25 (mm)
ZZZZZ		12/18/2016 18:49	1		DB-VRX 60 0.25 (mm)
600-141139-1		12/18/2016 19:24	1	J35313.D	DB-VRX 60 0.25 (mm)
600-141139-3		12/18/2016 19:59	1	J35314.D	DB-VRX 60 0.25 (mm)
600-141139-4		12/18/2016 20:34	1	J35315.D	DB-VRX 60 0.25 (mm)
600-141139-5		12/18/2016 21:09	1	J35316.D	DB-VRX 60 0.25 (mm)
600-141139-6		12/18/2016 21:44	1	J35317.D	DB-VRX 60 0.25 (mm)
600-141139-7		12/18/2016 22:20	1	J35318.D	DB-VRX 60 0.25 (mm)
ZZZZZ		12/18/2016 22:56	1		DB-VRX 60 0.25 (mm)
ZZZZZ		12/18/2016 23:30	1		DB-VRX 60 0.25 (mm)
ZZZZZ		12/19/2016 00:06	1		DB-VRX 60 0.25 (mm)
ZZZZZ		12/19/2016 00:42	20		DB-VRX 60 0.25 (mm)
ZZZZZ		12/19/2016 01:16	20		DB-VRX 60 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica HoustonJob No.: 600-141139-1

SDG No.: _____

Instrument ID: CHVOAMS06Start Date: 12/19/2016 11:43Analysis Batch Number: 203087End Date: 12/20/2016 02:23

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 600-203087/2		12/19/2016 11:43	1	J35400C.D	DB-VRX 60 0.25 (mm)
CCVIS 600-203087/3		12/19/2016 12:14	1	J35401.D	DB-VRX 60 0.25 (mm)
LCS 600-203087/4		12/19/2016 12:58	1	J35402.D	DB-VRX 60 0.25 (mm)
LCSD 600-203087/5		12/19/2016 13:33	1	J35403.D	DB-VRX 60 0.25 (mm)
MB 600-203087/7		12/19/2016 14:44	1	J35405.D	DB-VRX 60 0.25 (mm)
ZZZZZ		12/19/2016 15:19	1		DB-VRX 60 0.25 (mm)
ZZZZZ		12/19/2016 15:54	1		DB-VRX 60 0.25 (mm)
ZZZZZ		12/19/2016 16:29	1		DB-VRX 60 0.25 (mm)
ZZZZZ		12/19/2016 17:04	1		DB-VRX 60 0.25 (mm)
ZZZZZ		12/19/2016 17:39	100		DB-VRX 60 0.25 (mm)
ZZZZZ		12/19/2016 18:14	1000		DB-VRX 60 0.25 (mm)
ZZZZZ		12/19/2016 18:49	100		DB-VRX 60 0.25 (mm)
ZZZZZ		12/19/2016 19:24	1000		DB-VRX 60 0.25 (mm)
ZZZZZ		12/19/2016 19:58	100		DB-VRX 60 0.25 (mm)
ZZZZZ		12/19/2016 20:33	1000		DB-VRX 60 0.25 (mm)
ZZZZZ		12/19/2016 21:09	100		DB-VRX 60 0.25 (mm)
ZZZZZ		12/19/2016 21:43	1000		DB-VRX 60 0.25 (mm)
ZZZZZ		12/19/2016 22:18	200		DB-VRX 60 0.25 (mm)
600-141139-1 DL		12/19/2016 22:53	10	J35419.D	DB-VRX 60 0.25 (mm)
ZZZZZ		12/19/2016 23:28	1		DB-VRX 60 0.25 (mm)
ZZZZZ		12/20/2016 00:03	1		DB-VRX 60 0.25 (mm)
ZZZZZ		12/20/2016 00:38	1		DB-VRX 60 0.25 (mm)
ZZZZZ		12/20/2016 01:13	1		DB-VRX 60 0.25 (mm)
ZZZZZ		12/20/2016 01:48	1		DB-VRX 60 0.25 (mm)
ZZZZZ		12/20/2016 02:23	1		DB-VRX 60 0.25 (mm)

METALS

COVER PAGE
METALS

Lab Name: TestAmerica Houston Job Number: 600-141139-1

SDG No.: _____

Project: Kinder Morgan Bloomfield, NM San Juan

Client Sample ID	Lab Sample ID
<u>SANJUAN-MW09-12132016</u>	<u>600-141139-1</u>
<u>SANJUAN-MW09-12132016</u>	<u>600-141139-1 DL2</u>
<u>SANJUAN-MW08-12132016</u>	<u>600-141139-3</u>
<u>SANJUAN-MD08-12132016</u>	<u>600-141139-4</u>
<u>SANJUAN-MD08-12132016</u>	<u>600-141139-4 DL</u>
<u>SANJUAN-W02-12132016</u>	<u>600-141139-5</u>
<u>SANJUAN-W02-12132016</u>	<u>600-141139-5 DL</u>
<u>SANJUAN-MW04-12132016</u>	<u>600-141139-6</u>
<u>SANJUAN-MW04-12132016</u>	<u>600-141139-6 DL</u>
<u>SANJUAN-MW06-12132016</u>	<u>600-141139-7</u>
<u>SANJUAN-MW06-12132016</u>	<u>600-141139-7 DL2</u>

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: SANJUAN-MW09-12132016

Lab Sample ID: 600-141139-1

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG ID.:

Matrix: Water

Date Sampled: 12/13/2016 11:50

Reporting Basis: WET

Date Received: 12/14/2016 10:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum, Dissolved	15.5	0.500	0.0926	mg/L			1	6010C
7440-38-2	Arsenic, Dissolved	0.00285	0.0100	0.00285	mg/L	U		1	6010C
7440-39-3	Barium, Dissolved	0.0134	0.0200	0.000530	mg/L	J		1	6010C
7440-43-9	Cadmium, Dissolved	0.00840	0.00500	0.000280	mg/L			1	6010C
7440-70-2	Calcium, Dissolved	379	1.00	0.0240	mg/L			1	6010C
7440-47-3	Chromium, Dissolved	0.00230	0.0100	0.00159	mg/L	J		1	6010C
7440-48-4	Cobalt, Dissolved	0.224	0.0100	0.000310	mg/L			1	6010C
7440-50-8	Copper, Dissolved	0.0803	0.0100	0.000600	mg/L			1	6010C
7439-89-6	Iron, Dissolved	31.4	0.400	0.0270	mg/L			1	6010C
7439-92-1	Lead, Dissolved	0.00219	0.0100	0.00219	mg/L	U		1	6010C
7439-95-4	Magnesium, Dissolved	239	1.00	0.0555	mg/L			1	6010C
7439-96-5	Manganese, Dissolved	7.07	0.0100	0.000360	mg/L			1	6010C
7439-98-7	Molybdenum, Dissolved	0.000540	0.0100	0.000540	mg/L	U	^	1	6010C
7440-02-0	Nickel, Dissolved	0.357	0.0100	0.000800	mg/L			1	6010C
7440-09-7	Potassium, Dissolved	15.3	1.00	0.0374	mg/L			1	6010C
7782-49-2	Selenium, Dissolved	0.00287	0.0400	0.00287	mg/L	U		1	6010C
7440-22-4	Silver, Dissolved	0.00129	0.0100	0.00129	mg/L	U		1	6010C
7440-23-5	Sodium, Dissolved	4500	50.0	1.07	mg/L		B	50	6010C
7440-66-6	Zinc, Dissolved	1.10	0.0300	0.00143	mg/L		B	1	6010C
7439-97-6	Mercury, Dissolved	0.0000820	0.000200	0.0000820	mg/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: SANJUAN-MW08-12132016

Lab Sample ID: 600-141139-3

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG ID.:

Matrix: Water

Date Sampled: 12/13/2016 12:25

Reporting Basis: WET

Date Received: 12/14/2016 10:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum, Dissolved	0.348	0.500	0.0926	mg/L	J		1	6010C
7440-38-2	Arsenic, Dissolved	0.00285	0.0100	0.00285	mg/L	U		1	6010C
7440-39-3	Barium, Dissolved	0.0555	0.0200	0.000530	mg/L			1	6010C
7440-43-9	Cadmium, Dissolved	0.000500	0.00500	0.000280	mg/L	J		1	6010C
7440-70-2	Calcium, Dissolved	73.5	1.00	0.0240	mg/L			1	6010C
7440-47-3	Chromium, Dissolved	0.00159	0.0100	0.00159	mg/L	U		1	6010C
7440-48-4	Cobalt, Dissolved	0.00120	0.0100	0.000310	mg/L	J		1	6010C
7440-50-8	Copper, Dissolved	0.00170	0.0100	0.000600	mg/L	J		1	6010C
7439-89-6	Iron, Dissolved	2.35	0.400	0.0270	mg/L			1	6010C
7439-92-1	Lead, Dissolved	0.00219	0.0100	0.00219	mg/L	U		1	6010C
7439-95-4	Magnesium, Dissolved	79.4	1.00	0.0555	mg/L			1	6010C
7439-96-5	Manganese, Dissolved	0.966	0.0100	0.000360	mg/L			1	6010C
7439-98-7	Molybdenum, Dissolved	0.00850	0.0100	0.000540	mg/L	J	B	1	6010C
7440-02-0	Nickel, Dissolved	0.000800	0.0100	0.000800	mg/L	U		1	6010C
7440-09-7	Potassium, Dissolved	26.7	1.00	0.0374	mg/L			1	6010C
7782-49-2	Selenium, Dissolved	0.00287	0.0400	0.00287	mg/L	U		1	6010C
7440-22-4	Silver, Dissolved	0.00129	0.0100	0.00129	mg/L	U		1	6010C
7440-23-5	Sodium, Dissolved	2600	20.0	0.428	mg/L		B	20	6010C
7440-66-6	Zinc, Dissolved	0.0589	0.0300	0.00143	mg/L		B	1	6010C
7439-97-6	Mercury, Dissolved	0.0000820	0.000200	0.0000820	mg/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: SANJUAN-MD08-12132016

Lab Sample ID: 600-141139-4

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG ID.:

Matrix: Water

Date Sampled: 12/13/2016 12:35

Reporting Basis: WET

Date Received: 12/14/2016 10:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum, Dissolved	1.81	0.500	0.0926	mg/L			1	6010C
7440-38-2	Arsenic, Dissolved	0.00285	0.0100	0.00285	mg/L	U		1	6010C
7440-39-3	Barium, Dissolved	0.0595	0.0200	0.000530	mg/L			1	6010C
7440-43-9	Cadmium, Dissolved	0.000600	0.00500	0.000280	mg/L	J		1	6010C
7440-70-2	Calcium, Dissolved	70.9	1.00	0.0240	mg/L			1	6010C
7440-47-3	Chromium, Dissolved	0.00159	0.0100	0.00159	mg/L	U		1	6010C
7440-48-4	Cobalt, Dissolved	0.00190	0.0100	0.000310	mg/L	J		1	6010C
7440-50-8	Copper, Dissolved	0.00330	0.0100	0.000600	mg/L	J		1	6010C
7439-89-6	Iron, Dissolved	4.10	0.400	0.0270	mg/L			1	6010C
7439-92-1	Lead, Dissolved	0.00219	0.0100	0.00219	mg/L	U		1	6010C
7439-95-4	Magnesium, Dissolved	77.5	1.00	0.0555	mg/L			1	6010C
7439-96-5	Manganese, Dissolved	1.03	0.0100	0.000360	mg/L			1	6010C
7439-98-7	Molybdenum, Dissolved	0.00880	0.0100	0.000540	mg/L	J	B	1	6010C
7440-02-0	Nickel, Dissolved	0.000800	0.0100	0.000800	mg/L	U		1	6010C
7440-09-7	Potassium, Dissolved	26.1	1.00	0.0374	mg/L			1	6010C
7782-49-2	Selenium, Dissolved	0.00287	0.0400	0.00287	mg/L	U		1	6010C
7440-22-4	Silver, Dissolved	0.00129	0.0100	0.00129	mg/L	U		1	6010C
7440-23-5	Sodium, Dissolved	2560	20.0	0.428	mg/L		B	20	6010C
7440-66-6	Zinc, Dissolved	0.0425	0.0300	0.00143	mg/L		B	1	6010C
7439-97-6	Mercury, Dissolved	0.0000820	0.000200	0.0000820	mg/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: SANJUAN-W02-12132016

Lab Sample ID: 600-141139-5

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG ID.:

Matrix: Water

Date Sampled: 12/13/2016 13:10

Reporting Basis: WET

Date Received: 12/14/2016 10:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum, Dissolved	0.0926	0.500	0.0926	mg/L	U		1	6010C
7440-38-2	Arsenic, Dissolved	0.00285	0.0100	0.00285	mg/L	U		1	6010C
7440-39-3	Barium, Dissolved	0.00780	0.0200	0.000530	mg/L	J		1	6010C
7440-43-9	Cadmium, Dissolved	0.000600	0.00500	0.000280	mg/L	J		1	6010C
7440-70-2	Calcium, Dissolved	284	1.00	0.0240	mg/L			1	6010C
7440-47-3	Chromium, Dissolved	0.00159	0.0100	0.00159	mg/L	U		1	6010C
7440-48-4	Cobalt, Dissolved	0.000310	0.0100	0.000310	mg/L	U		1	6010C
7440-50-8	Copper, Dissolved	0.00920	0.0100	0.000600	mg/L	J		1	6010C
7439-89-6	Iron, Dissolved	0.0270	0.400	0.0270	mg/L	U		1	6010C
7439-92-1	Lead, Dissolved	0.00219	0.0100	0.00219	mg/L	U		1	6010C
7439-95-4	Magnesium, Dissolved	84.5	1.00	0.0555	mg/L			1	6010C
7439-96-5	Manganese, Dissolved	0.000360	0.0100	0.000360	mg/L	U		1	6010C
7439-98-7	Molybdenum, Dissolved	0.00290	0.0100	0.000540	mg/L	J	B	1	6010C
7440-02-0	Nickel, Dissolved	0.000800	0.0100	0.000800	mg/L	U		1	6010C
7440-09-7	Potassium, Dissolved	3.17	1.00	0.0374	mg/L			1	6010C
7782-49-2	Selenium, Dissolved	0.0778	0.0400	0.00287	mg/L			1	6010C
7440-22-4	Silver, Dissolved	0.00129	0.0100	0.00129	mg/L	U		1	6010C
7440-23-5	Sodium, Dissolved	1170	20.0	0.428	mg/L		B	20	6010C
7440-66-6	Zinc, Dissolved	0.0141	0.0300	0.00143	mg/L	J	B	1	6010C
7439-97-6	Mercury, Dissolved	0.0000820	0.000200	0.0000820	mg/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: SANJUAN-MW04-12132016

Lab Sample ID: 600-141139-6

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG ID.:

Matrix: Water

Date Sampled: 12/13/2016 13:45

Reporting Basis: WET

Date Received: 12/14/2016 10:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum, Dissolved	0.0926	0.500	0.0926	mg/L	U		1	6010C
7440-38-2	Arsenic, Dissolved	0.00285	0.0100	0.00285	mg/L	U		1	6010C
7440-39-3	Barium, Dissolved	0.00740	0.0200	0.000530	mg/L	J		1	6010C
7440-43-9	Cadmium, Dissolved	0.000800	0.00500	0.000280	mg/L	J		1	6010C
7440-70-2	Calcium, Dissolved	280	1.00	0.0240	mg/L			1	6010C
7440-47-3	Chromium, Dissolved	0.00159	0.0100	0.00159	mg/L	U		1	6010C
7440-48-4	Cobalt, Dissolved	0.0334	0.0100	0.000310	mg/L			1	6010C
7440-50-8	Copper, Dissolved	0.00300	0.0100	0.000600	mg/L	J		1	6010C
7439-89-6	Iron, Dissolved	5.09	0.400	0.0270	mg/L			1	6010C
7439-92-1	Lead, Dissolved	0.00219	0.0100	0.00219	mg/L	U		1	6010C
7439-95-4	Magnesium, Dissolved	116	1.00	0.0555	mg/L			1	6010C
7439-96-5	Manganese, Dissolved	6.31	0.0100	0.000360	mg/L			1	6010C
7439-98-7	Molybdenum, Dissolved	0.000540	0.0100	0.000540	mg/L	U	^	1	6010C
7440-02-0	Nickel, Dissolved	0.192	0.0100	0.000800	mg/L			1	6010C
7440-09-7	Potassium, Dissolved	6.25	1.00	0.0374	mg/L			1	6010C
7782-49-2	Selenium, Dissolved	0.00287	0.0400	0.00287	mg/L	U		1	6010C
7440-22-4	Silver, Dissolved	0.00129	0.0100	0.00129	mg/L	U		1	6010C
7440-23-5	Sodium, Dissolved	1250	20.0	0.428	mg/L		B	20	6010C
7440-66-6	Zinc, Dissolved	0.00440	0.0300	0.00143	mg/L	J	B	1	6010C
7439-97-6	Mercury, Dissolved	0.0000820	0.000200	0.0000820	mg/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: SANJUAN-MW06-12132016

Lab Sample ID: 600-141139-7

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG ID.:

Matrix: Water

Date Sampled: 12/13/2016 14:10

Reporting Basis: WET

Date Received: 12/14/2016 10:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum, Dissolved	15.1	0.500	0.0926	mg/L			1	6010C
7440-38-2	Arsenic, Dissolved	0.00285	0.0100	0.00285	mg/L	U		1	6010C
7440-39-3	Barium, Dissolved	0.00550	0.0200	0.000530	mg/L	J		1	6010C
7440-43-9	Cadmium, Dissolved	0.0123	0.00500	0.000280	mg/L			1	6010C
7440-70-2	Calcium, Dissolved	386	1.00	0.0240	mg/L			1	6010C
7440-47-3	Chromium, Dissolved	0.00159	0.0100	0.00159	mg/L	U		1	6010C
7440-48-4	Cobalt, Dissolved	0.228	0.0100	0.000310	mg/L			1	6010C
7440-50-8	Copper, Dissolved	0.0657	0.0100	0.000600	mg/L			1	6010C
7439-89-6	Iron, Dissolved	0.0696	0.400	0.0270	mg/L	J		1	6010C
7439-92-1	Lead, Dissolved	0.00219	0.0100	0.00219	mg/L	U		1	6010C
7439-95-4	Magnesium, Dissolved	320	1.00	0.0555	mg/L			1	6010C
7439-96-5	Manganese, Dissolved	6.70	0.0100	0.000360	mg/L			1	6010C
7439-98-7	Molybdenum, Dissolved	0.000540	0.0100	0.000540	mg/L	U	^	1	6010C
7440-02-0	Nickel, Dissolved	0.277	0.0100	0.000800	mg/L			1	6010C
7440-09-7	Potassium, Dissolved	21.6	1.00	0.0374	mg/L			1	6010C
7782-49-2	Selenium, Dissolved	0.350	0.0400	0.00287	mg/L			1	6010C
7440-22-4	Silver, Dissolved	0.00129	0.0100	0.00129	mg/L	U		1	6010C
7440-23-5	Sodium, Dissolved	4070	50.0	1.07	mg/L		B	50	6010C
7440-66-6	Zinc, Dissolved	0.665	0.0300	0.00143	mg/L		B	1	6010C
7439-97-6	Mercury, Dissolved	0.0000820	0.000200	0.0000820	mg/L	U		1	7470A

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG No.: _____

ICV Source: MET1216CCV_00004

Concentration Units: mg/L

CCV Source: MET1216CCV_00004

Analyte	ICV 600-203574/10 12/28/2016 08:02				CCV 600-203574/150 12/28/2016 13:53				CCV 600-203574/163 12/28/2016 14:24			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum, Dissolved	2.616		2.50	105	2.647		2.50	106	2.607		2.50	104
Arsenic, Dissolved	0.5138		0.500	103	0.5282		0.500	106	0.5317		0.500	106
Barium, Dissolved	0.5219		0.500	104	0.5106		0.500	102	0.4992		0.500	100
Cadmium, Dissolved	0.5202		0.500	104	0.5247		0.500	105	0.5255		0.500	105
Calcium, Dissolved	12.79		12.5	102	12.48		12.5	100	12.37		12.5	99
Chromium, Dissolved	0.5164		0.500	103	0.4941		0.500	99	0.4889		0.500	98
Cobalt, Dissolved	0.5191		0.500	104	0.5101		0.500	102	0.5075		0.500	102
Copper, Dissolved	0.5178		0.500	104	0.5371		0.500	107	0.5320		0.500	106
Iron, Dissolved	2.544		2.50	102	2.523		2.50	101	2.493		2.50	100
Lead, Dissolved	0.5147		0.500	103	0.5013		0.500	100	0.4995		0.500	100
Magnesium, Dissolved	5.067		5.00	101	4.800		5.00	96	4.803		5.00	96
Manganese, Dissolved	0.5132		0.500	103	0.5064		0.500	101	0.5075		0.500	102
Molybdenum, Dissolved	0.5460		0.500	109	0.5512		0.500	110	0.5554		0.500	111
Nickel, Dissolved	0.5139		0.500	103	0.5053		0.500	101	0.5038		0.500	101
Potassium, Dissolved	12.84		12.5	103	12.91		12.5	103	12.89		12.5	103
Selenium, Dissolved	0.5270		0.500	105	0.5442		0.500	109	0.5470		0.500	109
Silver, Dissolved	0.2621		0.250	105	0.2637		0.250	105	0.2652		0.250	106
Sodium	12.83		12.5	103	13.14		12.5	105	13.13		12.5	105
Zinc, Dissolved	0.5121		0.500	102	0.4757		0.500	95	0.4745		0.500	95

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG No.: _____

ICV Source: MET1216CCV_00004

Concentration Units: mg/L

CCV Source: MET1216CCV_00004

Analyte	CCV 600-203574/176 12/28/2016 14:56				CCV 600-203574/189 12/28/2016 15:28				CCV 600-203574/202 12/28/2016 15:59			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum, Dissolved	2.624		2.50	105	2.608		2.50	104	2.608		2.50	104
Arsenic, Dissolved	0.5323		0.500	106	0.5335		0.500	107	0.5363		0.500	107
Barium, Dissolved	0.5014		0.500	100	0.4973		0.500	99	0.4661		0.500	93
Cadmium, Dissolved	0.5245		0.500	105	0.5224		0.500	104	0.5240		0.500	105
Calcium, Dissolved	12.27		12.5	98	12.23		12.5	98	11.84		12.5	95
Chromium, Dissolved	0.4917		0.500	98	0.4865		0.500	97	0.4739		0.500	95
Cobalt, Dissolved	0.5077		0.500	102	0.5055		0.500	101	0.4967		0.500	99
Copper, Dissolved	0.5367		0.500	107	0.5344		0.500	107	0.5405		0.500	108
Iron, Dissolved	2.469		2.50	99	2.453		2.50	98	2.409		2.50	96
Lead, Dissolved	0.4997		0.500	100	0.4973		0.500	99	0.4847		0.500	97
Magnesium, Dissolved	4.743		5.00	95	4.714		5.00	94				
Manganese, Dissolved	0.5050		0.500	101	0.5036		0.500	101	0.4879		0.500	98
Molybdenum, Dissolved	0.5519		0.500	110	0.5528		0.500	111				
Nickel, Dissolved	0.5042		0.500	101	0.5008		0.500	100	0.4921		0.500	98
Potassium, Dissolved	12.83		12.5	103	12.77		12.5	102	12.71		12.5	102
Selenium, Dissolved	0.5455		0.500	109	0.5489		0.500	110				
Silver, Dissolved	0.2647		0.250	106	0.2625		0.250	105	0.2581		0.250	103
Sodium	13.09		12.5	105	13.25		12.5	106				
Zinc, Dissolved	0.4729		0.500	95	0.4689		0.500	94				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG No.: _____

ICV Source: MET1216LOW_00004

Concentration Units: mg/L

CCV Source: MET1216LOW_00004

Analyte	ICVL 600-203574/12 12/28/2016 08:08				CCVL 600-203574/151 12/28/2016 13:55				CCVL 600-203574/164 12/28/2016 14:26			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum, Dissolved	0.5096		0.500	102	0.5381		0.500	108	0.5180		0.500	104
Arsenic, Dissolved	0.02140		0.0200	107	0.02020		0.0200	101	0.02120		0.0200	106
Barium, Dissolved	0.02220		0.0200	111	0.02120		0.0200	106	0.02120		0.0200	106
Cadmium, Dissolved	0.01050		0.0100	105	0.01060		0.0100	106	0.01050		0.0100	105
Calcium, Dissolved	1.003		1.00	100	1.001		1.00	100	0.9916	J	1.00	99
Chromium, Dissolved	0.01980		0.0200	99	0.01760		0.0200	88	0.01660		0.0200	83
Cobalt, Dissolved	0.01990		0.0200	100	0.01950		0.0200	98	0.01950		0.0200	98
Copper, Dissolved	0.01920		0.0200	96	0.02010		0.0200	101	0.01990		0.0200	100
Iron, Dissolved	0.2020	J	0.200	101	0.2042	J	0.200	102	0.1881	J	0.200	94
Lead, Dissolved	0.01950		0.0200	98	0.01930		0.0200	97	0.01880		0.0200	94
Magnesium, Dissolved	1.050		1.00	105	0.9280	J	1.00	93	0.9540	J	1.00	95
Manganese, Dissolved	0.02070		0.0200	104	0.02050		0.0200	103	0.02010		0.0200	101
Molybdenum, Dissolved	0.02240		0.0200	112	0.02220		0.0200	111	0.02260		0.0200	113
Nickel, Dissolved	0.01940		0.0200	97	0.01800		0.0200	90	0.01780		0.0200	89
Potassium, Dissolved	1.021		1.00	102	1.053		1.00	105	1.034		1.00	103
Selenium, Dissolved	0.02120	J	0.0200	106	0.02360	J	0.0200	118	0.02200	J	0.0200	110
Silver, Dissolved	0.01080		0.0100	108	0.01100		0.0100	110	0.00980 0	J	0.0100	98
Sodium	1.039		1.00	104	1.207		1.00	121	1.177		1.00	118
Zinc, Dissolved	0.01950		0.0200	98	0.01870		0.0200	94	0.01850		0.0200	93

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG No.: _____

ICV Source: MET1216LOW_00004

Concentration Units: mg/L

CCV Source: MET1216LOW_00004

Analyte	CCVL 600-203574/177 12/28/2016 14:58				CCVL 600-203574/190 12/28/2016 15:30				CCVL 600-203574/203 12/28/2016 16:01			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum, Dissolved	0.5097		0.500	102	0.5345		0.500	107	0.5195		0.500	104
Arsenic, Dissolved	0.02120		0.0200	106	0.02120		0.0200	106	0.02040		0.0200	102
Barium, Dissolved	0.02100		0.0200	105	0.02130		0.0200	107	0.02020		0.0200	101
Cadmium, Dissolved	0.01070		0.0100	107	0.01080		0.0100	108	0.01090		0.0100	109
Calcium, Dissolved	0.9793	J	1.00	98	1.005		1.00	101	0.9577	J	1.00	96
Chromium, Dissolved	0.01720		0.0200	86	0.01600		0.0200	80	0.01520		0.0200	76
Cobalt, Dissolved	0.01950		0.0200	98	0.01930		0.0200	97	0.01930		0.0200	97
Copper, Dissolved	0.01970		0.0200	99	0.01990		0.0200	100	0.01980		0.0200	99
Iron, Dissolved	0.1921	J	0.200	96	0.1916	J	0.200	96	0.1775	J	0.200	89
Lead, Dissolved	0.01930		0.0200	97	0.01910		0.0200	96	0.01910		0.0200	96
Magnesium, Dissolved	0.9570	J	1.00	96	0.9601	J	1.00	96	0.9303	J	1.00	93
Manganese, Dissolved	0.02010		0.0200	101	0.02000		0.0200	100	0.01950		0.0200	98
Molybdenum, Dissolved	0.02230		0.0200	112	0.02250		0.0200	113	0.02280		0.0200	114
Nickel, Dissolved	0.01770		0.0200	89	0.01730		0.0200	87	0.01710		0.0200	86
Potassium, Dissolved	1.046		1.00	105	1.055		1.00	106	1.088		1.00	109
Selenium, Dissolved	0.02240	J	0.0200	112	0.02280	J	0.0200	114	0.02410	J	0.0200	121
Silver, Dissolved	0.01090		0.0100	109	0.01160		0.0100	116	0.01110		0.0100	111
Sodium	1.200		1.00	120								
Zinc, Dissolved	0.01870		0.0200	94	0.01840		0.0200	92	0.01750		0.0200	88

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG No.: _____

ICV Source: MET1216CCV_00004

Concentration Units: mg/L

CCV Source: MET1216CCV_00004

Analyte	ICV 600-203675/11 12/29/2016 09:51				CCV 600-203675/160 12/29/2016 15:49				CCV 600-203675/173 12/29/2016 16:20			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Molybdenum, Dissolved	0.5446		0.500	109	0.5425		0.500	109	0.5431		0.500	109
Sodium, Dissolved	12.82		12.5	103	13.07		12.5	105	13.14		12.5	105
<i>Aluminum</i>	2.530		2.50	101	2.548		2.50	102	2.519		2.50	101
<i>Arsenic</i>	0.5163		0.500	103	0.5230		0.500	105	0.5215		0.500	104
<i>Barium</i>	0.5233		0.500	105	0.5123		0.500	102	0.5109		0.500	102
<i>Cadmium</i>	0.5180		0.500	104	0.5190		0.500	104	0.5191		0.500	104
<i>Calcium</i>	12.92		12.5	103	12.87		12.5	103	12.87		12.5	103
<i>Chromium</i>	0.5192		0.500	104	0.5141		0.500	103	0.5110		0.500	102
<i>Cobalt</i>	0.5176		0.500	104	0.5082		0.500	102	0.5092		0.500	102
<i>Copper</i>	0.5216		0.500	104	0.5302		0.500	106	0.5288		0.500	106
<i>Iron</i>	2.550		2.50	102	2.523		2.50	101	2.532		2.50	101
<i>Lead</i>	0.5145		0.500	103	0.5134		0.500	103	0.5156		0.500	103
<i>Magnesium</i>	5.087		5.00	102	4.921		5.00	98	4.976		5.00	100
<i>Manganese</i>	0.5110		0.500	102	0.5150		0.500	103	0.5170		0.500	103
<i>Nickel</i>	0.5130		0.500	103	0.5123		0.500	102	0.5140		0.500	103
<i>Potassium</i>	12.89		12.5	103	12.94		12.5	104	13.05		12.5	104
<i>Selenium</i>	0.5234		0.500	105	0.5190		0.500	104	0.5180		0.500	104
<i>Silver</i>	0.2582		0.250	103	0.2636		0.250	105	0.2634		0.250	105
<i>Zinc</i>	0.5091		0.500	102	0.5013		0.500	100	0.5054		0.500	101

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG No.: _____

ICV Source: MET1216CCV_00004

Concentration Units: mg/L

CCV Source: MET1216CCV_00005

Analyte	ICV 600-203675/11 12/29/2016 09:51				CCV 600-203675/186 12/29/2016 16:53				CCV 600-203675/194 12/29/2016 17:13			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Molybdenum, Dissolved	0.5446		0.500	109	0.5398		0.500	108	0.5406		0.500	108
Sodium, Dissolved	12.82		12.5	103	12.87		12.5	103	12.84		12.5	103
<i>Aluminum</i>	2.530		2.50	101	2.510		2.50	100	2.538		2.50	102
<i>Arsenic</i>	0.5163		0.500	103	0.5157		0.500	103	0.5107		0.500	102
<i>Barium</i>	0.5233		0.500	105	0.5075		0.500	102	0.5078		0.500	102
<i>Cadmium</i>	0.5180		0.500	104	0.5138		0.500	103	0.5130		0.500	103
<i>Calcium</i>	12.92		12.5	103	12.70		12.5	102	12.84		12.5	103
<i>Chromium</i>	0.5192		0.500	104	0.5148		0.500	103	0.5106		0.500	102
<i>Cobalt</i>	0.5176		0.500	104	0.5043		0.500	101	0.5061		0.500	101
<i>Copper</i>	0.5216		0.500	104	0.5289		0.500	106	0.5171		0.500	103
<i>Iron</i>	2.550		2.50	102	2.493		2.50	100	2.535		2.50	101
<i>Lead</i>	0.5145		0.500	103	0.5127		0.500	103	0.5106		0.500	102
<i>Magnesium</i>	5.087		5.00	102	4.901		5.00	98	4.947		5.00	99
<i>Manganese</i>	0.5110		0.500	102	0.5169		0.500	103	0.5115		0.500	102
<i>Nickel</i>	0.5130		0.500	103	0.5087		0.500	102	0.5087		0.500	102
<i>Potassium</i>	12.89		12.5	103	12.87		12.5	103	12.88		12.5	103
<i>Selenium</i>	0.5234		0.500	105	0.5136		0.500	103	0.5118		0.500	102
<i>Silver</i>	0.2582		0.250	103	0.2615		0.250	105	0.2594		0.250	104
<i>Zinc</i>	0.5091		0.500	102	0.5012		0.500	100	0.5014		0.500	100

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG No.: _____

ICV Source: MET1216LOW_00004

Concentration Units: mg/L

CCV Source: MET1216LOW_00004

Analyte	ICVL 600-203675/13 12/29/2016 09:56				CCVL 600-203675/161 12/29/2016 15:52				CCVL 600-203675/174 12/29/2016 16:23			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Molybdenum, Dissolved	0.02090		0.0200	105	0.02350		0.0200	118	0.02330		0.0200	117
Sodium, Dissolved	1.027		1.00	103	1.172		1.00	117	1.182		1.00	118
<i>Aluminum</i>	0.5327		0.500	107	0.5141		0.500	103	0.5125		0.500	103
<i>Arsenic</i>	0.01880		0.0200	94	0.01920		0.0200	96	0.02000		0.0200	100
<i>Barium</i>	0.02200		0.0200	110	0.02160		0.0200	108	0.02150		0.0200	108
<i>Cadmium</i>	0.01030		0.0100	103	0.01060		0.0100	106	0.01040		0.0100	104
<i>Calcium</i>	1.020		1.00	102	1.034		1.00	103	1.025		1.00	103
<i>Chromium</i>	0.01900		0.0200	95	0.01720		0.0200	86	0.01750		0.0200	88
<i>Cobalt</i>	0.01990		0.0200	100	0.01950		0.0200	98	0.01960		0.0200	98
<i>Copper</i>	0.02180		0.0200	109	0.02390		0.0200	120	0.02370		0.0200	119
<i>Iron</i>	0.2041	J	0.200	102	0.1945	J	0.200	97	0.1989	J	0.200	99
<i>Lead</i>	0.02060		0.0200	103	0.02050		0.0200	103	0.02050		0.0200	103
<i>Magnesium</i>	1.034		1.00	103	1.005		1.00	101	1.045		1.00	105
<i>Manganese</i>	0.02070		0.0200	104	0.02030		0.0200	102	0.02020		0.0200	101
<i>Nickel</i>	0.01960		0.0200	98	0.01850		0.0200	93	0.01850		0.0200	93
<i>Potassium</i>	1.026		1.00	103	1.040		1.00	104	1.066		1.00	107
<i>Selenium</i>	0.02290	J	0.0200	115	0.02230	J	0.0200	112	0.02380	J	0.0200	119
<i>Silver</i>	0.01080		0.0100	108	0.01080		0.0100	108	0.01150		0.0100	115
<i>Zinc</i>	0.01960		0.0200	98	0.01890		0.0200	95	0.01910		0.0200	96

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG No.: _____

ICV Source: MET1216LOW_00004

Concentration Units: mg/L

CCV Source: MET1216LOW_00004

Analyte	CCVL 600-203675/187 12/29/2016 16:56				CCVL 600-203675/195 12/29/2016 17:15							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Molybdenum, Dissolved	0.02380		0.0200	119	0.02370		0.0200	119				
Sodium, Dissolved	1.133		1.00	113	1.090		1.00	109				
<i>Aluminum</i>	0.4995	J	0.500	100	0.4918	J	0.500	98				
<i>Arsenic</i>	0.01950		0.0200	98	0.01960		0.0200	98				
<i>Barium</i>	0.02160		0.0200	108	0.02180		0.0200	109				
<i>Cadmium</i>	0.01050		0.0100	105	0.01050		0.0100	105				
<i>Calcium</i>	1.005		1.00	101	1.023		1.00	102				
<i>Chromium</i>	0.01630		0.0200	82	0.01690		0.0200	85				
<i>Cobalt</i>	0.01950		0.0200	98	0.01960		0.0200	98				
<i>Copper</i>	0.02360		0.0200	118	0.02340		0.0200	117				
<i>Iron</i>	0.1877	J	0.200	94	0.1957	J	0.200	98				
<i>Lead</i>	0.02020		0.0200	101	0.01980		0.0200	99				
<i>Magnesium</i>	1.037		1.00	104	1.039		1.00	104				
<i>Manganese</i>	0.02020		0.0200	101	0.02000		0.0200	100				
<i>Nickel</i>	0.01820		0.0200	91	0.01830		0.0200	92				
<i>Potassium</i>	1.054		1.00	105	1.039		1.00	104				
<i>Selenium</i>	0.02010	J	0.0200	101	0.02380	J	0.0200	119				
<i>Silver</i>	0.01070		0.0100	107	0.01100		0.0100	110				
<i>Zinc</i>	0.01890		0.0200	95	0.01910		0.0200	96				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

ICV Source: MER0916S2_00073 Concentration Units: ug/L

CCV Source: MER0916S2_00073

Analyte	ICV 600-203577/12 12/27/2016 15:48				CCV 600-203577/51 12/27/2016 17:20				CCV 600-203577/63 12/27/2016 17:43			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury, Dissolved	2.813		3.00	94	2.769		3.00	92	2.762		3.00	92

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

ICV Source: MER0916S2_00073 Concentration Units: ug/L

CCV Source: MER0916S2_00073

Analyte	CCV 600-203577/75 12/27/2016 18:07				CCV 600-203577/87 12/27/2016 18:30				CCV 600-203577/103 12/28/2016 06:05			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury, Dissolved	2.712		3.00	90	2.789		3.00	93	2.652		3.00	88

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

ICV Source: MER0916S2_00073 Concentration Units: ug/L

CCV Source: MER0916S2_00073

Analyte	CCV 600-203577/110 12/28/2016 06:19											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury, Dissolved	2.542		3.00	85								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Houston Job No.: 600-141139-1
SDG No.: _____
Method: 7470A Instrument ID: MHG01
Lab Sample ID: CRA 600-203577/14 Concentration Units: ug/L
CRQL Check Standard Source: MER0916S1_00077

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury, Dissolved	0.200	0.2025		101	50-150

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

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG No.: _____

Concentration Units: mg/L

Analyte	RL	ICBIS 600-203574/13 12/28/2016 08:10		CCB 600-203574/152 12/28/2016 13:57		CCB 600-203574/165 12/28/2016 14:28		CCB 600-203574/178 12/28/2016 15:00	
		Found	C	Found	C	Found	C	Found	C
Aluminum, Dissolved	0.500	0.02330	J	0.01630	J	0.01220	J	0.02380	J
Arsenic, Dissolved	0.0100	0.00328	U	0.00328	U	0.00328	U	0.00328	U
Barium, Dissolved	0.0200	0.00220	U	0.00220	U	0.00220	U	0.00220	U
Cadmium, Dissolved	0.00500	0.000730	U	0.000730	U	0.000730	U	0.000730	U
Calcium, Dissolved	1.00	0.0219	U	0.0219	U	0.0219	U	0.0219	U
Chromium, Dissolved	0.0100	0.00155	U	0.00155	U	0.00155	U	0.00155	U
Cobalt, Dissolved	0.0100	0.000630	U	0.000630	U	0.000630	U	0.000630	U
Copper, Dissolved	0.0100	0.00145	U	0.00145	U	0.00145	U	0.00145	U
Iron, Dissolved	0.400	0.0866	U	0.0866	U	0.0866	U	0.0866	U
Lead, Dissolved	0.0100	0.00290	U	0.00290	U	0.00290	U	0.00290	U
Magnesium, Dissolved	1.00	0.0191	U	0.0191	U	0.0191	U	0.0191	U
Manganese, Dissolved	0.0100	0.000840	U	0.000840	U	0.000840	U	0.000840	U
Molybdenum, Dissolved	0.0100	0.00273	U	0.00273	U	0.00273	U	0.00273	U
Nickel, Dissolved	0.0100	0.00179	U	0.00179	U	0.00179	U	0.00179	U
Potassium, Dissolved	1.00	0.129	U	0.129	U	0.129	U	0.129	U
Selenium, Dissolved	0.0400	0.00417	U	0.00417	U	0.00417	U	0.00417	U
Silver, Dissolved	0.0100	0.00125	U	0.00125	U	0.00125	U	0.00125	U
Sodium	1.00	0.0200	U	0.1605	J	0.1294	J	0.1488	J
Zinc, Dissolved	0.0100	0.00217	U	0.00217	U	0.00217	U	0.00217	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG No.: _____

Concentration Units: mg/L

Analyte	RL	CCB 600-203574/191 12/28/2016 15:33		CCB 600-203574/204 12/28/2016 16:04					
		Found	C	Found	C	Found	C	Found	C
Aluminum, Dissolved	0.500	0.02140	J	0.009000	J				
Arsenic, Dissolved	0.0100	0.00328	U	0.00328	U				
Barium, Dissolved	0.0200	0.00220	U	0.00220	U				
Cadmium, Dissolved	0.00500	0.000730	U	0.000730	U				
Calcium, Dissolved	1.00	0.0219	U	0.0219	U				
Chromium, Dissolved	0.0100	0.00155	U	0.00155	U				
Cobalt, Dissolved	0.0100	0.000630	U	0.000630	U				
Copper, Dissolved	0.0100	0.00145	U	0.00145	U				
Iron, Dissolved	0.400	0.0866	U	0.0866	U				
Lead, Dissolved	0.0100	0.00290	U	0.00290	U				
Magnesium, Dissolved	1.00	0.0191	U	0.0191	U				
Manganese, Dissolved	0.0100	0.000840	U	0.000840	U				
Molybdenum, Dissolved	0.0100	0.00273	U	0.00273	U				
Nickel, Dissolved	0.0100	0.00179	U	0.00179	U				
Potassium, Dissolved	1.00	0.129	U	0.129	U				
Selenium, Dissolved	0.0400	0.00417	U	0.00417	U				
Silver, Dissolved	0.0100	0.00125	U	0.00125	U				
Sodium	1.00	0.2262	J	0.5709	J				
Zinc, Dissolved	0.0100	0.00217	U	0.00217	U				

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Concentration Units: mg/L

Analyte	RL	ICBIS 600-203675/14 12/29/2016 09:59		CCB 600-203675/162 12/29/2016 15:54		CCB 600-203675/175 12/29/2016 16:25		CCB 600-203675/188 12/29/2016 16:58	
		Found	C	Found	C	Found	C	Found	C
Molybdenum, Dissolved	0.0100	0.00273	U	0.00273	U	0.00273	U	0.00273	U
Sodium, Dissolved	1.00	0.0200	U	0.09790	J	0.09940	J	0.07410	J
<i>Aluminum</i>	0.500	0.00599	U	0.00599	U	0.008600	J	0.00599	U
<i>Arsenic</i>	0.0100	0.00328	U	0.00328	U	0.00328	U	0.00328	U
<i>Barium</i>	0.0200	0.00220	U	0.00220	U	0.00220	U	0.00220	U
<i>Cadmium</i>	0.00500	0.000730	U	0.000730	U	0.000730	U	0.000730	U
<i>Calcium</i>	1.00	0.0219	U	0.0219	U	0.0219	U	0.0219	U
<i>Chromium</i>	0.0100	0.00155	U	0.00155	U	0.00155	U	0.00155	U
<i>Cobalt</i>	0.0100	0.000630	U	0.000630	U	0.000630	U	0.000630	U
<i>Copper</i>	0.0100	0.00145	U	0.003500	J	0.003400	J	0.002600	J
<i>Iron</i>	0.400	0.0866	U	0.0866	U	0.0866	U	0.0866	U
<i>Lead</i>	0.0100	0.00290	U	0.00290	U	0.00290	U	0.00290	U
<i>Magnesium</i>	1.00	0.0191	U	0.0191	U	0.0191	U	0.0191	U
<i>Manganese</i>	0.0100	0.000840	U	0.000840	U	0.000840	U	0.000840	U
<i>Nickel</i>	0.0100	0.00179	U	0.00179	U	0.00179	U	0.00179	U
<i>Potassium</i>	1.00	0.129	U	0.129	U	0.129	U	0.129	U
<i>Selenium</i>	0.0400	0.00417	U	0.00417	U	0.00417	U	0.00417	U
<i>Silver</i>	0.0100	0.00125	U	0.00125	U	0.00125	U	0.00125	U
<i>Zinc</i>	0.0100	0.00217	U	0.00217	U	0.00217	U	0.00217	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Concentration Units: mg/L

Analyte	RL	CCB 600-203675/196 12/29/2016 17:18							
		Found	C	Found	C	Found	C	Found	C
Molybdenum, Dissolved	0.0100	0.00273	U						
Sodium, Dissolved	1.00	0.03220	J						
<i>Aluminum</i>	0.500	0.02440	J						
<i>Arsenic</i>	0.0100	0.00328	U						
<i>Barium</i>	0.0200	0.00220	U						
<i>Cadmium</i>	0.00500	0.000730	U						
<i>Calcium</i>	1.00	0.0219	U						
<i>Chromium</i>	0.0100	0.00155	U						
<i>Cobalt</i>	0.0100	0.000630	U						
<i>Copper</i>	0.0100	0.002700	J						
<i>Iron</i>	0.400	0.0866	U						
<i>Lead</i>	0.0100	0.00290	U						
<i>Magnesium</i>	1.00	0.0191	U						
<i>Manganese</i>	0.0100	0.000840	U						
<i>Nickel</i>	0.0100	0.00179	U						
<i>Potassium</i>	1.00	0.129	U						
<i>Selenium</i>	0.0400	0.00417	U						
<i>Silver</i>	0.0100	0.00125	U						
<i>Zinc</i>	0.0100	0.00217	U						

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	ICB 600-203577/13 12/27/2016 15:50		CCB 600-203577/52 12/27/2016 17:22		CCB 600-203577/64 12/27/2016 17:45		CCB 600-203577/76 12/27/2016 18:09	
		Found	C	Found	C	Found	C	Found	C
Mercury, Dissolved	0.200	0.0820	U	0.0820	U	0.0820	U	0.0820	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	CCB 600-203577/88 12/27/2016 18:32		CCB 600-203577/97 12/27/2016 18:50		CCB 600-203577/104 12/28/2016 06:07		CCB 600-203577/111 12/28/2016 06:21	
		Found	C	Found	C	Found	C	Found	C
Mercury, Dissolved	0.200	0.0820	U	0.0820	U	0.0820	U	0.0820	U

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Concentration Units: mg/L Lab Sample ID: MB 600-203516/1-A
 Instrument Code: Thermo6500 Batch No.: 203574

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum, Dissolved	0.0926	U		6010C
7440-38-2	Arsenic, Dissolved	0.00285	U		6010C
7440-39-3	Barium, Dissolved	0.000530	U		6010C
7440-43-9	Cadmium, Dissolved	0.000280	U		6010C
7440-70-2	Calcium, Dissolved	0.0240	U		6010C
7440-47-3	Chromium, Dissolved	0.00159	U		6010C
7440-48-4	Cobalt, Dissolved	0.000310	U		6010C
7440-50-8	Copper, Dissolved	0.000600	U		6010C
7439-89-6	Iron, Dissolved	0.0270	U		6010C
7439-92-1	Lead, Dissolved	0.00219	U		6010C
7439-95-4	Magnesium, Dissolved	0.0555	U		6010C
7439-96-5	Manganese, Dissolved	0.000360	U		6010C
7439-98-7	Molybdenum, Dissolved	0.000540	U	^	6010C
7440-02-0	Nickel, Dissolved	0.000800	U		6010C
7440-09-7	Potassium, Dissolved	0.0374	U		6010C
7782-49-2	Selenium, Dissolved	0.00287	U		6010C
7440-22-4	Silver, Dissolved	0.00129	U		6010C
7440-23-5	Sodium, Dissolved	0.1824	J		6010C
7440-66-6	Zinc, Dissolved	0.002500	J		6010C

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Houston Job No.: 600-141139-1
SDG No.: _____
Concentration Units: mg/L Lab Sample ID: MB 600-203516/1-A
Instrument Code: Thermo6500 Batch No.: 203675

CAS No.	Analyte	Concentration	C	Q	Method
7439-98-7	Molybdenum, Dissolved	0.001300	J		6010C
7440-23-5	Sodium, Dissolved	0.1268	J		6010C

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Houston Job No.: 600-141139-1
SDG No.: _____
Concentration Units: mg/L Lab Sample ID: MB 600-203401/7-A
Instrument Code: MHG01 Batch No.: 203577

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury, Dissolved	0.0000820	U		7470A

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Lab Sample ID: ICSA 600-203574/14 Instrument ID: Thermo6500
 Lab File ID: B122816.asc ICS Source: METISA_00121
 Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum, Dissolved	500	563	113
Arsenic, Dissolved		0.0068	
Barium, Dissolved		0.0001	
Cadmium, Dissolved		0.0012	
Calcium, Dissolved	500	535	107
Chromium, Dissolved		0.0004	
Cobalt, Dissolved		-0.0012	
Copper, Dissolved		-0.0017	
Iron, Dissolved	200	208	104
Lead, Dissolved		-0.0083	
Magnesium, Dissolved	500	541	108
Manganese, Dissolved		-0.0020	
Molybdenum, Dissolved		-0.0012	
Nickel, Dissolved		0.0121	
Potassium, Dissolved		0.0497	
Selenium, Dissolved		-0.0183	
Silver, Dissolved		-0.0001	
Sodium		-0.0355	
Zinc, Dissolved		0.0097	
<i>Antimony</i>		<i>-0.0050</i>	
<i>Beryllium</i>		<i>0.0001</i>	
<i>Boron</i>		<i>0.0024</i>	
<i>Lithium</i>		<i>0.0103</i>	
<i>Silicon</i>		<i>0.0038</i>	
<i>Strontium</i>		<i>0.0039</i>	
<i>Thallium</i>		<i>0.0109</i>	
<i>Tin</i>		<i>-0.0009</i>	
<i>Titanium</i>		<i>0.0052</i>	
<i>Vanadium</i>		<i>0.0015</i>	

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

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Lab Sample ID: ICSAB 600-203574/15 Instrument ID: Thermo6500
 Lab File ID: B122816.asc ICS Source: METISB_00119
 Concentration Units: mg/L

Analyte	True	Found	Percent Recovery
	Solution AB	Solution AB	
Aluminum, Dissolved	510	549	108
Arsenic, Dissolved	1.00	1.04	104
Barium, Dissolved	1.00	0.886	89
Cadmium, Dissolved	0.500	0.527	105
Calcium, Dissolved	510	520	102
Chromium, Dissolved	1.00	0.972	97
Cobalt, Dissolved	1.00	1.05	105
Copper, Dissolved	1.00	1.08	108
Iron, Dissolved	210	208	99
Lead, Dissolved	1.00	1.01	101
Magnesium, Dissolved	510	523	103
Manganese, Dissolved	1.00	0.965	96
Molybdenum, Dissolved	1.00	0.951	95
Nickel, Dissolved	1.00	1.06	106
Potassium, Dissolved	10.0	10.6	106
Selenium, Dissolved	1.00	1.00	100
Silver, Dissolved	0.500	0.551	110
Sodium	10.0	10.5	105
Zinc, Dissolved	1.00	1.10	110
<i>Antimony</i>	<i>1.00</i>	<i>0.974</i>	<i>97</i>
<i>Beryllium</i>	<i>0.500</i>	<i>0.465</i>	<i>93</i>
<i>Boron</i>	<i>1.00</i>	<i>1.00</i>	<i>100</i>
<i>Lithium</i>	<i>1.00</i>	<i>1.07</i>	<i>107</i>
<i>Silicon</i>	<i>1.00</i>	<i>0.932</i>	<i>93</i>
<i>Strontium</i>	<i>0.500</i>	<i>0.445</i>	<i>89</i>
<i>Thallium</i>	<i>1.00</i>	<i>0.934</i>	<i>93</i>
<i>Tin</i>	<i>1.00</i>	<i>1.04</i>	<i>104</i>
<i>Titanium</i>	<i>1.00</i>	<i>0.991</i>	<i>99</i>
<i>Vanadium</i>	<i>1.00</i>	<i>0.993</i>	<i>99</i>

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

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Lab Sample ID: ICSA 600-203675/15 Instrument ID: Thermo6500
 Lab File ID: A122916.asc ICS Source: METISA_00121
 Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Molybdenum, Dissolved		-0.0022	
Sodium, Dissolved		0.0143	
Aluminum	500	544	109
Antimony		-0.0075	
Arsenic		0.0022	
Barium		0.0001	
Beryllium		0.0001	
Boron		0.0048	
Cadmium		0.0012	
Calcium	500	503	101
Chromium		0.0000	
Cobalt		-0.0012	
Copper		0.0010	
Iron	200	195	97
Lead		-0.0093	
Lithium		0.0103	
Magnesium	500	509	102
Manganese		-0.0020	
Nickel		0.0094	
Potassium		0.0784	
Selenium		-0.0198	
Silicon		-0.0059	
Silver		-0.0006	
Strontium		0.0037	
Thallium		0.0075	
Tin		0.0005	
Titanium		0.0050	
Vanadium		-0.0008	
Zinc		0.0096	

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

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Lab Sample ID: ICSAB 600-203675/16 Instrument ID: Thermo6500
 Lab File ID: A122916.asc ICS Source: METISB_00119
 Concentration Units: mg/L

Analyte	True	Found	Percent Recovery
	Solution AB	Solution AB	
Molybdenum, Dissolved	1.00	0.955	96
Sodium, Dissolved	10.0	10.6	106
<i>Aluminum</i>	<i>510</i>	<i>560</i>	<i>110</i>
<i>Antimony</i>	<i>1.00</i>	<i>0.979</i>	<i>98</i>
<i>Arsenic</i>	<i>1.00</i>	<i>1.05</i>	<i>105</i>
<i>Barium</i>	<i>1.00</i>	<i>0.873</i>	<i>87</i>
<i>Beryllium</i>	<i>0.500</i>	<i>0.459</i>	<i>92</i>
<i>Boron</i>	<i>1.00</i>	<i>0.985</i>	<i>99</i>
<i>Cadmium</i>	<i>0.500</i>	<i>0.529</i>	<i>106</i>
<i>Calcium</i>	<i>510</i>	<i>517</i>	<i>101</i>
<i>Chromium</i>	<i>1.00</i>	<i>0.984</i>	<i>98</i>
<i>Cobalt</i>	<i>1.00</i>	<i>1.04</i>	<i>104</i>
<i>Copper</i>	<i>1.00</i>	<i>1.09</i>	<i>109</i>
<i>Iron</i>	<i>210</i>	<i>206</i>	<i>98</i>
<i>Lead</i>	<i>1.00</i>	<i>0.999</i>	<i>100</i>
<i>Lithium</i>	<i>1.00</i>	<i>1.06</i>	<i>106</i>
<i>Magnesium</i>	<i>510</i>	<i>515</i>	<i>101</i>
<i>Manganese</i>	<i>1.00</i>	<i>0.973</i>	<i>97</i>
<i>Nickel</i>	<i>1.00</i>	<i>1.05</i>	<i>105</i>
<i>Potassium</i>	<i>10.0</i>	<i>10.6</i>	<i>106</i>
<i>Selenium</i>	<i>1.00</i>	<i>0.998</i>	<i>100</i>
<i>Silicon</i>	<i>1.00</i>	<i>0.894</i>	<i>89</i>
<i>Silver</i>	<i>0.500</i>	<i>0.555</i>	<i>111</i>
<i>Strontium</i>	<i>0.500</i>	<i>0.442</i>	<i>88</i>
<i>Thallium</i>	<i>1.00</i>	<i>0.928</i>	<i>93</i>
<i>Tin</i>	<i>1.00</i>	<i>1.04</i>	<i>104</i>
<i>Titanium</i>	<i>1.00</i>	<i>1.01</i>	<i>101</i>
<i>Vanadium</i>	<i>1.00</i>	<i>1.00</i>	<i>100</i>
<i>Zinc</i>	<i>1.00</i>	<i>1.08</i>	<i>108</i>

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

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: SANJUAN-MW06-12132016 MS

Lab ID: 600-141139-7 MS

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG No.: _____

Matrix: Water

Concentration Units: mg/L

% Solids: _____

Analyte	SSR C	Sample Result (SR) C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury, Dissolved	0.002530	0.0000820	U 0.00300	84	75-125		7470A

SSR = Spiked Sample Result

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

6-IN
DUPLICATES
METALS - DISSOLVED

Client ID: SANJUAN-MW06-12132016 DU

Lab ID: 600-141139-7 DU

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG No.: _____

% Solids for Sample: _____

% Solids for Duplicate: _____

Matrix: Water

Concentration Units: mg/L

Analyte	Control Limit	Sample (S) C	Duplicate (D) C	RPD	Q	Method
Mercury, Dissolved	0.000200	0.0000820 U	0.0000820 U	NC		7470A

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

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 600-203516/2-A

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

Sample Matrix: Water

LCS Source: METCALA_00026

Analyte	Water (mg/L)							
	True	Found	C	%R	Limits		Q	Method
Aluminum, Dissolved	10.0	10.49		105	80	120		6010C
Arsenic, Dissolved	1.00	1.085		109	80	120		6010C
Barium, Dissolved	1.00	1.008		101	80	120		6010C
Cadmium, Dissolved	0.500	0.5320		106	80	120		6010C
Calcium, Dissolved	10.0	9.964		100	80	120		6010C
Chromium, Dissolved	1.00	1.033		103	80	120		6010C
Cobalt, Dissolved	1.00	1.018		102	80	120		6010C
Copper, Dissolved	1.00	1.136		114	80	120		6010C
Iron, Dissolved	10.0	10.26		103	80	120		6010C
Lead, Dissolved	1.00	1.022		102	80	120		6010C
Magnesium, Dissolved	10.0	9.653		97	80	120		6010C
Manganese, Dissolved	1.00	1.063		106	80	120		6010C
Molybdenum, Dissolved	1.00	1.086		109	80	120	^	6010C
Nickel, Dissolved	1.00	1.020		102	80	120		6010C
Potassium, Dissolved	10.0	10.45		105	80	120		6010C
Selenium, Dissolved	1.00	1.104		110	80	120		6010C
Silver, Dissolved	0.500	0.5531		111	80	120		6010C
Sodium, Dissolved	10.0	10.71		107	80	120		6010C
Zinc, Dissolved	1.00	0.9566		96	80	120		6010C

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

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 600-203516/2-A

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

Sample Matrix: Water

LCS Source: METCALB_00025

Analyte	Water (mg/L)							
	True	Found	C	%R	Limits		Q	Method
Molybdenum, Dissolved	1.00	1.065		107	80	120		6010C
Sodium, Dissolved	10.0	10.56		106	80	120		6010C

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

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 600-203401/8-A

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

Sample Matrix: Water

LCS Source: MER0916S2_00072

Analyte	Water (mg/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury, Dissolved	0.00300	0.002639		88	70	130		7470A

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

FORM VIIA - IN

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Houston

Job Number: 600-141139-1

SDG Number: _____

Matrix: Water

Instrument ID: Thermo6500

Method: 6010C

MDL Date: 09/01/2011 12:41

Prep Method: 3010A

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Aluminum, Dissolved		0.5	0.0926
Arsenic, Dissolved		0.01	0.00285
Barium, Dissolved		0.02	0.00053
Cadmium, Dissolved		0.005	0.00028
Calcium, Dissolved		1	0.024
Chromium, Dissolved		0.01	0.00159
Cobalt, Dissolved		0.01	0.00031
Copper, Dissolved		0.01	0.0006
Iron, Dissolved		0.4	0.027
Lead, Dissolved		0.01	0.00219
Magnesium, Dissolved		1	0.0555
Manganese, Dissolved		0.01	0.00036
Molybdenum, Dissolved		0.01	0.00054
Nickel, Dissolved		0.01	0.0008
Potassium, Dissolved		1	0.0374
Selenium, Dissolved		0.04	0.00287
Silver, Dissolved		0.01	0.00129
Sodium, Dissolved		1	0.0214
Zinc, Dissolved		0.03	0.00143

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Houston

Job Number: 600-141139-1

SDG Number: _____

Matrix: Water

Instrument ID: Thermo6500

Method: 6010C

XMDL Date: 09/01/2011 12:56

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Aluminum, Dissolved		0.5	0.00599
Arsenic, Dissolved		0.01	0.00328
Barium, Dissolved		0.02	0.0022
Cadmium, Dissolved		0.005	0.00073
Calcium, Dissolved		1	0.0219
Chromium, Dissolved		0.01	0.00155
Cobalt, Dissolved		0.01	0.00063
Copper, Dissolved		0.01	0.00145
Iron, Dissolved		0.4	0.0866
Lead, Dissolved		0.01	0.0029
Magnesium, Dissolved		1	0.0191
Manganese, Dissolved		0.01	0.00084
Molybdenum, Dissolved		0.01	0.00273
Nickel, Dissolved		0.01	0.00179
Potassium, Dissolved		1	0.129
Selenium, Dissolved		0.04	0.00417
Silver, Dissolved		0.01	0.00125
Sodium, Dissolved		1	0.02
Zinc, Dissolved		0.01	0.00217

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Houston

Job Number: 600-141139-1

SDG Number: _____

Matrix: Water

Instrument ID: MHG01

Method: 7470A

MDL Date: 01/30/2013 13:08

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury, Dissolved		0.2	0.082

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Houston Job Number: 600-141139-1
SDG Number: _____
Matrix: Water Instrument ID: MHG01
Method: 7470A XMDL Date: 05/16/2008 15:13

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury, Dissolved		0.2	0.082

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Houston Job Number: 600-141139-1

SDG No.: _____

ICP-AES Instrument ID: Thermo6500 Date: 01/04/2016

Analyte	Wave Length	Ag	Al	As	B	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Li
Aluminum													-0.000062		
Antimony											0.013941				
Arsenic											0.000632		-0.000011		
Barium															
Beryllium															
Boron															
Cadmium				0.016373											
Calcium													-0.000013		
Chromium															
Cobalt															
Copper															
Iron															
Lead			0.000119					-0.000009		-0.000608		0.000928	0.000001		
Lithium															
Magnesium															
Manganese															
Molybdenum															
Nickel													0.000050		
Potassium															
Selenium															
Silicon															
Silver															
Sodium															
Strontium															
Thallium											0.000188				
Tin															
Titanium											0.000212				
Vanadium															
Zinc											-0.000095				

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Houston Job Number: 600-141139-1

SDG No.: _____

ICP-AES Instrument ID: Thermo6500 Date: 01/04/2016

Analyte	Wave Length	Mg	Mn	Mo	Na	Ni	Pb	Sb	Se	Si	Sn	Sr	Ti	Tl	V
Aluminum				0.021995											0.045833
Antimony															
Arsenic				0.000902											
Barium															
Beryllium															0.000250
Boron															
Cadmium															0.000105
Calcium															
Chromium															
Cobalt						0.000120							0.002255		
Copper				-0.000202											-0.000268
Iron															
Lead				-0.002542		-0.000020									
Lithium															
Magnesium															
Manganese		0.000003													
Molybdenum															
Nickel				0.000860										0.000721	
Potassium															
Selenium															
Silicon															
Silver															0.000089
Sodium															
Strontium				0.000001											
Thallium			0.00095												0.000309
Tin															
Titanium				0.001410											
Vanadium				0.002508											
Zinc				0.000285											

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Houston Job Number: 600-141139-1

SDG No.: _____

ICP-AES Instrument ID: Thermo6500 Date: 01/04/2016

Analyte	Wave Length	Zn													
Aluminum															
Antimony															
Arsenic															
Barium															
Beryllium															
Boron															
Cadmium															
Calcium															
Chromium															
Cobalt															
Copper															
Iron															
Lead															
Lithium															
Magnesium															
Manganese															
Molybdenum															
Nickel															
Potassium															
Selenium															
Silicon															
Silver															
Sodium															
Strontium															
Thallium															
Tin															
Titanium															
Vanadium															
Zinc															

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Houston

Job No: 600-141139-1

SDG No.: _____

Instrument ID: Thermo6500

Date: 04/04/2016 09:34

Analyte	Integ. Time (Sec.)	Concentration (mg/L)	Method
Aluminum, Dissolved		500.	6010C
Arsenic, Dissolved		50.0	6010C
Barium, Dissolved		40.0	6010C
Cadmium, Dissolved		10.0	6010C
Calcium, Dissolved		2000	6010C
Chromium, Dissolved		50.0	6010C
Cobalt, Dissolved		25.0	6010C
Copper, Dissolved		50.0	6010C
Iron, Dissolved		1000	6010C
Lead, Dissolved		50.0	6010C
Magnesium, Dissolved		500.	6010C
Manganese, Dissolved		10.0	6010C
Molybdenum, Dissolved		10.0	6010C
Nickel, Dissolved		50.0	6010C
Potassium, Dissolved		200.	6010C
Selenium, Dissolved		25.0	6010C
Silver, Dissolved		2.00	6010C
Sodium, Dissolved		200.	6010C
Zinc, Dissolved		10.0	6010C

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Prep Method: 3010A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 600-203516/1-A	12/28/2016 04:20	203516		50	50
LCS 600-203516/2-A	12/28/2016 04:20	203516		50	50
600-141139-1	12/28/2016 04:20	203516		50	50
600-141139-1 DL2	12/28/2016 04:20	203516		50	50
600-141139-3	12/28/2016 04:20	203516		50	50
600-141139-4	12/28/2016 04:20	203516		50	50
600-141139-4 DL	12/28/2016 04:20	203516		50	50
600-141139-5	12/28/2016 04:20	203516		50	50
600-141139-5 DL	12/28/2016 04:20	203516		50	50
600-141139-6	12/28/2016 04:20	203516		50	50
600-141139-6 DL	12/28/2016 04:20	203516		50	50
600-141139-7	12/28/2016 04:20	203516		50	50
600-141139-7 DL2	12/28/2016 04:20	203516		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 600-203401/7-A	12/23/2016 09:04	203401		40	40
LCS 600-203401/8-A	12/23/2016 09:04	203401		50	50
600-141139-1	12/23/2016 09:04	203401		40	40
600-141139-3	12/23/2016 09:04	203401		40	40
600-141139-4	12/23/2016 09:04	203401		40	40
600-141139-5	12/23/2016 09:04	203401		40	40
600-141139-6	12/23/2016 09:10	203401		40	40
600-141139-7	12/23/2016 09:10	203401		40	40
600-141139-7 DU	12/23/2016 09:10	203401		40	40
600-141139-7 MS	12/23/2016 09:10	203401		40	40

Lab Name: <u>TestAmerica Houston</u>	Job No.: <u>600-141139-1</u>
SDG No.: _____	
Instrument ID: <u>Thermo6500</u>	Analysis Method: <u>6010C</u>
Start Date: <u>12/28/2016 07:41</u>	End Date: <u>12/28/2016 18:44</u>

Lab Sample Id	D/F	T y p e	Time	Analytes																											
				A g	A l	A s	B a	C a	C d	C o	C r	C u	F e	K	M g	M n	M o	N a	N i	P b	S e	Z n									
RINSE 600-203574/1			07:41																												
RINSE 600-203574/2			07:43																												
ZZZZZZ			07:46																												
ZZZZZZ			07:48																												
CALIBSTD 600-203574/5 IC			07:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CALIBSTD 600-203574/6 IC			07:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CALIBSTD 600-203574/7 IC			07:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CALIBSTD 600-203574/8 IC			07:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
ZZZZZZ			08:00																												
ICV 600-203574/10	1		08:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
ZZZZZZ			08:05																												
ICVL 600-203574/12	1		08:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
ICBIS 600-203574/13	1		08:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
ICSA 600-203574/14	1		08:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
ICSAB 600-203574/15	1		08:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CCV 600-203574/16			08:17																												
CCVL 600-203574/17			08:20																												
CCB 600-203574/18			08:22																												
ZZZZZZ			08:25																												
ZZZZZZ			08:27																												
ZZZZZZ			08:30																												
ZZZZZZ			08:32																												
ZZZZZZ			08:35																												
ZZZZZZ			08:37																												
ZZZZZZ			08:39																												
ZZZZZZ			08:42																												
ZZZZZZ			08:44																												
ZZZZZZ			08:47																												
CCV 600-203574/29			08:49																												
CCVL 600-203574/30			08:51																												
CCB 600-203574/31			08:54																												
ZZZZZZ			08:56																												
ZZZZZZ			08:59																												
ZZZZZZ			09:01																												
ZZZZZZ			09:03																												
ZZZZZZ			09:06																												
ZZZZZZ			09:08																												
ZZZZZZ			09:11																												
ZZZZZZ			09:13																												
ZZZZZZ			09:16																												
ZZZZZZ			09:18																												
CCV 600-203574/42			09:20																												

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG No.: _____

Instrument ID: Thermo6500

Analysis Method: 6010C

Start Date: 12/28/2016 07:41

End Date: 12/28/2016 18:44

Lab Sample Id	D/F	Type	Time	Analytes																									
				A	A	A	B	C	C	C	C	C	F	K	M	M	M	N	N	P	S	Z							
CCVL 600-203574/43			09:23																										
CCB 600-203574/44			09:25																										
ZZZZZZ			09:27																										
ZZZZZZ			09:30																										
ZZZZZZ			09:32																										
ZZZZZZ			09:35																										
ZZZZZZ			09:37																										
ZZZZZZ			09:40																										
ZZZZZZ			09:42																										
ZZZZZZ			09:44																										
ZZZZZZ			09:47																										
ZZZZZZ			09:49																										
CCV 600-203574/55			09:52																										
CCVL 600-203574/56			09:54																										
CCB 600-203574/57			09:57																										
ZZZZZZ			09:59																										
ZZZZZZ			10:01																										
ZZZZZZ			10:04																										
ZZZZZZ			10:06																										
ZZZZZZ			10:09																										
ZZZZZZ			10:11																										
ZZZZZZ			10:13																										
ZZZZZZ			10:16																										
ZZZZZZ			10:18																										
ZZZZZZ			10:21																										
CCV 600-203574/68			10:23																										
CCVL 600-203574/69			10:25																										
CCB 600-203574/70			10:27																										
ZZZZZZ			10:30																										
ZZZZZZ			10:32																										
ZZZZZZ			10:35																										
ZZZZZZ			10:37																										
ZZZZZZ			10:39																										
ZZZZZZ			10:42																										
ZZZZZZ			10:44																										
ZZZZZZ			10:47																										
ZZZZZZ			10:49																										
ZZZZZZ			10:51																										
CCV 600-203574/81			10:54																										
CCVL 600-203574/82			10:56																										
CCB 600-203574/83			10:58																										
ZZZZZZ			11:01																										

Lab Name: <u>TestAmerica Houston</u>	Job No.: <u>600-141139-1</u>
SDG No.: _____	
Instrument ID: <u>Thermo6500</u>	Analysis Method: <u>6010C</u>
Start Date: <u>12/28/2016 07:41</u>	End Date: <u>12/28/2016 18:44</u>

12/30/2016

Lab Name: <u>TestAmerica Houston</u>	Job No.: <u>600-141139-1</u>
SDG No.: _____	
Instrument ID: <u>Thermo6500</u>	Analysis Method: <u>6010C</u>
Start Date: 12/28/2016 07:41	End Date: 12/28/2016 18:44

[illegible]

Lab Name: <u>TestAmerica Houston</u>	Job No.: <u>600-141139-1</u>
SDG No.: _____	
Instrument ID: <u>Thermo6500</u>	Analysis Method: <u>6010C</u>
Start Date: <u>12/28/2016 07:41</u>	End Date: <u>12/28/2016 18:44</u>

12/30/2016

Lab Name: <u>TestAmerica Houston</u>	Job No.: <u>600-141139-1</u>
SDG No.: _____	
Instrument ID: <u>Thermo6500</u>	Analysis Method: <u>6010C</u>
Start Date: 12/28/2016 07:41	End Date: 12/28/2016 18:44

[illegible]

Lab Name: <u>TestAmerica Houston</u>	Job No.: <u>600-141139-1</u>
SDG No.: _____	
Instrument ID: <u>Thermo6500</u>	Analysis Method: <u>6010C</u>
Start Date: <u>12/28/2016 07:41</u>	End Date: <u>12/28/2016 18:44</u>

[illegible]

D = Dissolved
T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG No.: _____

Instrument ID: Thermo6500

Analysis Method: 6010C

Start Date: 12/29/2016 09:26

End Date: 12/29/2016 18:20

Lab Sample Id	D/F	Type	Time	Analytes																							
				M	N																						
RINSE 600-203675/1			09:26																								
RINSE 600-203675/2			09:28																								
ZZZZZZ			09:31																								
ZZZZZZ			09:33																								
CALIBSTD 600-203675/5 IC			09:35	X	X																						
CALIBSTD 600-203675/6 IC			09:38	X	X																						
CALIBSTD 600-203675/7 IC			09:40	X	X																						
CALIBSTD 600-203675/8 IC			09:42	X	X																						
ZZZZZZ			09:46																								
ZZZZZZ			09:48																								
ICV 600-203675/11	1		09:51	X	X																						
ZZZZZZ			09:53																								
ICVL 600-203675/13	1		09:56	X	X																						
ICBIS 600-203675/14	1		09:59	X	X																						
ICSA 600-203675/15	1		10:01	X	X																						
ICSAB 600-203675/16	1		10:03	X	X																						
CCV 600-203675/17			10:06																								
CCVL 600-203675/18			10:08																								
CCB 600-203675/19			10:10																								
ZZZZZZ			10:14																								
ZZZZZZ			10:16																								
ZZZZZZ			10:19																								
ZZZZZZ			10:21																								
ZZZZZZ			10:24																								
ZZZZZZ			10:26																								
ZZZZZZ			10:29																								
ZZZZZZ			10:31																								
ZZZZZZ			10:34																								
ZZZZZZ			10:36																								
CCV 600-203675/30			10:38																								
CCVL 600-203675/31			10:41																								
CCB 600-203675/32			10:43																								
ZZZZZZ			10:45																								
ZZZZZZ			10:48																								
ZZZZZZ			10:50																								
ZZZZZZ			10:52																								
ZZZZZZ			10:55																								
ZZZZZZ			10:57																								
ZZZZZZ			10:59																								
ZZZZZZ			11:02																								
ZZZZZZ			11:04																								
ZZZZZZ			11:07																								

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG No.: _____

Instrument ID: Thermo6500

Analysis Method: 6010C

Start Date: 12/29/2016 09:26

End Date: 12/29/2016 18:20

Lab Sample Id	D/F	T y p e	Time	Analytes																	
				M	N																
CCV 600-203675/43			11:09																		
CCVL 600-203675/44			11:12																		
CCB 600-203675/45			11:14																		
ZZZZZZ			11:17																		
ZZZZZZ			11:19																		
ZZZZZZ			11:22																		
ZZZZZZ			11:24																		
ZZZZZZ			11:26																		
ZZZZZZ			11:29																		
ZZZZZZ			11:31																		
ZZZZZZ			11:33																		
ZZZZZZ			11:36																		
ZZZZZZ			11:38																		
CCV 600-203675/56			11:41																		
CCVL 600-203675/57			11:43																		
CCB 600-203675/58			11:45																		
ZZZZZZ			11:48																		
ZZZZZZ			11:50																		
ZZZZZZ			11:53																		
ZZZZZZ			11:55																		
ZZZZZZ			11:57																		
ZZZZZZ			12:00																		
ZZZZZZ			12:02																		
ZZZZZZ			12:05																		
ZZZZZZ			12:07																		
ZZZZZZ			12:10																		
CCV 600-203675/69			12:12																		
CCVL 600-203675/70			12:14																		
CCB 600-203675/71			12:17																		
ZZZZZZ			12:19																		
ZZZZZZ			12:22																		
ZZZZZZ			12:24																		
ZZZZZZ			12:27																		
ZZZZZZ			12:29																		
ZZZZZZ			12:31																		
ZZZZZZ			12:34																		
ZZZZZZ			12:36																		
ZZZZZZ			12:38																		
ZZZZZZ			12:41																		
CCV 600-203675/82			12:43																		
CCVL 600-203675/83			12:46																		
CCB 600-203675/84			12:48																		

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Instrument ID: Thermo6500 Analysis Method: 6010C
 Start Date: 12/29/2016 09:26 End Date: 12/29/2016 18:20

Lab Sample Id	D/F	T y p e	Time	Analytes																									
				M	N																								
ZZZZZZ			12:50																										
ZZZZZZ			12:53																										
ZZZZZZ			12:55																										
ZZZZZZ			12:58																										
ZZZZZZ			13:00																										
ZZZZZZ			13:02																										
ZZZZZZ			13:05																										
ZZZZZZ			13:07																										
ZZZZZZ			13:10																										
ZZZZZZ			13:12																										
CCV 600-203675/95			13:14																										
CCVL 600-203675/96			13:17																										
CCB 600-203675/97			13:19																										
ZZZZZZ			13:22																										
ZZZZZZ			13:24																										
ZZZZZZ			13:26																										
ZZZZZZ			13:28																										
ZZZZZZ			13:31																										
ZZZZZZ			13:33																										
ZZZZZZ			13:35																										
ZZZZZZ			13:38																										
ZZZZZZ			13:40																										
ZZZZZZ			13:42																										
CCV 600-203675/108			13:45																										
CCVL 600-203675/109			13:47																										
CCB 600-203675/110			13:49																										
ZZZZZZ			13:52																										
ZZZZZZ			13:54																										
ZZZZZZ			13:57																										
ZZZZZZ			13:59																										
ZZZZZZ			14:02																										
ZZZZZZ			14:04																										
ZZZZZZ			14:07																										
ZZZZZZ			14:09																										
ZZZZZZ			14:11																										
ZZZZZZ			14:14																										
CCV 600-203675/121			14:16																										
CCVL 600-203675/122			14:18																										
CCB 600-203675/123			14:21																										
ZZZZZZ			14:23																										
ZZZZZZ			14:25																										
ZZZZZZ			14:28																										

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG No.: _____

Instrument ID: Thermo6500

Analysis Method: 6010C

Start Date: 12/29/2016 09:26

End Date: 12/29/2016 18:20

Lab Sample Id	D/F	Type	Time	Analytes																	
				M	N																
ZZZZZZ			14:30																		
ZZZZZZ			14:33																		
ZZZZZZ			14:35																		
ZZZZZZ			14:38																		
ZZZZZZ			14:40																		
ZZZZZZ			14:42																		
ZZZZZZ			14:45																		
CCV 600-203675/134			14:47																		
CCVL 600-203675/135			14:49																		
CCB 600-203675/136			14:52																		
ZZZZZZ			14:54																		
ZZZZZZ			14:57																		
ZZZZZZ			14:59																		
ZZZZZZ			15:01																		
ZZZZZZ			15:04																		
ZZZZZZ			15:06																		
ZZZZZZ			15:09																		
ZZZZZZ			15:11																		
ZZZZZZ			15:13																		
ZZZZZZ			15:16																		
CCV 600-203675/147			15:18																		
CCVL 600-203675/148			15:20																		
CCB 600-203675/149			15:23																		
ZZZZZZ			15:25																		
ZZZZZZ			15:28																		
ZZZZZZ			15:30																		
ZZZZZZ			15:32																		
ZZZZZZ			15:35																		
ZZZZZZ			15:37																		
ZZZZZZ			15:40																		
ZZZZZZ			15:42																		
ZZZZZZ			15:44																		
ZZZZZZ			15:47																		
CCV 600-203675/160	1		15:49	X	X																
CCVL 600-203675/161	1		15:52	X	X																
CCB 600-203675/162	1		15:54	X	X																
ZZZZZZ			15:56																		
ZZZZZZ			15:59																		
MB 600-203516/1-A	1	T	16:01	X	X																
LCS 600-203516/2-A	1	T	16:03	X	X																
ZZZZZZ			16:06																		
ZZZZZZ			16:08																		

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG No.: _____

Instrument ID: Thermo6500

Analysis Method: 6010C

Start Date: 12/29/2016 09:26

End Date: 12/29/2016 18:20

Lab Sample Id	D/F	T y p e	Time	Analytes																									
				M o	N a																								
ZZZZZZ			16:11																										
ZZZZZZ			16:13																										
600-141139-3	1	D	16:15	X																									
600-141139-3	20	D	16:18		X																								
CCV 600-203675/173	1		16:20	X	X																								
CCVL 600-203675/174	1		16:23	X	X																								
CCB 600-203675/175	1		16:25	X	X																								
600-141139-4	1	D	16:27	X																									
600-141139-4 DL	20	D	16:30		X																								
600-141139-5	1	D	16:32	X																									
600-141139-5 DL	20	D	16:35		X																								
600-141139-6 DL	20	D	16:37		X																								
ZZZZZZ			16:40																										
600-141139-1 DL2	50	D	16:44		X																								
ZZZZZZ			16:46																										
ZZZZZZ			16:49																										
ZZZZZZ			16:51																										
CCV 600-203675/186	1		16:53	X	X																								
CCVL 600-203675/187	1		16:56	X	X																								
CCB 600-203675/188	1		16:58	X	X																								
ZZZZZZ			17:00																										
ZZZZZZ			17:03																										
ZZZZZZ			17:05																										
ZZZZZZ			17:07																										
600-141139-7 DL2	50	D	17:11		X																								
CCV 600-203675/194	1		17:13	X	X																								
CCVL 600-203675/195	1		17:15	X	X																								
CCB 600-203675/196	1		17:18	X	X																								
ZZZZZZ			17:20																										
ZZZZZZ			17:23																										
ZZZZZZ			17:25																										
ZZZZZZ			17:27																										
ZZZZZZ			17:30																										
ZZZZZZ			17:32																										
ZZZZZZ			17:35																										
ZZZZZZ			17:37																										
ZZZZZZ			17:40																										
ZZZZZZ			17:42																										
CCV 600-203675/207			17:45																										
CCVL 600-203675/208			17:47																										
CCB 600-203675/209			17:49																										
ZZZZZZ			17:52																										

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Instrument ID: Thermo6500 Analysis Method: 6010C

Start Date: 12/29/2016 09:26 End Date: 12/29/2016 18:20

Lab Sample Id	D/F	T Y p e	Time	Analytes																									
				M O	N a																								
ZZZZZZ			17:54																										
ZZZZZZ			17:56																										
ZZZZZZ			17:59																										
ZZZZZZ			18:01																										
ZZZZZZ			18:04																										
ZZZZZZ			18:06																										
ZZZZZZ			18:08																										
ZZZZZZ			18:11																										
ZZZZZZ			18:13																										
CCV 600-203675/220			18:16																										
CCVL 600-203675/221			18:18																										
CCB 600-203675/222			18:20																										

Prep Types: _____
D = Dissolved
T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG No.: _____

Instrument ID: MHG01

Analysis Method: 7470A

Start Date: 12/27/2016 15:24

End Date: 12/28/2016 06:21

Lab Sample Id	D/F	T y p e	Time	Analytes																									
				H g																									
ZZZZZZ			15:24																										
ZZZZZZ			15:26																										
ZZZZZZ			15:28																										
ZZZZZZ			15:30																										
ZZZZZZ			15:32																										
ZZZZZZ			15:34																										
ZZZZZZ			15:37																										
ZZZZZZ			15:39																										
ZZZZZZ			15:41																										
ZZZZZZ			15:44																										
ZZZZZZ			15:46																										
ICV 600-203577/12	1		15:48	X																									
ICB 600-203577/13	1		15:50	X																									
CRA 600-203577/14	1		15:52	X																									
CCV 600-203577/15			15:54																										
CCB 600-203577/16			15:56																										
ZZZZZZ			16:13																										
ZZZZZZ			16:15																										
ZZZZZZ			16:17																										
ZZZZZZ			16:19																										
ZZZZZZ			16:21																										
ZZZZZZ			16:23																										
ZZZZZZ			16:25																										
ZZZZZZ			16:27																										
ZZZZZZ			16:29																										
ZZZZZZ			16:31																										
CCV 600-203577/27			16:33																										
CCB 600-203577/28			16:35																										
ZZZZZZ			16:37																										
ZZZZZZ			16:39																										
ZZZZZZ			16:41																										
ZZZZZZ			16:42																										
ZZZZZZ			16:44																										
ZZZZZZ			16:46																										
ZZZZZZ			16:48																										
ZZZZZZ			16:50																										
ZZZZZZ			16:52																										
ZZZZZZ			16:54																										
CCV 600-203577/39			16:56																										
CCB 600-203577/40			16:58																										
ZZZZZZ			17:00																										
ZZZZZZ			17:02																										

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG No.: _____

Instrument ID: MHG01

Analysis Method: 7470A

Start Date: 12/27/2016 15:24

End Date: 12/28/2016 06:21

Lab Sample Id	D/F	T y p e	Time	Analytes																									
				H g																									
ZZZZZZ			17:04																										
ZZZZZZ			17:06																										
ZZZZZZ			17:08																										
ZZZZZZ			17:10																										
ZZZZZZ			17:12																										
ZZZZZZ			17:14																										
ZZZZZZ			17:16																										
ZZZZZZ			17:18																										
CCV 600-203577/51	1		17:20	X																									
CCB 600-203577/52	1		17:22	X																									
ZZZZZZ			17:24																										
ZZZZZZ			17:26																										
ZZZZZZ			17:27																										
ZZZZZZ			17:29																										
ZZZZZZ			17:31																										
ZZZZZZ			17:33																										
MB 600-203401/7-A	1	T	17:35	X																									
LCS 600-203401/8-A	1	T	17:37	X																									
ZZZZZZ			17:39																										
ZZZZZZ			17:41																										
CCV 600-203577/63	1		17:43	X																									
CCB 600-203577/64	1		17:45	X																									
ZZZZZZ			17:47																										
ZZZZZZ			17:49																										
ZZZZZZ			17:51																										
ZZZZZZ			17:53																										
ZZZZZZ			17:55																										
ZZZZZZ			17:57																										
ZZZZZZ			17:59																										
ZZZZZZ			18:01																										
ZZZZZZ			18:03																										
ZZZZZZ			18:05																										
CCV 600-203577/75	1		18:07	X																									
CCB 600-203577/76	1		18:09	X																									
ZZZZZZ			18:11																										
ZZZZZZ			18:13																										
ZZZZZZ			18:14																										
ZZZZZZ			18:16																										
ZZZZZZ			18:18																										
ZZZZZZ			18:20																										
ZZZZZZ			18:22																										
ZZZZZZ			18:24																										

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Instrument ID: MHG01 Analysis Method: 7470A
 Start Date: 12/27/2016 15:24 End Date: 12/28/2016 06:21

Lab Sample Id	D/F	T y p e	Time	Analytes																									
				H g																									
600-141139-1	1	D	18:26	X																									
600-141139-3	1	D	18:28	X																									
CCV 600-203577/87	1		18:30	X																									
CCB 600-203577/88	1		18:32	X																									
600-141139-4	1	D	18:34	X																									
600-141139-5	1	D	18:36	X																									
600-141139-6	1	D	18:38	X																									
600-141139-7	1	D	18:40	X																									
600-141139-7 DU	1	D	18:42	X																									
600-141139-7 MS	1	D	18:44	X																									
ZZZZZZ			18:46																										
CCV 600-203577/96	1		18:48	X																									
CCB 600-203577/97	1		18:50	X																									
ZZZZZZ			05:52																										
ZZZZZZ			05:54																										
ZZZZZZ			05:56																										
ZZZZZZ			05:58																										
ZZZZZZ			06:00																										
CCV 600-203577/103	1		06:05	X																									
CCB 600-203577/104	1		06:07	X																									
ZZZZZZ			06:09																										
ZZZZZZ			06:11																										
ZZZZZZ			06:13																										
ZZZZZZ			06:15																										
ZZZZZZ			06:17																										
CCV 600-203577/110	1		06:19	X																									
CCB 600-203577/111	1		06:21	X																									

Prep Types: _____
 D = Dissolved
 T = Total/NA

METALS BATCH WORKSHEET

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Batch Number: 203516 Batch Start Date: 12/28/16 04:20 Batch Analyst: Lige, Derrick C

Batch Method: 3010A Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	METCALA 00026	METCALB 00025	METHCL 00139
MB 600-203516/1		3010A, 6010C			50 mL	50 mL			2.5 mL
LCS 600-203516/2		3010A, 6010C			50 mL	50 mL	250 uL	250 uL	2.5 mL
600-141139-C-1	SANJUAN-MW09-12132016	3010A, 6010C	D	<2	50 mL	50 mL			2.5 mL
600-141139-C-3	SANJUAN-MW08-12132016	3010A, 6010C	D	<2	50 mL	50 mL			2.5 mL
600-141139-C-4	SANJUAN-MD08-12132016	3010A, 6010C	D	<2	50 mL	50 mL			2.5 mL
600-141139-C-5	SANJUAN-W02-12132016	3010A, 6010C	D	<2	50 mL	50 mL			2.5 mL
600-141139-C-6	SANJUAN-MW04-12132016	3010A, 6010C	D	<2	50 mL	50 mL			2.5 mL
600-141139-C-7	SANJUAN-MW06-12132016	3010A, 6010C	D	<2	50 mL	50 mL			2.5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	METHNO3 00186					
MB 600-203516/1		3010A, 6010C		2.5 mL					
LCS 600-203516/2		3010A, 6010C		2.5 mL					
600-141139-C-1	SANJUAN-MW09-12132016	3010A, 6010C	D	2.5 mL					
600-141139-C-3	SANJUAN-MW08-12132016	3010A, 6010C	D	2.5 mL					
600-141139-C-4	SANJUAN-MD08-12132016	3010A, 6010C	D	2.5 mL					
600-141139-C-5	SANJUAN-W02-12132016	3010A, 6010C	D	2.5 mL					
600-141139-C-6	SANJUAN-MW04-12132016	3010A, 6010C	D	2.5 mL					
600-141139-C-7	SANJUAN-MW06-12132016	3010A, 6010C	D	2.5 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

6010C

METALS BATCH WORKSHEET

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Batch Number: 203516 Batch Start Date: 12/28/16 04:20 Batch Analyst: Lige, Derrick CBatch Method: 3010A Batch End Date: _____

Batch Notes	
Hot Block ID	#4
Oven, Bath or Block Temperature 1	91 + 4 = 95.0 Degrees C.
pH Paper ID	HC695560
Pipette ID	M12
Thermometer ID	#517
Digestion Tube/Cup ID	# 1605323

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Batch Number: 203401 Batch Start Date: 12/23/16 09:04 Batch Analyst: Edwards, Dennis DBatch Method: 7470A Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MER0816PP 00005	MER0916HS 00006	MER0916KM 00011	MER0916S2 00072
MB 600-203401/7		7470A, 7470A		40 mL	40 mL	3.2 mL	3 mL	6 mL	
LCS 600-203401/8		7470A, 7470A		50 mL	50 mL	3.2 mL	3 mL	6 mL	1.5 mL
600-141139-C-1	SANJUAN-MW09-12132016	7470A, 7470A	D	40 mL	40 mL	3.2 mL	3 mL	6 mL	
600-141139-C-3	SANJUAN-MW08-12132016	7470A, 7470A	D	40 mL	40 mL	3.2 mL	3 mL	6 mL	
600-141139-C-4	SANJUAN-MD08-12132016	7470A, 7470A	D	40 mL	40 mL	3.2 mL	3 mL	6 mL	
600-141139-C-5	SANJUAN-W02-12132016	7470A, 7470A	D	40 mL	40 mL	3.2 mL	3 mL	6 mL	
600-141139-C-6	SANJUAN-MW04-12132016	7470A, 7470A	D	40 mL	40 mL	3.2 mL	3 mL	6 mL	
600-141139-C-7	SANJUAN-MW06-12132016	7470A, 7470A	D	40 mL	40 mL	3.2 mL	3 mL	6 mL	
600-141139-C-7 DU	SANJUAN-MW06-12132016	7470A, 7470A	D	40 mL	40 mL	3.2 mL	3 mL	6 mL	
600-141139-C-7 MS	SANJUAN-MW06-12132016	7470A, 7470A	D	40 mL	40 mL	3.2 mL	3 mL	6 mL	1.2 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MERSUL 00096	METHNO3 00184				
MB 600-203401/7		7470A, 7470A		2 mL	1 mL				
LCS 600-203401/8		7470A, 7470A		2 mL	1 mL				
600-141139-C-1	SANJUAN-MW09-12132016	7470A, 7470A	D	2 mL	1 mL				
600-141139-C-3	SANJUAN-MW08-12132016	7470A, 7470A	D	2 mL	1 mL				
600-141139-C-4	SANJUAN-MD08-12132016	7470A, 7470A	D	2 mL	1 mL				
600-141139-C-5	SANJUAN-W02-12132016	7470A, 7470A	D	2 mL	1 mL				
600-141139-C-6	SANJUAN-MW04-12132016	7470A, 7470A	D	2 mL	1 mL				
600-141139-C-7	SANJUAN-MW06-12132016	7470A, 7470A	D	2 mL	1 mL				
600-141139-C-7 DU	SANJUAN-MW06-12132016	7470A, 7470A	D	2 mL	1 mL				
600-141139-C-7 MS	SANJUAN-MW06-12132016	7470A, 7470A	D	2 mL	1 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

7470A

Page 1 of 2

METALS BATCH WORKSHEET

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Batch Number: 203401 Batch Start Date: 12/23/16 09:04 Batch Analyst: Edwards, Dennis DBatch Method: 7470A Batch End Date: _____

Batch Notes	
Hood ID	m5
Hot Block ID	hb4
Stannous Chloride ID	2229224
Temperature	90+4=94 Degrees C
Thermometer ID	517
Digestion Tube/Cup ID	1605323

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Houston Job Number: 600-141139-1

SDG No.: _____

Project: Kinder Morgan Bloomfield, NM San Juan

Client Sample ID	Lab Sample ID
<u>SANJUAN-MW09-12132016</u>	<u>600-141139-1</u>
<u>SANJUAN-MW08-12132016</u>	<u>600-141139-3</u>
<u>SANJUAN-MD08-12132016</u>	<u>600-141139-4</u>
<u>SANJUAN-W02-12132016</u>	<u>600-141139-5</u>
<u>SANJUAN-MW04-12132016</u>	<u>600-141139-6</u>
<u>SANJUAN-MW06-12132016</u>	<u>600-141139-7</u>

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SANJUAN-MW09-12132016

Lab Sample ID: 600-141139-1

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG ID.:

Matrix: Water

Date Sampled: 12/13/2016 11:50

Reporting Basis: WET

Date Received: 12/14/2016 10:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Nitrate Nitrite as N	1.39	0.0500	0.0170	mg/L			1	353.2

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SANJUAN-MW09-12132016

Lab Sample ID: 600-141139-1

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG ID.:

Matrix: Water

Date Sampled: 12/13/2016 11:50

Reporting Basis: WET

Date Received: 12/14/2016 10:18

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Alkalinity	5.00	5.00		mg/L	U		1	SM 2320B
	Bicarbonate Alkalinity as CaCO ₃	5.00	5.00		mg/L	U		1	SM 2320B
	Carbonate Alkalinity as CaCO ₃	5.00	5.00		mg/L	U		1	SM 2320B
	Total Dissolved Solids	16400	200		mg/L			1	SM 2540C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SANJUAN-MW08-12132016

Lab Sample ID: 600-141139-3

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG ID.:

Matrix: Water

Date Sampled: 12/13/2016 12:25

Reporting Basis: WET

Date Received: 12/14/2016 10:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Nitrate Nitrite as N	0.0170	0.0500	0.0170	mg/L	U		1	353.2

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SANJUAN-MW08-12132016

Lab Sample ID: 600-141139-3

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG ID.:

Matrix: Water

Date Sampled: 12/13/2016 12:25

Reporting Basis: WET

Date Received: 12/14/2016 10:18

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Alkalinity	2090	5.00		mg/L			1	SM 2320B
	Bicarbonate Alkalinity as CaCO ₃	2090	5.00		mg/L			1	SM 2320B
	Carbonate Alkalinity as CaCO ₃	5.00	5.00		mg/L	U		1	SM 2320B
	Total Dissolved Solids	6600	100		mg/L			1	SM 2540C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SANJUAN-MD08-12132016

Lab Sample ID: 600-141139-4

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG ID.:

Matrix: Water

Date Sampled: 12/13/2016 12:35

Reporting Basis: WET

Date Received: 12/14/2016 10:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Nitrate Nitrite as N	0.0170	0.0500	0.0170	mg/L	U		1	353.2

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SANJUAN-MD08-12132016

Lab Sample ID: 600-141139-4

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG ID.:

Matrix: Water

Date Sampled: 12/13/2016 12:35

Reporting Basis: WET

Date Received: 12/14/2016 10:18

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Alkalinity	2340	5.00		mg/L			1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	2340	5.00		mg/L			1	SM 2320B
	Carbonate Alkalinity as CaCO3	5.00	5.00		mg/L	U		1	SM 2320B
	Total Dissolved Solids	7190	100		mg/L			1	SM 2540C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SANJUAN-W02-12132016

Lab Sample ID: 600-141139-5

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG ID.:

Matrix: Water

Date Sampled: 12/13/2016 13:10

Reporting Basis: WET

Date Received: 12/14/2016 10:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Nitrate Nitrite as N	9.59	0.500	0.170	mg/L			10	353.2

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SANJUAN-W02-12132016

Lab Sample ID: 600-141139-5

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG ID.:

Matrix: Water

Date Sampled: 12/13/2016 13:10

Reporting Basis: WET

Date Received: 12/14/2016 10:18

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Alkalinity	169	5.00		mg/L		F1 F2	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	169	5.00		mg/L			1	SM 2320B
	Carbonate Alkalinity as CaCO3	5.00	5.00		mg/L	U		1	SM 2320B
	Total Dissolved Solids	4860	40.0		mg/L			1	SM 2540C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SANJUAN-MW04-12132016

Lab Sample ID: 600-141139-6

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG ID.:

Matrix: Water

Date Sampled: 12/13/2016 13:45

Reporting Basis: WET

Date Received: 12/14/2016 10:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Nitrate Nitrite as N	0.0170	0.0500	0.0170	mg/L	U		1	353.2

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SANJUAN-MW04-12132016

Lab Sample ID: 600-141139-6

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG ID.:

Matrix: Water

Date Sampled: 12/13/2016 13:45

Reporting Basis: WET

Date Received: 12/14/2016 10:18

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Alkalinity	798	5.00		mg/L			1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	798	5.00		mg/L			1	SM 2320B
	Carbonate Alkalinity as CaCO3	5.00	5.00		mg/L	U		1	SM 2320B
	Total Dissolved Solids	4900	40.0		mg/L			1	SM 2540C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SANJUAN-MW06-12132016

Lab Sample ID: 600-141139-7

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG ID.:

Matrix: Water

Date Sampled: 12/13/2016 14:10

Reporting Basis: WET

Date Received: 12/14/2016 10:18

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Nitrate Nitrite as N	45.2	2.00	0.680	mg/L			40	353.2

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SANJUAN-MW06-12132016

Lab Sample ID: 600-141139-7

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG ID.:

Matrix: Water

Date Sampled: 12/13/2016 14:10

Reporting Basis: WET

Date Received: 12/14/2016 10:18

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Alkalinity	5.00	5.00		mg/L	U		1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	5.00	5.00		mg/L	U		1	SM 2320B
	Carbonate Alkalinity as CaCO3	5.00	5.00		mg/L	U		1	SM 2320B
	Total Dissolved Solids	15300	100		mg/L			1	SM 2540C

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Analyst: EAS Batch Start Date: 12/16/2016
 Reporting Units: mg/L Analytical Batch No.: 203009

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
7	ICV	16:57	Nitrate Nitrite as N	1.034	1.00	103	90-110		WETSICINO2_00022
8	ICB	16:58	Nitrate Nitrite as N	0.0170				U	
19	CCV	17:06	Nitrate Nitrite as N	1.003					
20	CCB	17:07	Nitrate Nitrite as N	0.0170				U	
31	CCV	17:19	Nitrate Nitrite as N	1.011					
32	CCB	17:20	Nitrate Nitrite as N	0.0170				U	
46	CCV	17:33	Nitrate Nitrite as N	0.9935					
47	CCB	17:35	Nitrate Nitrite as N	0.0170				U	
56	CCV	17:44	Nitrate Nitrite as N	1.015					
57	CCB	17:45	Nitrate Nitrite as N	0.0170				U	

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

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG No.: _____

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 203009 Date: 12/16/2016 16:59							
353.2	MB 600-203009/10	Nitrate Nitrite as N	0.0170	U	mg/L	0.0500	1
Batch ID: 203236 Date: 12/20/2016 16:38							
SM 2320B	MB 600-203236/2	Alkalinity	5.00	U	mg/L	5.00	1
SM 2320B	MB 600-203236/2	Bicarbonate Alkalinity as CaCO3	5.00	U	mg/L	5.00	1
SM 2320B	MB 600-203236/2	Carbonate Alkalinity as CaCO3	5.00	U	mg/L	5.00	1
Batch ID: 203444 Date: 12/23/2016 12:54							
SM 2320B	MB 600-203444/2	Alkalinity	5.00	U	mg/L	5.00	1
SM 2320B	MB 600-203444/2	Bicarbonate Alkalinity as CaCO3	5.00	U	mg/L	5.00	1
SM 2320B	MB 600-203444/2	Carbonate Alkalinity as CaCO3	5.00	U	mg/L	5.00	1
Batch ID: 203172 Date: 12/19/2016 13:51							
SM 2540C	MB 600-203172/25	Total Dissolved Solids	10.0	U	mg/L	10.0	1

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 203236 Date: 12/20/2016 19:15											
SM 2320B	600-141139-5	Alkalinity	169		mg/L						F1 F2
SM 2320B	600-141139-5	Alkalinity	310.6		mg/L	250	57	75-125			F1
MS											

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

5-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 203236 Date: 12/20/2016 19:44											
SM	600-141139-5	Alkalinity	201.2		mg/L	250	13	75-125	43	20	F1 F2
2320B	MSD										

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

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 203009 Date: 12/16/2016 17:00											
						LCS Source: WETSICIN02_00022					
353.2	LCS 600-203009/11	Nitrate Nitrite as N	1.071		mg/L	1.00	107	90-110			
Batch ID: 203236 Date: 12/20/2016 16:46											
						LCS Source: WETSNACO3L_00025					
SM 2320B	LCS 600-203236/3	Alkalinity	97.32		mg/L	100	97	90-110			
Batch ID: 203444 Date: 12/23/2016 12:58											
						LCS Source: WETSNACO3L_00025					
SM 2320B	LCS 600-203444/3	Alkalinity	105.4		mg/L	100	105	90-110	3		
Batch ID: 203172 Date: 12/19/2016 13:51											
						LCS Source: TDSILCS_00103					
SM 2540C	LCS 600-203172/26	Total Dissolved Solids	1761		mg/L	1800	98	90-110			

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

FORM VIIA-IN

7A-IN
LAB CONTROL SAMPLE DUPLICATE
GENERAL CHEMISTRY

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 203444 Date: 12/23/2016 13:04											
						LCSD Source: WETSNAC03L_00025					
SM	LCSD	Alkalinity	101.9		mg/L	100	102	90-110	3		
2320B	600-203444/4										

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

FORM VIIA-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Houston

Job Number: 600-141139-1

SDG Number: _____

Matrix: Water

Instrument ID: WC05

Method: 353.2

MDL Date: 07/09/2012 10:23

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Nitrate Nitrite as N		0.05	0.017

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Houston

Job Number: 600-141139-1

SDG Number: _____

Matrix: Water

Instrument ID: WC05

Method: 353.2

XMDL Date: 05/05/2014 08:21

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Nitrate Nitrite as N		0.05	0.017

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Houston

Job Number: 600-141139-1

SDG Number: _____

Matrix: Water

Instrument ID: WC23

Method: SM 2320B

RL Date: 01/09/2008 12:24

Analyte	Wavelength/ Mass	RL (mg/L)	
Alkalinity		5	
Bicarbonate Alkalinity as CaCO ₃		5	
Carbonate Alkalinity as CaCO ₃		5	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Houston Job Number: 600-141139-1
SDG Number: _____
Matrix: Water Instrument ID: WC23
Method: SM 2320B XMDL Date: 04/30/2014 10:35

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Alkalinity		5	2
Bicarbonate Alkalinity as CaCO ₃		5	2
Carbonate Alkalinity as CaCO ₃		5	2

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Houston Job Number: 600-141139-1
SDG Number: _____
Matrix: Water Instrument ID: NOEQUIP
Method: SM 2540C RL Date: 07/10/2012 13:37

Analyte	Wavelength/ Mass	RL (mg/L)	
Total Dissolved Solids		10	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Houston

Job Number: 600-141139-1

SDG Number: _____

Matrix: Water

Instrument ID: NOEQUIP

Method: SM 2540C

XMDL Date: 07/10/2012 13:37

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Total Dissolved Solids		10	3.564

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG No.: _____

Instrument ID: WC05

Analysis Method: 353.2

Start Date: 12/16/2016 16:52

End Date: 12/16/2016 17:45

Lab Sample Id	D/F	T y p e	Time	Analytes																									
				N N O 3 2																									
STD1 600-203009/1 IC			16:52	X																									
STD2 600-203009/2 IC			16:53	X																									
STD3 600-203009/3 IC			16:54	X																									
STD4 600-203009/4 IC			16:54	X																									
STD5 600-203009/5 IC			16:55	X																									
STD6 600-203009/6 IC			16:56	X																									
ICV 600-203009/7	1		16:57	X																									
ICB 600-203009/8	1		16:58	X																									
ZZZZZZ			16:58																										
MB 600-203009/10	1	T	16:59	X																									
LCS 600-203009/11	1	T	17:00	X																									
ZZZZZZ			17:01																										
ZZZZZZ			17:02																										
ZZZZZZ			17:02																										
ZZZZZZ			17:03																										
ZZZZZZ			17:04																										
ZZZZZZ			17:05																										
ZZZZZZ			17:06																										
CCV 600-203009/19	1		17:06	X																									
CCB 600-203009/20	1		17:07	X																									
ZZZZZZ			17:08																										
ZZZZZZ			17:09																										
ZZZZZZ			17:09																										
ZZZZZZ			17:10																										
ZZZZZZ			17:11																										
ZZZZZZ			17:12																										
ZZZZZZ			17:13																										
ZZZZZZ			17:13																										
ZZZZZZ			17:17																										
ZZZZZZ			17:18																										
CCV 600-203009/31	1		17:19	X																									
CCB 600-203009/32	1		17:20	X																									
ZZZZZZ			17:20																										
ZZZZZZ			17:21																										
ZZZZZZ			17:22																										
600-141139-1	1	T	17:23	X																									
600-141139-3	1	T	17:25	X																									
600-141139-4	1	T	17:26	X																									
ZZZZZZ			17:27																										

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Instrument ID: WC05 Analysis Method: 353.2
 Start Date: 12/16/2016 16:52 End Date: 12/16/2016 17:45

Lab Sample Id	D/F	T Y P e	Time	Analytes																									
				N N O 3 2																									
600-141139-6	1	T	17:27	X																									
ZZZZZZ			17:28																										
ZZZZZZ			17:29																										
ZZZZZZ			17:31																										
ZZZZZZ			17:31																										
ZZZZZZ			17:32																										
CCV 600-203009/46	1		17:33	X																									
CCB 600-203009/47	1		17:35	X																									
ZZZZZZ			17:35																										
ZZZZZZ			17:36																										
ZZZZZZ			17:37																										
600-141139-5	10	T	17:38	X																									
ZZZZZZ			17:39																										
ZZZZZZ			17:39																										
ZZZZZZ			17:40																										
600-141139-7	40	T	17:41	X																									
CCV 600-203009/56	1		17:44	X																									
CCB 600-203009/57	1		17:45	X																									

Prep Types: _____
 T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Houston

Job No.: 600-141139-1

SDG No.: _____

Instrument ID: WC23

Analysis Method: SM 2320B

Start Date: 12/20/2016 16:32

End Date: 12/20/2016 20:03

Lab Sample Id	D/F	T y p e	Time	Analytes																									
				A l k	B A L K C C	C a r A l k																							
RINSE 600-203236/1			16:32																										
MB 600-203236/2	1	T	16:38	X	X	X																							
LCS 600-203236/3	1	T	16:46	X	X	X																							
ZZZZZZ			16:53																										
ZZZZZZ			17:00																										
ZZZZZZ			17:07																										
ZZZZZZ			17:14																										
ZZZZZZ			17:20																										
ZZZZZZ			17:25																										
ZZZZZZ			17:34																										
ZZZZZZ			17:40																										
ZZZZZZ			17:45																										
600-141139-1	1	T	17:50	X	X	X																							
ZZZZZZ			18:15																										
ZZZZZZ			18:40																										
ZZZZZZ			18:42																										
600-141139-5	1	T	18:49	X	X	X																							
600-141139-6	1	T	19:02	X	X	X																							
600-141139-7	1	T	19:07	X	X	X																							
600-141139-5 MS	1	T	19:15	X	X	X																							
ZZZZZZ			19:22																										
ZZZZZZ			19:29																										
ZZZZZZ			19:38																										
600-141139-5 MSD	1	T	19:44	X	X	X																							
ZZZZZZ			19:51																										
ZZZZZZ			20:00																										
ZZZZZZ			20:03																										

Prep Types: _____

T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Instrument ID: WC23 Analysis Method: SM 2320B
 Start Date: 12/23/2016 12:50 End Date: 12/23/2016 13:52

Lab Sample Id	D/F	T y p e	Time	Analytes																									
				A l k	B A L K C C	C a r A l k																							
RINSE 600-203444/1			12:50																										
MB 600-203444/2	1	T	12:54	X	X	X																							
LCS 600-203444/3	1	T	12:58	X	X	X																							
LCSD 600-203444/4	1	T	13:04	X	X	X																							
ZZZZZZ			13:13																										
ZZZZZZ			13:23																										
600-141139-3	1	T	13:32	X	X	X																							
600-141139-4	1	T	13:43	X	X	X																							
ZZZZZZ			13:49																										
ZZZZZZ			13:52																										

Prep Types: _____
 T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Houston Job No.: 600-141139-1
 SDG No.: _____
 Instrument ID: NOEQUIP Analysis Method: SM 2540C
 Start Date: 12/19/2016 13:51 End Date: 12/19/2016 13:51

Lab Sample Id	D/F	T y p e	Time	Analytes																									
				T D S																									
ZZZZZZ			13:51																										
ZZZZZZ			13:51																										
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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Instrument ID: NOEQUIP Analysis Method: SM 2540C

Start Date: 12/19/2016 13:51 End Date: 12/19/2016 13:51

Lab Sample Id	D/F	T y p e	Time	Analytes																									
				T D S																									
ZZZZZZ			13:51																										
ZZZZZZ			13:51																										
ZZZZZZ			13:51																										
ZZZZZZ			13:51																										
ZZZZZZ			13:51																										
ZZZZZZ			13:51																										
ZZZZZZ			13:51																										

Prep Types: _____
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Batch Number: 203009 Batch Start Date: 12/16/16 16:52 Batch Analyst: Sineva, Ekaterina ABatch Method: 353.2 Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	WETSICINO2 00022	WETSNO2ICV 00023		
ICV 600-203009/7		353.2		5 mL	5 mL	0.005 mL			
ICB 600-203009/8		353.2		5 mL	5 mL				
MB 600-203009/10		353.2		5 mL	5 mL				
LCS 600-203009/11		353.2		5 mL	5 mL	0.005 mL			
CCV 600-203009/19		353.2		5 mL	5 mL		0.005 mL		
CCB 600-203009/20		353.2		5 mL	5 mL				
CCV 600-203009/31		353.2		5 mL	5 mL		0.005 mL		
CCB 600-203009/32		353.2		5 mL	5 mL				
600-141139-B-1	SANJUAN-MW09-121 32016	353.2	T	5 mL	5 mL				
600-141139-B-3	SANJUAN-MW08-121 32016	353.2	T	5 mL	5 mL				
600-141139-B-4	SANJUAN-MD08-121 32016	353.2	T	5 mL	5 mL				
600-141139-B-6	SANJUAN-MW04-121 32016	353.2	T	5 mL	5 mL				
CCV 600-203009/46		353.2		5 mL	5 mL		0.005 mL		
CCB 600-203009/47		353.2		5 mL	5 mL				
600-141139-B-5 ^10	SANJUAN-W02-1213 2016	353.2	T	5 mL	5 mL				
600-141139-B-7 ^40	SANJUAN-MW06-121 32016	353.2	T	5 mL	5 mL				
CCV 600-203009/56		353.2		5 mL	5 mL		0.005 mL		
CCB 600-203009/57		353.2		5 mL	5 mL				

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

353.2

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Batch Number: 203009 Batch Start Date: 12/16/16 16:52 Batch Analyst: Sineva, Ekaterina ABatch Method: 353.2 Batch End Date: _____

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

353.2

Page 2 of 2

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Batch Number: 203236 Batch Start Date: 12/20/16 16:32 Batch Analyst: Daniel, Kevin RBatch Method: SM 2320B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	CalcMsg	FinalAmount	WETSNA2CO3 00024	WETSNACO3L 00025	
MB 600-203236/2		SM 2320B		50 mL	Titrant1Normali ty is blank	50 mL			
LCS 600-203236/3		SM 2320B		50 mL	Titrant1Normali ty is blank	50 mL		5 mL	
600-141139-A-1	SANJUAN-MW09-121 32016	SM 2320B	T	50 mL	Titrant1Normali ty is blank	50 mL			
600-141139-A-5	SANJUAN-W02-1213 2016	SM 2320B	T	50 mL	Titrant1Normali ty is blank	50 mL			
600-141139-A-6	SANJUAN-MW04-121 32016	SM 2320B	T	50 mL	Titrant1Normali ty is blank	50 mL			
600-141139-A-7	SANJUAN-MW06-121 32016	SM 2320B	T	50 mL	Titrant1Normali ty is blank	50 mL			
600-141139-A-5 MS	SANJUAN-W02-1213 2016	SM 2320B	T	50 mL	Titrant1Normali ty is blank	50 mL	5 mL		
600-141139-A-5 MSD	SANJUAN-W02-1213 2016	SM 2320B	T	50 mL	Titrant1Normali ty is blank	50 mL	5 mL		

Batch Notes	
pH Buffer 1 ID	ph 4: 2238729
pH Buffer 2 ID	ph 7 G: 2238729
pH Buffer 3 ID	ph 7 Y: 2055043
pH Buffer 4 ID	ph 10: 2056333
Sulfuric Acid Vendor	2335551
Nominal Amount Used	50 mL
Pipette ID	wc62

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

SM 2320B

Page 1 of 1

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Batch Number: 203444 Batch Start Date: 12/23/16 12:50 Batch Analyst: Daniel, Kevin RBatch Method: SM 2320B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	CalcMsg	FinalAmount	WETSNACO3L 00025		
MB 600-203444/2		SM 2320B		50 mL	Titrant1Normali ty is blank	50 mL			
LCS 600-203444/3		SM 2320B		50 mL	Titrant1Normali ty is blank	50 mL	5 mL		
LCSD 600-203444/4		SM 2320B		50 mL	Titrant1Normali ty is blank	50 mL	5 mL		
600-141139-A-3	SANJUAN-MW08-121 32016	SM 2320B	T	50 mL	Titrant1Normali ty is blank	50 mL			
600-141139-A-4	SANJUAN-MD08-121 32016	SM 2320B	T	50 mL	Titrant1Normali ty is blank	50 mL			

Batch Notes	
pH Buffer 1 ID	ph 4: 2238729
pH Buffer 2 ID	ph 7 G: 2351700
pH Buffer 3 ID	ph 7 Y: 2055043
pH Buffer 4 ID	ph 10: 2056333
Sulfuric Acid Vendor	2110464
Nominal Amount Used	50 mL
Pipette ID	wc62

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Batch Number: 203172 Batch Start Date: 12/19/16 13:51 Batch Analyst: Contreras, EnriqueBatch Method: SM 2540C Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	Conductivity	InitialAmount	TareWeight	Weight1	Weight2	WeightOne%Diff
MB 600-203172/25		SM 2540C			100 mL	132.7444 g	132.7447 g	132.7446 g	Pass No Unit
LCS 600-203172/26		SM 2540C			100 mL	120.7774 g	120.9535 g	120.9535 g	Pass No Unit
600-141139-A-1	SANJUAN-MW09-121 32016	SM 2540C	T	17050 umhos/cm	5 mL	122.5474 g	122.6292 g	122.6292 g	Pass No Unit
600-141139-A-3	SANJUAN-MW08-121 32016	SM 2540C	T	8400 umhos/cm	10 mL	119.5920 g	119.6580 g	119.6580 g	Pass No Unit
600-141139-A-4	SANJUAN-MD08-121 32016	SM 2540C	T	9270 umhos/cm	10 mL	125.9126 g	125.9846 g	125.9845 g	Pass No Unit
600-141139-A-5	SANJUAN-W02-1213 2016	SM 2540C	T	5800 umhos/cm	25 mL	132.9863 g	133.1078 g	133.1078 g	Pass No Unit
600-141139-A-6	SANJUAN-MW04-121 32016	SM 2540C	T	6040 umhos/cm	25 mL	129.6891 g	129.8118 g	129.8117 g	Pass No Unit
600-141139-A-7	SANJUAN-MW06-121 32016	SM 2540C	T	16090 umhos/cm	10 mL	120.9308 g	121.0835 g	121.0835 g	Pass No Unit

Lab Sample ID	Client Sample ID	Method Chain	Basis	WeightTwo%Diff	Weight40K	Residue	Residue2	Residue3	Residue4
MB 600-203172/25		SM 2540C		N/A No Unit	N/A	0.0003 g	0.0002 g	N/A g	N/A g
LCS 600-203172/26		SM 2540C		N/A No Unit	N/A	0.1761 g	0.1761 g	N/A g	N/A g
600-141139-A-1	SANJUAN-MW09-121 32016	SM 2540C	T	N/A No Unit	N/A	0.0818 g	0.0818 g	N/A g	N/A g
600-141139-A-3	SANJUAN-MW08-121 32016	SM 2540C	T	N/A No Unit	N/A	0.066 g	0.066 g	N/A g	N/A g
600-141139-A-4	SANJUAN-MD08-121 32016	SM 2540C	T	N/A No Unit	N/A	0.072 g	0.0719 g	N/A g	N/A g
600-141139-A-5	SANJUAN-W02-1213 2016	SM 2540C	T	N/A No Unit	N/A	0.1215 g	0.1215 g	N/A g	N/A g
600-141139-A-6	SANJUAN-MW04-121 32016	SM 2540C	T	N/A No Unit	N/A	0.1227 g	0.1226 g	N/A g	N/A g
600-141139-A-7	SANJUAN-MW06-121 32016	SM 2540C	T	N/A No Unit	N/A	0.1527 g	0.1527 g	N/A g	N/A g

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	CalcMsg	TDSILCS 00103			
MB 600-203172/25		SM 2540C		100 mL	OK				
LCS 600-203172/26		SM 2540C		100 mL	OK	100 mL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

SM 2540C

Page 1 of 3

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Batch Number: 203172 Batch Start Date: 12/19/16 13:51 Batch Analyst: Contreras, EnriqueBatch Method: SM 2540C Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	CalcMsg	TDSILCS 00103			
600-141139-A-1	SANJUAN-MW09-121 32016	SM 2540C	T	100 mL	OK				
600-141139-A-3	SANJUAN-MW08-121 32016	SM 2540C	T	100 mL	OK				
600-141139-A-4	SANJUAN-MD08-121 32016	SM 2540C	T	100 mL	OK				
600-141139-A-5	SANJUAN-W02-1213 2016	SM 2540C	T	100 mL	OK				
600-141139-A-6	SANJUAN-MW04-121 32016	SM 2540C	T	100 mL	OK				
600-141139-A-7	SANJUAN-MW06-121 32016	SM 2540C	T	100 mL	OK				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

SM 2540C

Page 2 of 3

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Houston Job No.: 600-141139-1

SDG No.: _____

Batch Number: 203172 Batch Start Date: 12/19/16 13:51 Batch Analyst: Contreras, EnriqueBatch Method: SM 2540C Batch End Date: _____

Batch Notes	
Balance ID	B-1
Conductivity Meter ID	nonequip
Constant Weight (WT2) Date/Time In	12-20-2016 1000
Constant Weight (WT2) Date/Time Out	12-20-2016 1100
Constant Weight (WT2) Temp In	179 Degrees C
Constant Weight (WT2) Temp Out	179 Degrees C
Uncorrected CW (Wt2) Temp In	180 Degrees C
Uncorrected CW (Wt2) Temp Out	180 Degrees C
Corrected Temperature in Oven	179 Degrees C
Corrected Temperature out of Oven	179 Degrees C
Date/Time Samples placed in Oven	12-19-2016 1500
Date/Time Samples Removed from Oven	12-20-2016 0700
Filter Paper ID	600014-6138-R-2
Nominal Amount Used	100 mL
Oven ID	O-13
Oven Temperature Verification	179 Degrees C
Pipette ID	WC01
Thermometer ID	592
Uncorrected In Temperature	180 Degrees C
Uncorrected Out Temperature	180 Degrees C
Weight (WT1) Start Date/Time	12-20-2016 0800
Weight (WT1) Date/Time Out	12-20-2016 0900
Weight (WT1) Start Temp	179 Degrees C
Weight (WT1) Temp Out	179 Degrees C
Uncorrected Weight (WT1) Start Temp	180 Degrees C
Uncorrected Weight (WT1) Temp Out	180 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

Chain of Custody Record

Client Information Client Contact: Aleeca Forsberg Company: CH2M Hill, Inc. Address: 3721 Rutledge Road NE Suite B-1 City: Albuquerque State, Zip: NM, 87109 Phone: 505-855-5239 Email: Aleeca.Forsberg@CH2M.com Project Name: Kinder Morgan Bloomfield, NM San Juan Site: San Juan Waters		Sampler: A. Forsberg Lab #/M: Upton, Cathy L E-Mail: cathy.upton@testamericainc.com Phone: 505 918 1800 Due Date Requested: TAT Requested (days): Std PO # Purchase Order Requested WO # Project # 60005961 SSOW# Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 X - EDTA Y - EDA Z - other (specify)											
Carrier Tracking No(s): 7117 8060 2491 GOC No: 600-32775-10950.1 Page: Page 1 of 1 Job # Analysis Requested Total Number of containers 600-141139 Chain of Custody		300_ORGFM_28D Chloride, Sulfate 2540C_Calcd - TDS 2320B - Alkalinity 6010B/7470A - NMWACC Dissolved Metals 353_2_Pres - Nitrate Nitrite as N 8260B_LL - BTEX Perform MS/MSD (Yes or No) Field Filtered Sample (Yes or No)											
Sample Identification SAN JUAN - HW09-12132016 SAN JUAN - TB01-12132016 SAN JUAN - HW08-12132016 SAN JUAN - HW08-12132016 SAN JUAN - HW02-12132016 SAN JUAN - HW04-12132016 SAN JUAN - HW06-12132016	Sample Date 12/31/16 12/31/16 12/31/16 12/31/16 12/31/16 12/31/16 12/31/16	Sample Time 1150 1245 1245 1245 1310 1345 1410	Sample Type (G=Comp, G=grab) G G G G G G G	Matrix (W=water, S=solid, O=oil, BT=Tissue, A=air) Water Water Water Water Water Water Water	Preservation Code G G G G G G G	Field Filtered Sample (Yes or No) X X X X X X X	Perform MS/MSD (Yes or No) X X X X X X X	8260B_LL - BTEX X X X X X X X	353_2_Pres - Nitrate Nitrite as N X X X X X X X	6010B/7470A - NMWACC Dissolved Metals X X X X X X X	2320B - Alkalinity X X X X X X X	2540C_Calcd - TDS X X X X X X X	300_ORGFM_28D Chloride, Sulfate X X X X X X X
Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months											
Deliverable Requested: I, II, III, IV, Other (specify) Empty Kit Relinquished by: Relinquished by: Aleeca Forsberg CH2M Relinquished by: Relinquished by: Custody Seals Intact: Δ Yes Δ No		Special Instructions/QC Requirements: Method of Shipment: Received by: Received by: Received by: Cooler Temperature(s) °C and Other Remarks:											

TestAmerica Houston

Loc: 600
141139**TestAmerica**
THE LEADER IN ENVIRONMENTAL TESTING**Sample Receipt**

JOB NUMBER: _____

Date/Time Received: _____

16 DEC 14 10:18

UNPACKED BY: _____

CLIENT: _____

CARRIER/DRIVER: _____

Custody Seal Present: ☒ YES ☐ NO

Number of Coolers Received: _____

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
BW	Y / N	Y / N	2.4	184	0.3	2.7
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☐ YES ☐ NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED:

☐ NO☐ YESBase samples are > pH 12: ☐ YES ☐ NO

Acid preserved are < pH 2:

☒ YES☐ NOpH paper Lot # 12689794VOA headspace acceptable (5-6mm): ☒ YES ☐ NO ☐ NA

YES NO

Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?

FedExTRK# 7117 8060 2491
0221WED - 14 DEC 3:00P
STANDARD OVERNIGHT**XH LKSA**

77040

TX-US IAH



Rev. 3; 07/01/2014

H

#5135550 12/13 544J1/D42F/14E8

Page 211 of 212

12/30/2016

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-141139-1

Login Number: 141139

List Source: TestAmerica Houston

List Number: 1

Creator: Crafton, Tommie S

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.