

AP – 69

2013 AGWMR

03 / 31 / 2014



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March 31, 2014

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Mr. Glenn von Gonten
New Mexico Oil Conservation Division (NMOCD)
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Subject: 2013 Annual Groundwater Monitoring Report, San Juan River Gas Plant, Kirtland, New Mexico
NMOCD Reference Number: AP-69-0

Dear Mr. von Gonten:

CH2M HILL Engineers, Inc., on behalf of El Paso Gas Transmission Company, is submitting the enclosed 2013 Annual Groundwater Monitoring Report for the San Juan River Gas Plant project. This report presents the groundwater monitoring data collected during 2013.

If you have any questions or comments concerning the enclosed report, please contact Joe Wiley (713.420.3475) or me (505.855.5237).

Sincerely,

CH2M HILL Engineers, Inc.

A handwritten signature in blue ink that reads "Jeffrey Minchak".

Jeffrey Minchak, P.G.
Senior Project Manager

c: J. Wiley

2013 Annual Groundwater Monitoring Report
San Juan River Gas Plant
Kirtland, New Mexico

Prepared for
El Paso Natural Gas Company, LLC

March 2014

CH2MHILL®

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Acronyms and Abbreviations

BTEX	benzene, toluene, ethylbenzene, and total xylenes
cy	cubic yards
DTW	depth to water
EPNG	El Paso Natural Gas Company, LLC
Ft/ft	feet per foot
IDW	investigation derived waste
mg/L	milligram 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
RCRA	Resource Conservation and Recovery Act
SJRP	San Juan River (Gas) Plant
TD	total depth
TDS	total dissolved solids
VOC	volatile organic compound

SECTION 1

Introduction

This *2013 Annual Groundwater Monitoring Report* has been prepared on behalf of El Paso Natural Gas Company, LLC (EPNG) to present the results of the December 2013 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 99 Road 6500, Kirtland, San Juan County, New Mexico. The site location is shown in Figure 1 and the site plan is shown in Figure 2.

Monitoring activities were previously performed by MWH Americas, Inc. from approximately 2001 to 2011. Monitoring resumed at the site in December 2013, and the event was performed by CH2M HILL, the current EPNG contractor for the site.

SECTION 2

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. EPNG owned the SJRP until June 1992, when it was sold to Western Gas Resources, Inc., which is now an owned subsidiary of Anadarko Petroleum Corporation. EPNG retained responsibility for environmental impacts known to exist prior to the 1992 sale of the facility. The SJRP is a 630-acre facility that contains gas processing facilities, a sulfur recovery plant, water and hydrocarbon tanks, a pigging station, flare, and several 16- to 24-inch diameter natural gas pipelines that cross the facility. The facility also contained two raw water ponds and three wastewater evaporation ponds, which are now closed. During 2002 and 2003, a Praxair nitrogen plant 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 MWH Americas, Inc. 2011 annual monitoring report (MWH, 2011), the investigation and remediation activities performed at the SJRP to date are summarized:

- EPNG previously owned the SJRP, and the site was purchased by Western Gas Resources, Inc. on June 19, 1992.
- 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 landfarm located southwest of the main production area is composed of the soil excavated from the north and south flare pits during their closure. 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 operated 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 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 direct push technology being an ineffective and found to be limited during the investigation, a revised work plan was submitted to NMOCD in September 2006, recommending that 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 observed that monitoring well MW-5 had been destroyed due to subsurface coal mining activities to the west of SJRP. The destruction of the well was determined to have occurred between February and May 2008.
- From May 2008 through the end of 2011, the environmental program at the SJRP has consisted of remediation via the ORC socks in MW-8 and site-wide groundwater monitoring.

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, June 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 cobbles 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 Geoprobe 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 2013 sampling event, the groundwater flow direction north of the SJRP is to the west. However, from approximately the center and south of the SJRP facility, groundwater flows to the southwest.

SECTION 3

Site Activities

3.1 Depth-to-Water Measurements and Groundwater Sampling

On December 19 and 20, 2013, CH2M HILL conducted groundwater monitoring at the SJRP site. The following summarizes the activities conducted during the 2013 monitoring event.

Field operations commenced by identifying and verifying all monitor well locations. Depth to water (DTW) and total depth (TD) were measured at each of the 5 site monitoring wells. Prior to groundwater sample collection, monitoring wells were purged with either a peristaltic pump using low-flow methods, or by hand bailing if there was insufficient water to pump. Field-parameters (temperature, pH, conductivity, temperature, turbidity, dissolved oxygen and redox potential) were measured and recorded during purging activities. Groundwater samples were collected following either field-parameter stabilization or the removal of three well-casing volumes. Groundwater samples were submitted for laboratory analyses of VOCs via U.S. Environmental Protection Agency SW-846 Method 8260B, Resource and Conservation and Recovery Act (RCRA) Metals via Method SW-6010B, mercury via Method SW-7470A, alkalinity via Method A2320, 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. Groundwater extracted during purging activities was contained in a 30-gallon polyethylene drum and transferred to a Department of Transportation-approved 55-gallon drum on a daily basis. Following groundwater purging and sampling activities, an investigation derived waste (IDW) sample was collected from the water generated during purging activities. The IDW sample was submitted for laboratory analyses of standard waste classification parameters for profiling and disposal of the IDW purge water. Appendix A contains the groundwater purge forms.

SECTION 4

Results and Discussion

4.1 Groundwater Elevation and Gradient

Based on the groundwater elevations at MW-8 and MW-9 compared to the elevations at the other site monitoring wells, the direction of groundwater flow north of the SJRP is to the west. Based on the groundwater elevations at MW-2, MW-4, and MW-6, the groundwater flow direction south of the SJRP is to the southwest. The overall groundwater gradient across the site is approximately 0.019 – 0.020 ft/ft. The overall direction of groundwater flow at the site is to the west/southwest. The gradient and groundwater flow direction are consistent with previous reports.

Historical and the December 2013 groundwater elevation data are provided in Table 1. A potentiometric surface map depicting the groundwater elevation collected during the 2013 monitoring event is provided in Figure 3.

4.2 Groundwater Analytical Results

Tables 2 and 3 summarize the historical and 2013 groundwater analytical results. The 2013 laboratory analytical reports are provided in Appendix B. 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 mg/L at MW-9. Metals concentrations that exceeded the NMWQCC standard include: aluminum (3 locations); arsenic (1 location); cadmium (1 location); cobalt (3 locations); iron (3 locations); manganese (5 locations); nickel (3 locations); and selenium (2 locations).

Concentrations of chloride, sulfate, and TDS were elevated above the NMWQCC standards (250 mg/L, 600 mg/L, and 1 mg/L, respectively) at each site monitoring well. MW-6 had the highest chloride concentration and MW-9 had the highest sulfate concentration. TDS concentrations in each site monitoring well were greater than 5,000 mg/L, with the greatest concentration reported at 16,300 mg/L in MW-6.

Concentrations of nitrate/nitrite exceeded the NMWQCC standard of 10 mg/L at monitoring wells MW-2 and MW-6.

SECTION 5

Conclusions and Potential Future Activities

The following conclusions and recommendations are presented relative to groundwater conditions at the site based on the potentiometric and analytical data obtained during the 2013 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.

5.2 Potential Future Activities

EPNG is considering additional investigation activities at the site and these activities would be addressed in a separate site investigation work plan and would generally include:

- Install new monitoring wells in locations that would provide better delineation; these wells would be constructed with longer screens such that they would have a longer service life should groundwater elevations continue to decline and should groundwater elevations increase in response to increased precipitation in northwestern New Mexico.
- Collect depth to water measurements and groundwater samples from the site wells.
- Review the data to evaluate the groundwater flow direction and compare the concentration distribution to NMWQCC standards.
- Evaluate the potential for historical site operations to have contributed to the metals and inorganic analytes that are observed at the site.

SECTION 6

References

- El Paso Natural Gas Company, 2005. *Stage 1 Abatement Plan*. November.
- K.W. Brown and Associates, Inc., 1987. *Land Application Feasibility Study, San Juan River Plant, Phase I Final Report*, August 1987.
- MWH, 2011. *2011 Annual Report San Juan River Plant*. Prepared for El Paso CGP Company. March 2012.
- Philip Environmental, 1998. *Summary of Investigations at the San Juan River Plant, Kirtland, New Mexico*, prepared for El Paso Natural Gas Company, Farmington, New Mexico, June 1998.
- Stone, W.J., Lyford, F.P., Frenzel, P.F., Mizell, N.H., and Padgett, E.T., 1983. *Hydrogeology and Water Resources of the San Juan Basin, New Mexico*. New Mexico Bureau of Mines and Mineral Resources, 1983.

Figures



FIGURE 1
Site Location Map
 San Juan River Gas Plant Site
 Kirtland, New Mexico



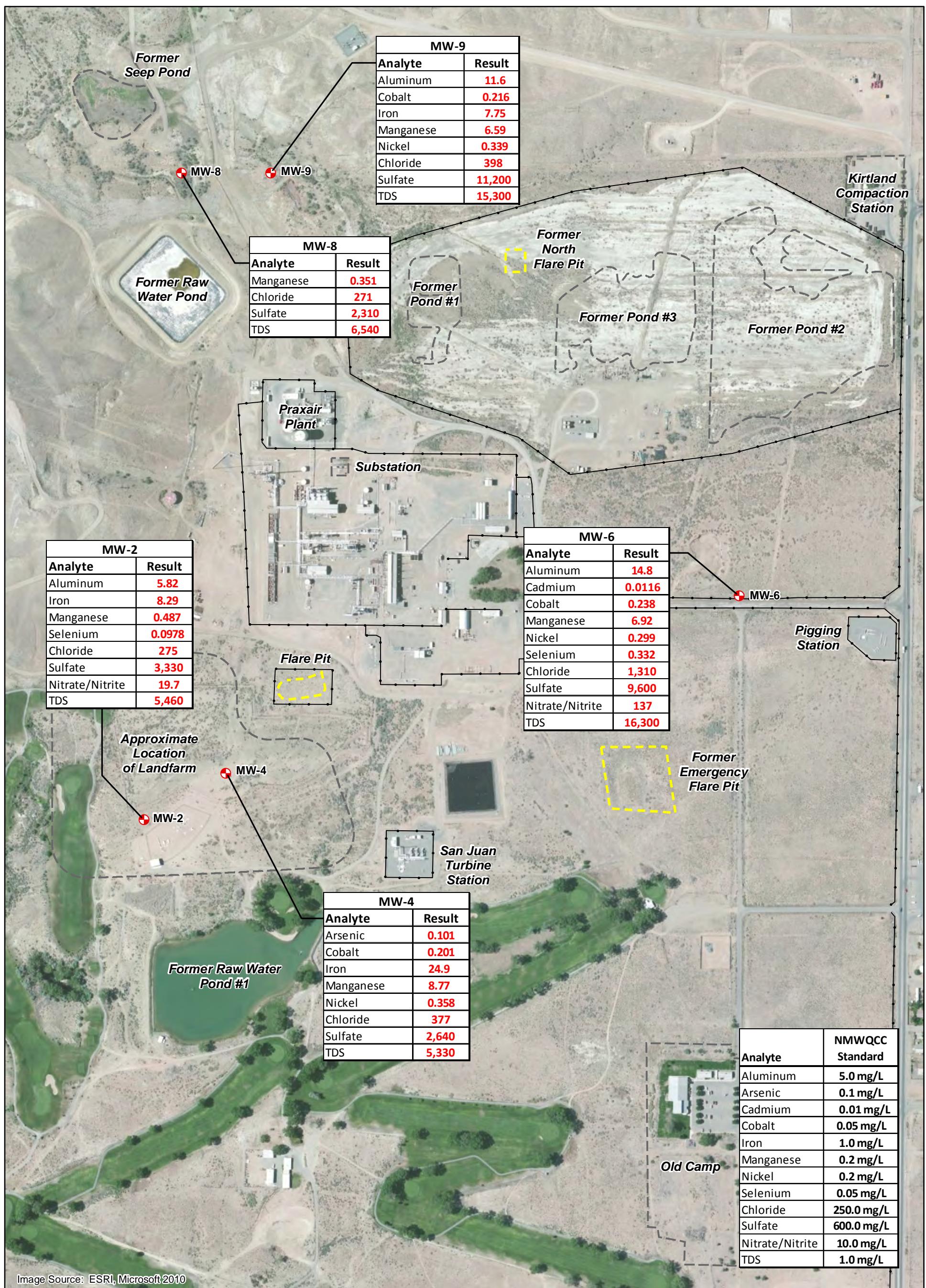


FIGURE 3
Potentiometric Surface Map – December 2013
San Juan River Gas Plant Site
Kirtland, New Mexico

LEGEND

- Monitoring Well
- Site Feature
- Fence
- Former Flare Pit
- 5231.08 Groundwater Elevation
- Groundwater Elevation Contour (Dashed where inferred)
- Groundwater Flow Direction

z
0 200 400
Feet


LEGEND

- Monitoring Well
- Site Feature
- Fence
- [Yellow Box] Former Flare Pit

Notes:

1. Groundwater analytical results are in milligrams per Liter (mg/L)

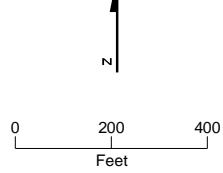


FIGURE 4
Groundwater Exceedances of NMWQCC Standards
San Juan River Gas Plant Site
Kirtland, New Mexico

Tables

Table 1
Groundwater Elevation Data
San Juan River Gas Plant, Kirtland, New Mexico

Monitoring Well	Measurement Date	Depth to Water (ft BTOC)	GW Elevation (ft MSL)
W-2	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
MW-4	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
MW-5	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
	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

Table 1
Groundwater Elevation Data
San Juan River Gas Plant, Kirtland, New Mexico

Monitoring Well	Measurement Date	Depth to Water (ft BTOC)	GW Elevation (ft MSL)
MW-6	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
MW-7	12/19/2013	30.98	5273.86
	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
MW-8	8/10/2006	20.33	5272.80
	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
	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

Table 1
Groundwater Elevation Data
San Juan River Gas Plant, Kirtland, New Mexico

Monitoring Well	Measurement Date	Depth to Water (ft BTOC)	GW Elevation (ft MSL)
MW-8	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
MW-9	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
	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

Table 1
Groundwater Elevation Data
San Juan River Gas Plant, Kirtland, New Mexico

Monitoring Well	Measurement Date	Depth to Water (ft BTOC)	GW Elevation (ft MSL)
MW-9	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

Notes:

NA - Historical measurement is not available

ft BTOC - feet below top of casing

ft MSL - feet above mean sea level

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	
W-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
MW-4	12/19/2013	<0.00008	<0.00015	<0.00011	<0.00026
	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
MW-5	12/19/2013	0.000208 J	<0.00015	<0.00011	<0.00026
	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
	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
	8/23/2007	0.0037	<0.001	<0.001	<0.002

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-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
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
	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

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	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
	12/19/2013	0.00281	<0.00015	<0.00011	<0.00026
MW-9	2/10/1998	0.0731	<0.001	0.0071	0.0075
	5/12/1998	0.0895	<0.001	0.00851	0.00561
	8/7/1998	0.077	<0.001	0.00708	0.005
	11/4/1998	0.0898	<0.001	0.00942	0.0109
	2/10/1999	0.077	<0.001	0.0081	0.006
	5/17/1999	0.0783	<0.001	0.00754	0.00363
	8/18/1999	0.0764	<0.001	0.00721	0.00497
	11/30/1999	0.082	<0.002	0.0075	0.0053
	4/10/2000	0.048	0.0021	0.0047	0.0059
	6/29/2000	0.1	<0.002	0.0092	<0.002
	9/29/2000	0.095	<0.002	0.011	0.009
	12/21/2000	0.086	<0.002	0.0071	0.012
	3/27/2001	0.061	<0.002	0.0057	<0.002
	6/27/2001	0.087	<0.002	0.0077	<0.002
	9/25/2001	0.023	0.002	0.0022	<0.002
	10/29/2001	0.12	<0.0005	0.0024	0.0051
	12/26/2001	0.034	0.0011	0.0099	0.017
	1/25/2002	0.022	<0.0005	0.0044	0.003
	2/21/2002	0.048	<0.0005	0.0074	0.0045
	5/23/2002	0.0014	<0.0005	<0.0005	<0.001
	8/15/2002	0.0117	<0.0005	0.0021	0.0009
	3/6/2003	0.0002	0.0002	<0.001	0.0008
	5/15/2003	<0.001	<0.001	<0.001	<0.003
	8/26/2003	0.0293	<0.001	<0.001	<0.003
	11/25/2003	0.0086	<0.001	0.0011	<0.003

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	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
	12/19/2013	0.186	0.000246 J	0.0575	0.0152

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

NMWQCC - New Mexico Water Quality Control Commission

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

Analyte	NMWQCC Standard (mg/L)	W-2	W-2	W-2	W-2	W-2	W-2	W-2	MW-4	MW-4						
		9/25/2001	8/15/2002	8/21/2002	8/26/2003	8/27/2004	8/24/2005	8/10/20'06	8/23/2007	8/27/2008	8/28/2009	8/26/2010	8/31/2011	12/19/2013	9/25/2001	8/15/2002
Metals (mg/L)																
Aluminum	5.0	4.2	1.13	--	2.07	--	1.24	1.54	12.8	--	21.0	5.18	6.08000	5.82	9.3	1.37
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	0.22	0.0207
Barium	1.0	0.029	0.0327	--	0.2	0.2	<0.02	<0.2	<0.2	--	<0.2	<0.2	<0.2	0.0346	0.11	0.0271
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	0.017	0.0012
Calcium	NE	400.0	402.0	--	349.0	--	454.0	399.0	404.0	--	356.0	319.0	330.00000	384.0	210.0	210.0
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	ND	0.0102
Cobalt	0.05	<0.05	0.0035	--	0.05	--	<0.05	<0.05	<0.05	--	<0.05	<0.05	<0.05	0.00790 J	0.28	0.191
Copper	1.0	0.015	0.116	--	0.0428	--	<0.025	<0.025	0.0329	--	0.0272	<0.025	<0.025	0.0309	0.82	0.158
Iron	1.0	4.6	1.76	--	1.48	--	1.58	1.02	10.3	--	16.5	4.3	4.75	8.29	31.0	6.5
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	0.17	0.0113
Magnesium	NE	120.0	108.0	--	106.0	--	126.0	111.0	133.0	--	110.0	103.0	97.3	103.0	81.0	80.1
Manganese	0.2	0.23	0.216	--	0.0439	--	0.163	0.256	0.223	--	0.268	0.0871	0.178	0.487	6.1	6.08
Mercury	0.002	--	0.00012	--	0.0002	0.0002	<0.0002	<0.0002	<0.0002	--	--	<0.0002	<0.0002	<0.000082	--	0.00061
Molybdenum	1.0	<0.01	0.0028	--	0.01	--	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.00273	ND	0.0027
Nickel	0.2	<0.04	0.0075	--	0.04	--	<0.04	<0.04	<0.04	--	<0.04	<0.04	<0.04	0.00900 J	0.33	0.261
Potassium	NE	4.7	13.40	--	5.0	--	5.84	5.63	8.88	--	10.2	5.29	<5.000	4.02	7.3	8.99
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	<0.005	0.0034
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	<0.01	0.0017
Sodium	NE	1200.0	1350.0	--	36.555	--	1,400.0	1,150.0	1,120.0	--	1,130.0	1,160.0	1,200.0	1,260.0	920.0	1,040.0
Zinc	10.0	<0.02	0.0733	--	0.0581	--	0.459	0.148	0.169	--	0.0981	0.0344	0.0552	0.156	4.2	0.241
Inorganics (mg/L)																
Alkalinity	NE	--	--	170	196	180	138	163	165	178	174	198	176	203	--	--
Chloride	250.0	300	--	296	309	431	265	162	338	308	795	290	318	275	330	--
Nitrate+Nitrite	10.0	25	--	--	21.8	25.2	17	18	18	17.2	17.7	19.5	16.7	19.7	--	--
Sulfate	600.0	3600	--	3380	3630	3160	3170	3420	3410	3320	3000	3200	1530	3330	2000	--
TDS	1.0	5800	--	5690	5880	6170	5730	4920	5710	4920	5870	5970	5860	5460	3920	--

Notes:

-- = not analyzed for the listed analyte

Bold text indicates detected concentration

Highlighted and bold cells indicate concentration exceeding New Mexico Water Quality Control Commission standard

mg/L - milligrams per liter

< or ND = not detected above 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-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-5	MW-5	MW-5	MW-5	
		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	8/31/2011	12/19/2013	11/30/1999	4/10/2000	6/29/2000	9/29/2000
Metals (mg/L)																
Aluminum	5.0	--	5.29	--	<0.2	0.416	9.29	9.81	1.0	3.31	1.38	0.702	--	--	--	--
Arsenic	0.1	--	0.0818	0.018	0.0262	0.0636	0.0211	0.0342	0.0125	0.0175	0.0082	0.101	--	--	--	--
Barium	1.0	--	0.2	0.20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.0327	--	--	--	--
Cadmium	0.01	--	0.01	0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.00150 J	--	--	--	--
Calcium	NE	--	212.0	--	286.0	245.0	249.0	267.0	234.0	228.0	263.0	323.0	--	--	--	--
Chromium	0.05	--	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00310 J	--	--	--	--
Cobalt	0.05	--	0.156	--	0.144	0.103	0.0883	0.094	0.0752	0.0576	0.0536	0.201	--	--	--	--
Copper	1.0	--	0.789	--	0.0629	0.0567	0.0683	0.15	0.0334	0.0589	0.0268	0.0913	--	--	--	--
Iron	1.0	--	12.4	--	10.2	31.8	21.7	17.7	8.16	9.93	5.38	24.9	0.16	0.12	0.38	0.24
Lead	0.05	--	0.0401	0.003	0.165	0.051	0.014	0.0512	0.014	0.0195	0.0128	0.016	--	--	--	--
Magnesium	NE	--	88.1	--	111.0	95.3	108.0	113.0	101.0	100.0	105.0	123.0	--	--	--	--
Manganese	0.2	--	6.88	--	8.78	5.8	6.59	7.19	6.4	5.97	5.03	8.77	2.5	3.3	3.3	1.8
Mercury	0.002	--	0.0035	0.003	0.00026	0.00021	0.00042	<0.0002	--	0.00068	0.00031	<0.000082	--	--	--	--
Molybdenum	1.0	--	0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.179	--	--	--	--
Nickel	0.2	--	0.251	--	0.26	0.182	0.268	0.229	0.199	0.203	238.0	0.358	--	--	--	--
Potassium	NE	--	9.39	--	9.62	8.77	10.1	13.1	8.13	7.86	6.75	8.09	--	--	--	--
Selenium	0.05	--	0.005	0.005	0.0058	<0.005	<0.005	<0.005	<0.005	0.0076	<0.005	0.00860 J	--	--	--	--
Silver	0.05	--	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00125	--	--	--	--
Sodium	NE	--	802.0	--	1190.0	1050.0	910.0	1020.0	1020.0	1050.0	1130.0	1310.0	--	--	--	--
Zinc	10.0	--	1.55	--	0.159	0.2	0.11	0.05	<0.02	0.0287	<0.02	0.15700	--	--	--	--
Inorganics (mg/L)																
Alkalinity	NE	874	446	888	650	870	820	916	428	856	34	765	--	--	--	--
Chloride	250.0	234	303	453	321	385	303	16.9	373	345	1240	377	280	--	--	--
Nitrate+Nitrite	10.0	--	4	10	0.5	0.2	2.1	0.39	0.64	0.54	0.14	0.695	10	5	10	2
Sulfate	600.0	1790	2090	2000	2010	2250	2000	2150	2230	2150	2140	2640	17000	16000	16000	--
TDS	1.0	4060	4540	4410	4330	3840	4460	4120	4820	4810	4210	5330	--	--	--	--

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

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-5	MW-5	MW-5	MW-5	MW-5	MW-6	MW-6	MW-6
		12/21/2000	3/27/2001	6/27/2001	9/25/2001	8/15/2002	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
Metals (mg/L)															
Aluminum	5.0	--	--	--	458.0	2.7	--	12.5	--	1.19	3.34	16.9	22.0	13.6	--
Arsenic	0.1	--	--	--	<0.005	0.0106	--	0.0089	0.005	<0.005	<0.005	<0.005	<0.005	0.0078	--
Barium	1.0	--	--	--	0.16	0.0175	--	0.2	0.2	<0.2	<0.2	<0.2	0.015	0.0139	--
Cadmium	0.01	--	--	--	<0.004	0.00046	--	0.004	0.004	<0.004	0.004	0.0048	0.012	0.0109	--
Calcium	NE	--	--	--	400.0	361.0	--	348.0	--	418.0	338.0	342.0	400.0	388.0	--
Chromium	0.05	--	--	--	0.022	0.005	--	0.01	0.01	<0.01	<0.01	<0.01	<0.01	0.0303	--
Cobalt	0.05	--	--	--	0.035	0.0127	--	0.05	--	<0.05	0.0505	0.0637	0.26	0.202	--
Copper	1.0	--	--	--	0.059	0.014	--	0.0502	--	<0.025	<0.025	0.03	0.046	0.0434	--
Iron	1.0	0.59000	3.30000	0.46000	63.0	3.38	--	11.8	--	3.18	1.99	12.1	2.9	0.986	--
Lead	0.05	--	--	--	0.15	0.0048	--	0.0061	0.003	0.0134	0.0096	0.0205	0.25	0.005	--
Magnesium	NE	--	--	--	220.0	168.0	--	200.0	--	245.0	203.0	232.0	420.0	316.0	--
Manganese	0.2	0.02600	4.20000	3.80000	3.9	3.26	--	5.87	--	8.65	7.64	8.04	9.6	6.55	--
Mercury	0.002	--	--	--	--	0.00008	--	0.0002	0.0002	<0.0002	<0.0002	<0.0002	--	0.0001	--
Molybdenum	1.0	--	--	--	<0.01	0.005	--	0.01	--	<0.01	<0.01	<0.01	<0.01	0.005	--
Nickel	0.2	--	--	--	0.059	0.0493	--	0.0755	--	0.153	0.18	0.183	0.32	0.272	--
Potassium	NE	--	--	--	24.0	30.9	--	32.0	--	42.8	44.4	46.4	22.0	29.1	--
Selenium	0.05	--	--	--	<0.005	0.0032	--	0.005	0.0075	0.0073	<0.005	<0.005	0.3	0.304	--
Silver	0.05	--	--	--	<0.01	0.0026	--	0.01	0.01	<0.01	<0.01	<0.01	<0.01	0.004	--
Sodium	NE	--	--	--	6300.0	5980.0	--	4390.0	--	6050.0	4640.0	4410.0	4000.0	4080.0	--
Zinc	10.0	--	--	--	0.19	0.049	--	0.109	--	0.168	0.259	0.304	0.79	0.612	--
Inorganics (mg/L)															
Alkalinity	NE	--	--	340	--	--	459	358	393	125	109	35	--	--	145
Chloride	250.0	--	--	380	290	--	331	488	773	1150	1140	1730	1300	--	1040
Nitrate+Nitrite	10.0	1	5	--	--	--	--	20	20	0.2	0.1	2.6	ND	--	--
Sulfate	600.0	14000	16000	18000	14000	--	14400	14200	14500	11700	10500	11400	10000	--	8300
TDS	1.0	--	--	19500	20300	--	20300	19900	21400	21700	11700	18600	16500	--	14900

Notes:

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mg/L - milligrams per liter

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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-7	MW-7	MW-7	MW-7										
		8/26/2003	8/27/2004	8/24/2005	8/10/2006	8/23/2007	8/27/2008	8/28/2009	8/26/2010	8/31/2011	12/19/2013	9/25/2001	8/15/2002	8/21/2002	8/26/2003	8/27/2004
Metals (mg/L)																
Aluminum	5.0	24.5	--	14.5	6.45	12.6	--	16.8	19.2	16.3	14.8	14.0	3.21	--	35.6	--
Arsenic	0.1	0.005	0.005	<0.005	<0.005	<0.005	--	<0.005	<0.005	<0.005	<0.00328	<0.005	0.0072	--	0.0144	0.0089
Barium	1.0	0.2	0.2	<0.2	<0.2	<0.2	--	<0.2	<0.2	<0.2	0.0108 J	0.085	0.0441	--	0.302	0.265
Cadmium	0.01	0.0133	0.0102	0.0114	0.0068	0.0081	--	0.0095	0.0114	0.0131	0.0116	<0.004	0.0013	--	0.004	0.004
Calcium	NE	343.0	--	447.0	389.0	325.0	--	359.0	331.0	350.0	389.0	450.0	416.0	--	397.0	--
Chromium	0.05	0.01	0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.00155	<0.01	0.0081	--	0.0213	0.0187
Cobalt	0.05	0.236	--	0.219	0.123	0.161	--	0.176	0.199	0.227	0.238	0.029	0.0116	--	0.05	--
Copper	1.0	0.0807	--	0.0378	<0.025	0.0387	--	0.0383	0.042	0.0479	0.045	0.039	0.0237	--	0.0921	--
Iron	1.0	5.51	--	0.427	0.296	3.78	--	3.44	4.6	1.04	0.418	14.0	4.24	--	32.7	--
Lead	0.05	0.0039	0.003	0.0103	0.0076	0.011	--	0.0044	0.0151	0.0187	<0.00290	0.15	0.005	--	0.0168	0.0155
Magnesium	NE	360.0	--	376.0	273.0	356.0	--	315.0	326.0	326.0	318.0	230.0	173.0	--	229.0	--
Manganese	0.2	8.63	--	8.25	4.82	5.88	--	6.83	7.2	8.06	6.92	8.9	4.57	--	4.85	--
Mercury	0.002	0.0002	0.0002	<0.0002	<0.0002	<0.0002	--	--	<0.0002	<0.0002	<0.000082	--	0.0001	--	0.0002	0.002
Molybdenum	1.0	0.0100	--	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.00273	<0.01	0.0021	--	0.01	--
Nickel	0.2	0.3100	--	0.275	0.155	0.187	--	0.228	0.305	0.333	0.299	0.043	0.0267	--	0.0483	--
Potassium	NE	29.4	--	37.6	34.2	39.4	--	34.8	27.6	21.1	19.7	15.0	26.8	--	25.1	--
Selenium	0.05	0.247	0.331	0.618	0.995	0.893	--	0.381	0.335	0.351	0.332	<0.005	0.0114	--	0.0141	0.0098
Silver	0.05	0.01	0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	0.0023 J	<0.01	0.0034	--	0.01	0.01
Sodium	NE	3830.0	--	4370.0	3400.0	3370.0	--	3470.0	3620.0	3860.0	3950.0	4800.0	4810.0	--	4490.0	--
Zinc	10.0	0.729	--	0.764	0.527	0.594	--	0.592	0.692	0.772	0.836	0.14	0.068	--	0.199	--
Inorganics (mg/L)																
Alkalinity	NE	12	11	25	54	30	17	6	<5.0	12	<10	--	--	900	995	1040
Chloride	250.0	1410	1340	1150	1320	1830	1150	1290	1180	1190	1310	460	--	367	369	694
Nitrate+Nitrite	10.0	70.3	88.3	176	314	258	140	97.8	57	92.2	137	ND	--	20	24	
Sulfate	600.0	10300	9320	8490	8400	8930	3780	4140	9180	8970	9600	11000	--	11000	11900	10800
TDS	1.0	17100	16600	17700	11600	15500	16300	16000	14900	15600	16300	16500	--	17500	17600	16000

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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Table 3
Summary of Metals and Inorganics Groundwater Analytical Results
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	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	8/26/2003
Metals (mg/L)															
Aluminum	5.0	0.6	0.801	--	--	--	--	--	--	0.24	--	0.508	--	1.62	
Arsenic	0.1	<0.005	<0.005	--	--	--	--	--	--	<0.005	--	0.0238	--	0.008	
Barium	1.0	<0.2	<0.2	--	--	--	--	--	--	0.019	--	0.029	--	0.2	
Cadmium	0.01	<0.004	<0.004	--	--	--	--	--	--	<0.004	--	0.002	--	0.004	
Calcium	NE	462.0	421.0	--	--	--	--	--	--	370.0	310.0	67.2	--	354.0	
Chromium	0.05	<0.01	<0.01	--	--	--	--	--	--	<0.01	--	1.08	--	0.01	
Cobalt	0.05	<0.05	<0.05	--	--	--	--	--	--	<0.05	--	0.007	--	0.05	
Copper	1.0	0.0256	<0.025	--	--	--	--	--	--	<0.025	--	0.014	--	0.0414	
Iron	1.0	0.226	0.295	0.16	1.8	0.32	0.32	0.16	1.1	1.1	2.5	0.87	6.89	--	2.39
Lead	0.05	0.009	0.0089	--	--	--	--	--	--	0.25	--	0.005	--	0.003	
Magnesium	NE	238.0	231.0	--	--	--	--	--	--	370.0	280.0	465.0	--	370.0	
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	--	1.46
Mercury	0.002	<0.0002	<0.0002	--	--	--	--	--	--	--	--	--	0.0001	--	0.0002
Molybdenum	1.0	<0.01	<0.01	--	--	--	--	--	--	<0.01	--	0.0568	--	0.01	
Nickel	0.2	<0.04	<0.04	--	--	--	--	--	--	<0.04	--	0.251	--	0.04	
Potassium	NE	27.7	31.0	--	--	--	--	--	--	20.0	36.0	62.9	--	45.4	
Selenium	0.05	0.0181	0.0477	--	--	--	--	--	--	<0.005	--	0.0022	--	0.005	
Silver	0.05	<0.01	<0.01	--	--	--	--	--	--	<0.01	--	0.01	--	0.01	
Sodium	NE	5540.0	4970.0	--	--	--	--	--	--	6200.0	4500.0	4720.0	--	4390.0	
Zinc	10.0	0.0791	0.0889	--	--	--	--	--	--	<0.02	--	0.0145	--	0.0748	
Inorganics (mg/L)															
Alkalinity	NE	925	1140	--	--	--	--	--	--	4200	--	24	--	4420	5030
Chloride	250.0	307	344	--	--	--	--	--	--	440	610	780	--	318	726
Nitrate+Nitrite	10.0	22	33	10	5	5	2	1	5	10	ND	0.2	--	--	20
Sulfate	600.0	11000	14200	5200	5000	7500	8500	12000	6300	6200	9600	10	--	5450	8260
TDS	1.0	19900	16500	--	--	--	--	--	--	13800	18000	17000	--	13200	17900

Notes:

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mg/L - milligrams per liter

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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-8	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9						
		8/27/2004	8/24/2005	8/10/2006	8/23/2007	8/27/2008	8/28/2009	8/26/2010	19/12/2013	11/30/1999	4/10/2000	6/29/2000	9/29/2000	12/21/2000	3/27/2001
Metals (mg/L)															
Aluminum	5.0	--	0.634	0.219	1.3	3.26	5.34	5.21	0.651	--	--	--	--	--	--
Arsenic	0.1	0.0207	0.0062	0.0074	<0.005	0.0055	0.0122	0.03	<0.00328	--	--	--	--	--	--
Barium	1.0	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.0414	--	--	--	--	--	--
Cadmium	0.01	0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.00035	--	--	--	--	--	--
Calcium	NE	--	155.0	91.6	69.5	101.0	34.3	36.2	57.3	--	--	--	--	--	--
Chromium	0.05	0.01	<0.01	<0.01	<0.01	<0.01	0.013	0.018	<0.00155	--	--	--	--	--	--
Cobalt	0.05	--	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.0017 J	--	--	--	--	--	--
Copper	1.0	--	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.0102	--	--	--	--	--	--
Iron	1.0	--	0.831	<0.1	0.855	1.97	3.07	3.83	0.65	2.2	2.7	0.85	1.2	--	1.4
Lead	0.05	0.0074	0.0069	0.0051	0.0048	0.0043	0.0039	0.0087	<0.0029	--	--	--	--	--	--
Magnesium	NE	--	274.0	216.0	288.0	264.0	373.0	36.8	166.0	--	--	--	--	--	--
Manganese	0.2	--	1.23	1.04	0.59	0.557	0.869	0.367	0.351	8.8	9.2	8.5	8.4	0.1	9.0
Mercury	0.002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.000082	--	--	--	--	--	--
Molybdenum	1.0	--	0.0293	0.016	0.0165	<10	0.0321	0.0333	0.0087 J	--	--	--	--	--	--
Nickel	0.2	--	<0.04	<0.04	<0.04	<0.04	<0.04	<0.2	0.0033 J	--	--	--	--	--	--
Potassium	NE	--	75.6	73.0	87.4	89.0	85.6	226.0	35.4	--	--	--	--	--	--
Selenium	0.05	0.0062	<0.005	<0.005	<0.005	<0.005	<0.005	0.0075	<0.00417	--	--	--	--	--	--
Silver	0.05	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00125	--	--	--	--	--	--
Sodium	NE	--	2610.0	2210.0	2220.0	2790.0	2850.0	2800.0	2280.0	--	--	--	--	--	--
Zinc	10.0	--	0.0421	0.0526	0.132	0.0207	0.0234	<0.1	0.399	--	--	--	--	--	--
Inorganics (mg/L)															
Alkalinity	NE	4920	1880	2150	2580	3380	3860	9250	3150	--	--	--	--	--	ND
Chloride	250.0	806	261	147	165	4	<1.0	<1.0	271	--	--	--	--	--	770
Nitrate+Nitrite	10.0	20	0.7	0.7	0.6	0.36	1.2	3	0.366	10	5	5	2	1	5
Sulfate	600.0	7760	4920	4160	3980	3590	4050	2150	2310	14000	12000	11000	11000	3800	11000
TDS	1.0	17000	11000	7820	8200	9420	10700	12000	6540	--	--	--	--	--	16600

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-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	MW-9	MW-9
		9/25/2001	10/29/2001	8/15/2002	8/21/2009	8/26/2003	8/27/2004	8/24/2005	8/10/2006	8/23/2007	8/27/2008	8/28/2009	8/26/2010	11/09/2010	8/31/2011	12/19/2013
Metals (mg/L)																
Aluminum	5.0	7.0	--	8.9	--	43.9	--	13.6	9.77	16.3	14.5	14.7	11.1	--	14.0	11.6
Arsenic	0.1	<0.005	--	0.0088	--	0.0061	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	<0.00328
Barium	1.0	0.0088	--	0.0119	--	0.2	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	--	<0.2	0.0098 J	
Cadmium	0.01	<0.004	--	0.0084	--	0.0094	0.0081	0.0089	0.0082	<0.004	0.0085	0.0063	0.0061	--	0.0082	0.009
Calcium	NE	340.0	310.0	358.0	--	319.0	--	385.0	346.0	108.0	361.0	314.0	300.0	--	318.0	375.0
Chromium	0.05	<0.01	--	0.0078	--	0.0169	0.0104	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	0.0017 J
Cobalt	0.05	0.18	--	0.183	--	0.2	--	0.212	0.193	0.205	0.197	0.228	0.235	--	0.187	0.216
Copper	1.0	0.031	--	0.0512	--	0.162	--	0.059	0.0458	0.121	0.0629	0.043	0.0335	--	0.0682	0.0895
Iron	1.0	3.3	0.13	0.849	--	29.0	--	4.39	1.48	6.33	3.66	8.93	7.4	--	7.83	7.75
Lead	0.05	0.2	--	0.005	--	0.0135	0.007	0.0111	0.0087	0.0084	0.0051	0.0065	0.014	--	0.0239	<0.00290
Magnesium	NE	310.0	270.0	258.0	--	270.0	--	282.0	244.0	289.0	276.0	245.0	244.0	--	217.0	225.0
Manganese	0.2	8.3	0.54	6.47	--	7.33	--	7.87	7.36	6.42	7.77	8.3	7.9	--	6.79	6.59
Mercury	0.002	--	--	0.00013	--	0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	--	<0.0002	<0.000082
Molybdenum	1.0	<0.01	--	0.005	--	0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.0273
Nickel	0.2	0.3	--	0.295	--	0.335	--	0.335	0.307	0.318	0.316	0.336	0.391	--	0.328	0.339
Potassium	NE	12.0	43.0	25.6	--	23.0	--	25.9	23.8	23.7	28.0	24.6	19.1	--	13.1	12.3
Selenium	0.05	<0.005	--	0.0067	--	0.005	0.0065	0.0068	<0.005	<0.005	<0.005	<0.005	0.00970	--	<0.005	<0.00417
Silver	0.05	<0.01	--	0.0029	--	0.01	0.0100	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	0.0016 J
Sodium	NE	3900.0	4800.0	4490.0	--	3980.0	--	4650.0	3720.0	3590.0	3760.0	3930.0	4080.0	--	4080.0	4390.0
Zinc	10.0	0.53	--	0.0145	--	0.597	--	0.693	0.624	0.732	0.65	0.604	0.608	--	0.751	1.02
Inorganics (mg/L)																
Alkalinity	NE	--	4000	--	<4	13	24.5	19	22	25	18	30	34	--	28	46.5
Chloride	250.0	2200	530	--	673	752	969	782	674	775	606	1440	580	--	576	398
Nitrate+Nitrite	10.0	ND	0.23	--	--	20	20	<0.050	<0.050	0.4	<0.10	<0.10	<0.10	--	<0.10	0.147
Sulfate	600.0	12000	2200	--	11600	11800	12000	10200	10700	10900	4630	4030	10300	--	8440	11200
TDS	1.0	17000	16000	--	17200	16800	17400	18400	11000	16500	16200	17700	15800	--	15800	15300

Notes:

-- = not analyzed for the listed analyte

Bold text indicates detected concentration

Highlighted and bold cells indicate concentration exceeding NMWQCC standard

exceeding NMWQCC standards

mg/L - milligrams per liter

< or ND = not detected above method detection limit

Appendix A
Groundwater Sampling Forms

CH2MHILL		PROJECT NUMBER	WELL ID		MW-6			
		GROUNDWATER SAMPLING FIELD DATA SHEET						
PROJECT:	San Juan River Gas Plant		LOCATION:	Bloomfield, NM				
WEATHER (wind/temp/ppt):	Sunny 45°		OTHER NOTABLE FIELD CONDITIONS:					
INITIAL ORGANIC VAPOR METER READINGS:								
INITIAL DEPTH TO WATER:	30.98		TOTAL DEPTH OF WELL:	42.7	SCREENED INTERVAL:			
PURGE VOLUME CALCULATION:	$42.7 - 30.98 = 11.72 \times .653 = 7.6 = 22.8$							
METHOD OF PURGING:	Bailing							
DISPOSITION OF DISCHARGE WATER:								
MONITORING EQUIPMENT USED:	Hach 2100P Horiba U-52							
Well Purging Information								
Date 12/19/13	Total (gals)	Temp (°C)	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO	ORP	Remarks (color, odor, sheen, sediment, etc.)
1442	1.5	15.47	5.69	15.3	7.5	9.35	177	clear, no odor
1444	3.0	15.44	5.24	15.6	0	5.30	221	clear, no odor
1446	4.5	15.38	4.86	15.7	0	3.99	250	"
1448	7.5	15.38	4.80	15.7	0	3.25	289	"
1450	9.0	15.22	5.07	15.7	88.4	3.10	287	"
1452	15.0	15.15	4.40	15.9	2.8	3.25	281	"
1454	16.5	15.09	4.35	16.0	0	3.04	304	"
1456	18.0	14.98	4.31	16.0	8	3.05	311	"
1458	19.5	14.88	4.55	16.0	1.1	3.00	313	"
Sample Information								
SAMPLE DATE:	SAMPLE TYPE: normal/FO			SAMPLE MATRIX: GW				
SAMPLING PERSONNEL: LH				SPLIT SAMPLES OBTAINED BY:				
SAMPLING METHOD: Grab				SAMPLE TEMP/pH/EC/TURB/DO: See measurements above				
SAMPLE ID(s): SanJuan - MW06-12192013				DUPLICATE/BLANK SAMPLE ID(s):				
NOTABLE OBSERVATIONS (color, odor, sand, headspace, etc.): SanJuan - MD06-12192013 (P) 1700								
Sample ID	Sample Time	Sample Containers No./Volume/Type	Preservatives (ice, acids,)	Analytical Method	Laboratory			
SanJuan - MW06-12192013	i500	3-40 mL VOA 1-250 mL poly 1-liter poly 1-250 mL poly						

Initials of sampling personnel

三

 CH2MHILL	PROJECT NUMBER	WELL ID <i>MW-08</i>						
	GROUNDWATER SAMPLING FIELD DATA SHEET							
PROJECT:	San Juan River Gas Plant							
WEATHER (wind/temp/ppt):	Sunny 40°							
INITIAL ORGANIC VAPOR METER READINGS:	0.0							
INITIAL DEPTH TO WATER:	15.11	TOTAL DEPTH OF WELL:	22.3					
PURGE VOLUME CALCULATION:	$7.19 \times .653 = 4.69 \times 3 = 14.08$							
METHOD OF PURGING:	low flow							
DISPOSITION OF DISCHARGE WATER:								
MONITORING EQUIPMENT USED:	Horiba U-52 Hach 2100P							
Well Purging Information								
Date Time	Total ML (Total)	Temp (°C)	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO	ORP	Remarks (color, odor, sheen, sediment, etc.)
12/19/13	2950	13.74	7.67	8.99	1000+	18.26	-112	turbid, no odor
1044	5900	13.87	7.56	8.93	1000+	16.40	-125	"
1049	8850	13.91	7.53	8.80	1000+	4.51	-124	"
1054	11800	14.01	7.59	8.96	1000+	3.83	-118	"
1059	14750	14.13	7.52	8.77	1000+	3.69	-122	"
1104	17700	14.44	7.44	8.54	537	3.15	-115	"
1109	20650	14.36	7.40	8.46	445	2.85	-110	"
1114	23600	14.39	7.39	8.45	369	2.84	-110	"
1119	26550	14.39	7.37	8.42	325	2.70	-108	"
Sample Information								
SAMPLE DATE:	12/19/13			SAMPLE TYPE:	normal		SAMPLE MATRIX:	GW
SAMPLING PERSONNEL:	LH			SPLIT SAMPLES OBTAINED BY:				
SAMPLING METHOD:	Grab			SAMPLE TEMP/pH/EC/TURB/DO:			See measurements above	
SAMPLE ID(s):	SanJuan - MW08 - 12192013			DUPLICATE/BLANK SAMPLE ID(s):				
NOTABLE OBSERVATIONS (color, odor, sand, headspace, etc.):								
Sample ID	Sample Time	Sample Containers No./Volume/Type	Preservatives (ice, acids.)	Analytical Method	Laboratory			
SanJuan - MW08 - 12192013	1120	3.40 mL VOA	HCl	VOC	Test America			
"	1120	1-250 mL poly	H ₂ SO ₄	NH ₄ Cl, N ₂ , H ₂ O ₂				
"	1120	1 liter poly		2,4,6-TBP, CuO, D ₂ O				
"	1120	1-250 mL poly	HNO ₃	WW103, 1470A				

Initials of sampling personnel

LH



CH2MHILL

Initials of sampling personnel

LH

CH2MHILL		PROJECT NUMBER	WELL ID					
GROUNDWATER SAMPLING FIELD DATA SHEET								
PROJECT: San Juan River Gas Plant		LOCATION: Bloomfield, NM						
WEATHER (wind/temp/ppt): SUNNY 45°		OTHER NOTABLE FIELD CONDITIONS:						
INITIAL ORGANIC VAPOR METER READINGS: 0.0								
INITIAL DEPTH TO WATER: 55.31		TOTAL DEPTH OF WELL: 64.5 SCREENED INTERVAL:						
PURGE VOLUME CALCULATION: $9.19 \times .103 = 1.49 - 4.49$								
METHOD OF PURGING:								
DISPOSITION OF DISCHARGE WATER:								
MONITORING EQUIPMENT USED: Horiba U-52 Hach 2100P								
Well Purging Information								
Date 12/19/13	Total (gals)	Temp (°C)	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO	ORP	Remarks (color, odor, sheen, sediment, etc.)
1348	1.0	13.81	7.80	6.04	1000+	11.97	-4	turbid, no odor
1349	1.25	13.00	7.65	6.10	3	5.94	10	clear, no odor
1351	1.75	13.74	7.61	4.79	23.5	9.05	16	"
1353	2.0	14.62	7.60	6.31	319	4.35	27	turbid, no odor
1355	Well went dry. Let recharge then sample							
Sample Information								
SAMPLE DATE: 12/19/13	SAMPLE TYPE: normal			SAMPLE MATRIX: GW				
SAMPLING PERSONNEL: LH				SPLIT SAMPLES OBTAINED BY:				
SAMPLING METHOD: Grab				SAMPLE TEMP/pH/EC/TURB/DO: See measurements above				
SAMPLE ID(s): SanJuan-W02-12192013				DUPLICATE/BLANK SAMPLE ID(s):				
NOTABLE OBSERVATIONS (color, odor, sand, headspace, etc.):								
Sample ID	Sample Time	Sample Containers No./Volume/Type	Preservatives (ice, acids,)	Analytical Method	Laboratory			
SanJuan-W02-12192013	1400	3-400mL VOA	HCl	VOC	Test America			
	1400	1-250mL poly	H ₂ SO ₄	NH ₄ NO ₃				
	1400	1-Liter poly	—	250g 800mL				
	1400	1-250mL poly	HNO ₃	UV, 630nm				
				1470A				

Initials of sampling personnel

LH

CH2MHILL		PROJECT NUMBER		WELL ID		MW-4		
		GROUNDWATER SAMPLING FIELD DATA SHEET						
PROJECT: San Juan River Gas Plant		LOCATION: Bloomfield, NM						
WEATHER (wind/temp/ppt): Sunny 45°		OTHER NOTABLE FIELD CONDITIONS:						
INITIAL ORGANIC VAPOR METER READINGS: 0.0		INITIAL DEPTH TO WATER: 52.0 TOTAL DEPTH OF WELL: 57.05 SCREENED INTERVAL:						
PURGE VOLUME CALCULATION: $5.05 \times 143 = 722 \times 3 = 2.46$								
METHOD OF PURGING: Bailing								
DISPOSITION OF DISCHARGE WATER:								
MONITORING EQUIPMENT USED: Horiba U-52 Hach 2100P								
Bailing Well		Well Purging Information						
Date 12/19/13	Total (gals)	Temp (°C)	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO	ORP	Remarks (color, odor, sheen, sediment, etc.)
1315	.5	14.91	6.60	5.79	14.6	17.21	54	clear, no odor
1316	1	15.03	6.80	5.11	143	7.01	-52	!!
1318	1.25	15.07	7.20	4.89	114	4.52	-80	!!
1319	1.50	15.10	6.87	5.94	116	4.49	-92	!!
1322	2.0	15.37	6.89	6.14	122	4.48	-97	!!
Bail	well	dry and	let recharge	Then	sample			
Sample Information								
SAMPLE DATE: 12/13/14	SAMPLE TYPE:			SAMPLE MATRIX: GW				
SAMPLING PERSONNEL: LH				SPLIT SAMPLES OBTAINED BY:				
SAMPLING METHOD: Grab				SAMPLE TEMP/pH/EC/TURB/DO: See measurements above				
SAMPLE ID(s): SanJuan MW04 - 12192013				DUPLICATE/BLANK SAMPLE ID(s):				
NOTABLE OBSERVATIONS (color, odor, sand, headspace, etc.):								
Sample ID	Sample Time	Sample Containers No./Volume/Type	Preservatives (ice, acids.)	Analytical Method	Laboratory			
SanJuan-MW04-12192013	1335	3-40 mL VOA 1-250 mL poly 1-liter poly 1-250 mL poly	HCl H ₂ SO ₄ — HNO ₃	VOC Nitrate Nitrite 2340B 2340B 2010B 1410A	TEST America			

Initials of sampling personnel

LH

Appendix B
2013 Laboratory Analytical Reports

Data Usability Review: Data Package				
Client Name:	Kinder Morgan	Project Number:	477041.03.01	
Project / Affected Property:	San Juan Gas Plant	Project Manager:	Jeff Minchak	
Laboratory:	TA Houston	Lab SDG # / Job #:	J84503-1	
Reviewer:	Bryan Jones	Date Reviewed:	2/19/2014	
Level of Review / Validation:	III	Date SDG Received:	01/31/14	
ITEM	YES	NO	N/A	COMMENTS
Laboratory Data Package Signature Page included?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Date of sample collection included?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sample receipt temperature 2-6° C?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Signed COCs included?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Field ID included?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Laboratory ID included?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Date of analysis included?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Date of sample preparation included?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Detection levels included?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Method reference included?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sample matrix included?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sample results included?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Supporting QC documentation included?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Case narrative included, where required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative Percent Difference; RRT - Relative Retention Time; RSD - Relative Standard Deviation.				
COMMENTS				
VOC - U-EB, UJ-CC, J-CC				
Metals - U-EB				
Wet Chem - U-EB, J-MS				

Data Usability Review: VOCs (GC/MS), SW-846 8260B					
Client Name:	Kinder Morgan	Project Number:	477041.03.01		
Project / Affected Property:	San Juan Gas Plant	Project Manager:	Jeff Minchak		
Laboratory:	TA Houston	Lab SDG # / Job #:	J84503-1		
Reviewer:	Bryan Jones	Date Reviewed:	2/19/2014		
Level of Review / Validation:	III				
ITEM		YES	NO	N/A	COMMENTS
R1	Preparatory/analytical holding time met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
R2	Surrogate data included in lab package?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
R3	%R criteria met? (use limits listed below or specify lab limits). Reject %R <10%.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
R4	R5 Method blank data included in Lab Package?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
R5	Criteria met? (<5X MQL for common cont, <MQL for others)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	U-EB
R6	QC check samples/LCS data included in lab package?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
R7	%R criteria met? (specified limits)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
R8	Matrix spike data included in lab package?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
R9	%R criteria met? (laboratory specified limits)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
R10	RPD criteria met? (< 20% water, <50% soil)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
R11	Initial calibration documentation included in lab package?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
R12	RF criteria met for SPCC? RRF <0.05 rejected.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
R13	%RSD criteria met for CCC? (<30% RSD for CCC, >15% RSD must have fit)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
R14	Calibration verification data included in lab package?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
R15	RF criteria met for SPCC? RRF <0.05 rejected.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
R16	%D criteria met for CCC? (20% Max, Qualify >25%D)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	UJ-CC, J-CC
R17	Instrument Tune included in lab package?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
R18	Instrument Tune criteria met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
R19	Internal standard data included in lab package?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
R20	Area within limits? (within -50% to +100% of last calibration check?)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
R21	RRT within limits? (<30 sec. Difference from last calibration check?)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Notes: * SPCC: chloromethane (0.1); 1,1-dichloroethane (0.1); bromoform (0.1); chlorobenzene (0.3); and 1,1,2,2-tetrachloroethane (0.3).					
Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P					
COMMENTS					
R5: The equipment blank had detects for acetone (3.53 ug/L), associated detected results within 5 X the EB concentration were flagged U-EB.					
R16: The continuing calibration verification (CCV) for analytical batch 123637 was biased low for carbon disulfide (-44.4), chloromethane(-49.5) and trans-1,2-dichloroethene (-36.1) and biased high for 1,1,2,2-tetrachloroethane(+38.8). Associated non-detected results for carbon disulfide, chloromethane and trans-1,2-dichloroethene were flagged UJ-CC, associated detected results were flagged J-CC, associated non-detects for 1,1,2,2-tetrachloroethane required no flagging. The continuing calibration verification (CCV) for analytical batch 123757 was biased low for chloromethane (-45.7) and carbon disulfide (-39.3), associated non-detected results were flagged UJ-CC.					

Data Usability Review: Metals, SW-846 6010, 7470/7471, 7000 Series				
Client Name:	Kinder Morgan	Project Number:	477041.03.01	
Project / Affected Property:	San juan Gas Plant	Project Manager:	Jeff Minchak	
Laboratory:	TA Houston	Lab SDG # / Job #:	J84503-1	
Reviewer:	Bryan Jones	Date Reviewed:	2/19/2014	
Level of Review / Validation:	III			
ITEM		YES	NO	N/A
R1	Preparatory/analytical holding time met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R2	Method blank data included in Lab Package?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R3	Criteria met? (< MDL)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
R4	LCS / QC check sample data included in lab package?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R5	%R criteria met? (90-110%)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R6	Matrix spike data included in lab package?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R7	%R criteria met? (AA/ICP 75-125%, Hg 85-115%)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
R8	MSD or sample duplicate data included in lab package?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R9	RPD criteria met? (water RPD < 20%; soil RPD < 30%)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R10	Initial calibration documentation included in lab package?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
R11	Proper number of standards used in calibration curve? (ICP blank+1 std; AA blank+3 stds; Hg blank+5 stds)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
R12	Calibration verification data (ICV, CCV) included in lab package?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R13	%R criteria met? (90-110%)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R14	Interference check sample data included? (ICP only)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
R15	%R criteria met? (80-120%)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
R16	Dilution test (1:5) data included?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
R17	Results within 10% original?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
R18	Post digestion spike included?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
R19	%R criteria met? (75-125% ICP), (85-115% Hg/AA)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P				
COMMENTS				
R3; EB sample San Juan-EquBlank04-12192013 had detects of Silver (0.002 mg/L), Calcium (0.344 mg/L), Magnesium (0.0458 mg/L), Sodium (0.127 mg/L) and Zinc (0.0679 mg/L), all sample results > 5 times the blank concentration except for some Silver detected results, which were flagged U-EB.				
R7; Calcium, Magnesium, Sodium and Manganese failed the recovery criteria MS/MSD of sample San Juan-MW09-12192013 MS (600-84503-2), sample concentrations were >4 times the spike concentration, Selenium failed the recovery criteria high, sample result nondetect, no DV flags applied.				

Client Name:	Kinder Morgan	Project Number:	477041.03.01		
Project / Affected Property:	San Juan Gas Plant	Project Manager:	Jeff Minchak		
Laboratory:	TA Houston	Lab SDG # / Job #:	J84503-1		
Reviewer:	Bryan Jones	Date Reviewed:	2/19/2014		
Level of Review / Validation:	III				
ITEM		YES	NO	N/A	COMMENTS
R1	Preparatory/analytical holding time met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
R2	Method blank data included in Lab Package?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
R3	Criteria met? (<MQL)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	U-EB
R4	QC check samples/LCS data included in lab package?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
R5	%R criteria met? (90-110%)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
R6	Matrix spike data included in lab package?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
R7	%R criteria met?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	J-MS
R8	Sample duplicate data included in lab package?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
R9	RPD criteria met? (RPD < 20%)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
R10	Initial calibration documentation included in lab package?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
R11	Calibration verification data included in lab package?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
R12	%R criteria met? (Initial 90-110%)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Notes:					
Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; MQL - Method Quantitation Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative P					
COMMENTS					
R3; EB sample San Juan-EquBlank04-12192013 had detects of Chloride (1.01 mg/L), Sulfate (0.715 mg/L), Nitrate Nitrite (0.110 mg/L), Alkalinity (27.9 mg/L) and TDS (45.0 mg/L), all sample results > 5 times the blank concentration except for some Nitrate Nitrite detected results, which were flagged U-EB.					
R7; Sulfate failed the recovery criteria low for the MS/MSD of sample San Juan-MW09-12192013 MS (600-84503-2), sample concentration was >4 times the spike concentration, no DV flags applied. Nitrate Nitrite as N failed the recovery criteria low for the MS/MSD of sample San Juan-MW09-12192013 MS (600-84503-2), sample result flagged J-MS. Nitrate Nitrite as N failed the recovery criteria high for the MS/MSD of sample San Juan-MW06-12192013MS (600-84503-6), sample result flagged J-MS					
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ANALYTICAL REPORT

Job Number: 600-84503-1

Job Description: 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 Management Assistant II
1/31/2014 3:11 PM

Cathy L Upton, Project Management Assistant II
6310 Rothway Street, Houston, TX, 77040
(713)690-4444
cathy.upton@testamericainc.com
01/31/2014

cc: Jeffrey Minchak

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Project Manager.

TestAmerica Houston Certifications and Approvals: TX NELAP T104704223-09A-TX, ARDEQ 88-0759, LADEQ 01967, OKDEQ 9503, UT DOH GULF

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CASE NARRATIVE

Client: CH2M Hill Constructors, Inc.

Project: San Juan

Report Number: 600-84503-1

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 12/21/2013; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.8 C and 3.2 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples San Juan-MW08-12192013 (600-84503-1), San Juan-MW09-12192013 (600-84503-2), San Juan-MW04-12192013 (600-84503-3), San Juan-MW02-12192013 (600-84503-4), San Juan-EquBlank04-12192013 (600-84503-5), San Juan-MW06-12192013 (600-84503-6), San Juan-MD03-12192013 (600-84503-7) and TB03-12192013 (600-84503-9) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 12/24/2013 and 12/26/2013.

Sample San Juan-MW09-12192013 (600-84503-2)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The continuing calibration verification (CCV) for analytical batch 123637 recovered below control limits for carbon disulfide, chloromethane, 1,1,2,2-tetrachloroethane, and trans-1,2-dichloroethene. The continuing calibration verification (CCV) for analytical batch 123757 recovered below control limits for chloromethane and carbon disulfide. Per the laboratory's SOP criteria, up to six non-CCC analytes can recover up to 50%; therefore, the results have been reported and qualified.

No other difficulties were encountered during the volatiles analysis.

All other quality control parameters were within the acceptance limits.

TOTAL METALS (ICP)

Samples San Juan-MW08-12192013 (600-84503-1), San Juan-MW09-12192013 (600-84503-2), San Juan-MW04-12192013 (600-84503-3), San Juan-MW02-12192013 (600-84503-4), San Juan-EquBlank04-12192013 (600-84503-5), San Juan-MW06-12192013 (600-84503-6) and San Juan-MD03-12192013 (600-84503-7) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 12/30/2013 and analyzed on 12/31/2013.

Magnesium and Manganese failed the recovery criteria low for the MS of sample San Juan-MW09-12192013 MS (600-84503-2) in batch 600-124038. Selenium and Sodium failed the recovery criteria high.

Magnesium, Manganese and Sodium failed the recovery criteria low for the MSD of sample San Juan-MW09-12192013 MSD (600-84503-2) in batch 600-124038. Selenium failed the recovery criteria high.

Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

Refer to the QC report for details.

Samples San Juan-MW08-12192013 (600-84503-1)[20X], San Juan-MW09-12192013 (600-84503-2)[50X], San Juan-MW04-12192013 (600-84503-3)[20X], San Juan-MW02-12192013 (600-84503-4)[20X], San Juan-MW06-12192013 (600-84503-6)[50X] and San Juan-MD03-12192013 (600-84503-7)[50X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the metals analysis.

All other quality control parameters were within the acceptance limits.

TOTAL MERCURY

Samples San Juan-MW08-12192013 (600-84503-1), San Juan-MW09-12192013 (600-84503-2), San Juan-MW04-12192013 (600-84503-3), San Juan-MW02-12192013 (600-84503-4), San Juan-EquBlank04-12192013 (600-84503-5), San Juan-MW06-12192013 (600-84503-6) and San Juan-MD03-12192013 (600-84503-7) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 12/23/2013.

No difficulties were encountered during the mercury analysis.

All quality control parameters were within the acceptance limits.

ALKALINITY

Samples San Juan-MW08-12192013 (600-84503-1), San Juan-MW09-12192013 (600-84503-2), San Juan-MW04-12192013 (600-84503-3), San Juan-MW02-12192013 (600-84503-4), San Juan-EquBlank04-12192013 (600-84503-5), San Juan-MW06-12192013 (600-84503-6) and San Juan-MD03-12192013 (600-84503-7) were analyzed for alkalinity in accordance with SM20 2320B. The samples were analyzed on 01/02/2014.

No difficulties were encountered during the alkalinity analysis.

All quality control parameters were within the acceptance limits.

TOTAL DISSOLVED SOLIDS

Samples San Juan-MW08-12192013 (600-84503-1), San Juan-MW09-12192013 (600-84503-2), San Juan-MW04-12192013 (600-84503-3), San Juan-MW02-12192013 (600-84503-4), San Juan-EquBlank04-12192013 (600-84503-5), San Juan-MW06-12192013 (600-84503-6) and San Juan-MD03-12192013 (600-84503-7) were analyzed for total dissolved solids in accordance with SM20 2540C. The samples were analyzed on 12/23/2013.

No difficulties were encountered during the TDS analysis.

All quality control parameters were within the acceptance limits.

ANIONS

Samples San Juan-MW08-12192013 (600-84503-1), San Juan-MW09-12192013 (600-84503-2), San Juan-MW04-12192013 (600-84503-3), San Juan-MW02-12192013 (600-84503-4), San Juan-EquBlank04-12192013 (600-84503-5), San Juan-MW06-12192013 (600-84503-6) and San Juan-MD03-12192013 (600-84503-7) were analyzed for anions in accordance with EPA Method 300.0. The samples were analyzed on 12/23/2013 and 12/24/2013.

Sulfate failed the recovery criteria low for the MS of sample San Juan-MW09-12192013 MS (600-84503-2) in batch 600-123582.

Sulfate failed the recovery criteria low for the MSD of sample San Juan-MW09-12192013 MSD (600-84503-2) in batch 600-123582.

Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

Refer to the QC report for details.

Samples San Juan-MW08-12192013 (600-84503-1)[200X], San Juan-MW09-12192013 (600-84503-2)[100X], San Juan-MW09-12192013 (600-84503-2)[500X], San Juan-MW04-12192013 (600-84503-3)[100X], San Juan-MW02-12192013 (600-84503-4)[100X], San Juan-MW06-12192013 (600-84503-6)[1000X] and San Juan-MD03-12192013 (600-84503-7)[1000X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the anions analysis.

All other quality control parameters were within the acceptance limits.

NITRATE-NITRITE AS NITROGEN

Samples San Juan-MW08-12192013 (600-84503-1), San Juan-MW09-12192013 (600-84503-2), San Juan-MW04-12192013 (600-84503-3), San Juan-MW02-12192013 (600-84503-4), San Juan-EquBlank04-12192013 (600-84503-5), San Juan-MW06-12192013

(600-84503-6) and San Juan-MD03-12192013 (600-84503-7) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 01/03/2014.

Nitrate Nitrite as N failed the recovery criteria low for the MS of sample San Juan-MW09-12192013 MS (600-84503-2) in batch 600-124343.

Nitrate Nitrite as N failed the recovery criteria low for the MSD of sample San Juan-MW09-12192013 MSD (600-84503-2) in batch 600-124343.

Nitrate Nitrite as N failed the recovery criteria high for the MS of sample San Juan-MW06-12192013MS (600-84503-6) in batch 600-124343.

Nitrate Nitrite as N failed the recovery criteria high for the MSD of sample San Juan-MW06-12192013MSD (600-84503-6) in batch 600-124343. Nitrate Nitrite as N exceeded the RPD limit.

Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Refer to the QC report for details.

Samples San Juan-MW02-12192013 (600-84503-4)[250X], San Juan-MW06-12192013 (600-84503-6)[250X] and San Juan-MD03-12192013 (600-84503-7)[250X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the nitrate-nitrite analysis.

All other quality control parameters were within the acceptance limits.

Sample Summary

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

APPENDIX B (12 of 240)
TestAmerica Job ID: 600-84503-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-84503-1	San Juan-MW08-12192013	Water	12/19/13 11:20	12/21/13 10:45
600-84503-2	San Juan-MW09-12192013	Water	12/19/13 12:35	12/21/13 10:45
600-84503-3	San Juan-MW04-12192013	Water	12/19/13 13:35	12/21/13 10:45
600-84503-4	San Juan-MW02-12192013	Water	12/19/13 14:00	12/21/13 10:45
600-84503-5	San Juan-EquBlank04-12192013	Water	12/19/13 14:20	12/21/13 10:45
600-84503-6	San Juan-MW06-12192013	Water	12/19/13 15:00	12/21/13 10:45
600-84503-7	San Juan-MD03-12192013	Water	12/19/13 17:00	12/21/13 10:45
600-84503-9	TB03-12192013	Water	12/19/13 08:00	12/21/13 10:45

Method Summary

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

APPENDIX B (13 of 240)
TestAmerica Job ID: 600-84503-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
6010B	Metals (ICP)	SW846	TAL HOU
7470A	Mercury (CVAA)	SW846	TAL HOU
300.0	Anions, Ion Chromatography	MCAWW	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

Detection Summary

APPENDIX B (14 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

Client Sample ID: San Juan-MW08-12192013

Lab Sample ID: 600-84503-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.60		5.00	0.990	ug/L	1	8260B		Total/NA
Benzene	2.81		1.00	0.0800	ug/L	1	8260B		Total/NA
Aluminum	0.651		0.500	0.0216	mg/L	1	6010B		Total/NA
Barium	0.0414		0.0200	0.00220	mg/L	1	6010B		Total/NA
Calcium	57.3		1.00	0.0219	mg/L	1	6010B		Total/NA
Cobalt	0.00170 J		0.0100	0.000630	mg/L	1	6010B		Total/NA
Copper	0.0102		0.0100	0.00145	mg/L	1	6010B		Total/NA
Iron	0.650		0.400	0.0866	mg/L	1	6010B		Total/NA
Potassium	35.4		1.00	0.129	mg/L	1	6010B		Total/NA
Magnesium	166		1.00	0.0191	mg/L	1	6010B		Total/NA
Manganese	0.351		0.0100	0.000840	mg/L	1	6010B		Total/NA
Molybdenum	0.00870 J		0.0100	0.00273	mg/L	1	6010B		Total/NA
Nickel	0.00330 J		0.0100	0.00179	mg/L	1	6010B		Total/NA
Zinc	0.399		0.0300	0.00217	mg/L	1	6010B		Total/NA
Sodium - DL	2280		20.0	0.400	mg/L	20	6010B		Total/NA
Chloride	271		80.0	5.40	mg/L	200	300.0		Total/NA
Sulfate	2310		100	16.6	mg/L	200	300.0		Total/NA
Nitrate Nitrite as N	0.366		0.0500	0.0170	mg/L	1	353.2		Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	3150		10.0	10.0	mg/L	1	SM 2320B		Total/NA
Bicarbonate Alkalinity as CaCO3	3150		10.0	10.0	mg/L	1	SM 2320B		Total/NA
Total Dissolved Solids	6540		40.0	40.0	mg/L	1	SM 2540C		Total/NA

Client Sample ID: San Juan-MW09-12192013

Lab Sample ID: 600-84503-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bromoform	0.318 J		1.00	0.190	ug/L	1	8260B		Total/NA
Dibromochloromethane	0.209 J		1.00	0.150	ug/L	1	8260B		Total/NA
Chlorobenzene	0.164 J		1.00	0.120	ug/L	1	8260B		Total/NA
1,2-Dichloroethane	0.227 J		1.00	0.140	ug/L	1	8260B		Total/NA
Styrene	0.185 J		1.00	0.0700	ug/L	1	8260B		Total/NA
Toluene	0.246 J		1.00	0.150	ug/L	1	8260B		Total/NA
o-Xylene	0.242 J		1.00	0.120	ug/L	1	8260B		Total/NA
m-Xylene & p-Xylene	15.0		1.00	0.170	ug/L	1	8260B		Total/NA
Xylenes, Total	15.2		1.00	0.260	ug/L	1	8260B		Total/NA
cis-1,2-Dichloroethene	0.106 J		1.00	0.0600	ug/L	1	8260B		Total/NA
Benzene - DL	186		10.0	0.800	ug/L	10	8260B		Total/NA
Ethylbenzene - DL	57.5		10.0	1.10	ug/L	10	8260B		Total/NA
Silver	0.00160 J		0.0100	0.00125	mg/L	1	6010B		Total/NA
Aluminum	11.6		0.500	0.0216	mg/L	1	6010B		Total/NA
Barium	0.00980 J		0.0200	0.00220	mg/L	1	6010B		Total/NA
Calcium	375		1.00	0.0219	mg/L	1	6010B		Total/NA
Cadmium	0.00900		0.00500	0.000350	mg/L	1	6010B		Total/NA
Cobalt	0.216		0.0100	0.000630	mg/L	1	6010B		Total/NA
Chromium	0.00170 J		0.0100	0.00155	mg/L	1	6010B		Total/NA
Copper	0.0895		0.0100	0.00145	mg/L	1	6010B		Total/NA
Iron	7.75		0.400	0.0866	mg/L	1	6010B		Total/NA
Potassium	12.3		1.00	0.129	mg/L	1	6010B		Total/NA
Magnesium	225		1.00	0.0191	mg/L	1	6010B		Total/NA
Manganese	6.59		0.0100	0.000840	mg/L	1	6010B		Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Houston

Detection Summary

APPENDIX B (15 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

Client Sample ID: San Juan-MW09-12192013 (Continued)

Lab Sample ID: 600-84503-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	0.339		0.0100	0.00179	mg/L	1	6010B		Total/NA
Zinc	1.02		0.0300	0.00217	mg/L	1	6010B		Total/NA
Sodium - DL	4390		50.0	1.00	mg/L	50	6010B		Total/NA
Chloride	398		40.0	2.70	mg/L	100	300.0		Total/NA
Sulfate	11200		250	41.5	mg/L	500	300.0		Total/NA
Nitrate Nitrite as N	0.147		0.0500	0.0170	mg/L	1	353.2		Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	46.5		10.0	10.0	mg/L	1	SM 2320B		Total/NA
Bicarbonate Alkalinity as CaCO ₃	46.5		10.0	10.0	mg/L	1	SM 2320B		Total/NA
Total Dissolved Solids	15300		10.0	10.0	mg/L	1	SM 2540C		Total/NA

Client Sample ID: San Juan-MW04-12192013

Lab Sample ID: 600-84503-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	11.0		5.00	0.990	ug/L	1	8260B		Total/NA
Benzene	0.208	J	1.00	0.0800	ug/L	1	8260B		Total/NA
2-Butanone (MEK)	1.88	J	2.00	0.760	ug/L	1	8260B		Total/NA
Carbon disulfide	0.297	J	2.00	0.240	ug/L	1	8260B		Total/NA
1,1-Dichloroethane	0.148	J	1.00	0.110	ug/L	1	8260B		Total/NA
Trichloroethylene	0.288	J	1.00	0.180	ug/L	1	8260B		Total/NA
cis-1,2-Dichloroethylene	0.619	J	1.00	0.0600	ug/L	1	8260B		Total/NA
1,2-Dichloroethylene, Total	0.619	J	1.00	0.300	ug/L	1	8260B		Total/NA
Arsenic	0.101		0.0100	0.00328	mg/L	1	6010B		Total/NA
Aluminum	0.702		0.500	0.0216	mg/L	1	6010B		Total/NA
Barium	0.0327		0.0200	0.00220	mg/L	1	6010B		Total/NA
Calcium	323		1.00	0.0219	mg/L	1	6010B		Total/NA
Cadmium	0.00150	J	0.00500	0.000350	mg/L	1	6010B		Total/NA
Cobalt	0.201		0.0100	0.000630	mg/L	1	6010B		Total/NA
Chromium	0.00310	J	0.0100	0.00155	mg/L	1	6010B		Total/NA
Copper	0.0913		0.0100	0.00145	mg/L	1	6010B		Total/NA
Iron	24.9		0.400	0.0866	mg/L	1	6010B		Total/NA
Potassium	8.09		1.00	0.129	mg/L	1	6010B		Total/NA
Magnesium	123		1.00	0.0191	mg/L	1	6010B		Total/NA
Manganese	8.77		0.0100	0.000840	mg/L	1	6010B		Total/NA
Molybdenum	0.179		0.0100	0.00273	mg/L	1	6010B		Total/NA
Nickel	0.358		0.0100	0.00179	mg/L	1	6010B		Total/NA
Lead	0.0160		0.0100	0.00290	mg/L	1	6010B		Total/NA
Selenium	0.00860	J	0.0400	0.00417	mg/L	1	6010B		Total/NA
Zinc	0.157		0.0300	0.00217	mg/L	1	6010B		Total/NA
Sodium - DL	1310		20.0	0.400	mg/L	20	6010B		Total/NA
Chloride	377		40.0	2.70	mg/L	100	300.0		Total/NA
Sulfate	2640		50.0	8.30	mg/L	100	300.0		Total/NA
Nitrate Nitrite as N	0.695		0.0500	0.0170	mg/L	1	353.2		Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	765		10.0	10.0	mg/L	1	SM 2320B		Total/NA
Bicarbonate Alkalinity as CaCO ₃	765		10.0	10.0	mg/L	1	SM 2320B		Total/NA
Total Dissolved Solids	5330		20.0	20.0	mg/L	1	SM 2540C		Total/NA

Client Sample ID: San Juan-MW02-12192013

Lab Sample ID: 600-84503-4

This Detection Summary does not include radiochemical test results.

TestAmerica Houston

Detection Summary

APPENDIX B (16 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

Client Sample ID: San Juan-MW02-12192013 (Continued)

Lab Sample ID: 600-84503-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silver	0.00130	J	0.0100	0.00125	mg/L	1	6010B		Total/NA
Arsenic	0.00480	J	0.0100	0.00328	mg/L	1	6010B		Total/NA
Aluminum	5.82		0.500	0.0216	mg/L	1	6010B		Total/NA
Barium	0.0346		0.0200	0.00220	mg/L	1	6010B		Total/NA
Calcium	384		1.00	0.0219	mg/L	1	6010B		Total/NA
Cadmium	0.000900	J	0.00500	0.000350	mg/L	1	6010B		Total/NA
Cobalt	0.00790	J	0.0100	0.000630	mg/L	1	6010B		Total/NA
Chromium	0.00810	J	0.0100	0.00155	mg/L	1	6010B		Total/NA
Copper	0.0309		0.0100	0.00145	mg/L	1	6010B		Total/NA
Iron	8.29		0.400	0.0866	mg/L	1	6010B		Total/NA
Potassium	4.02		1.00	0.129	mg/L	1	6010B		Total/NA
Magnesium	103		1.00	0.0191	mg/L	1	6010B		Total/NA
Manganese	0.487		0.0100	0.000840	mg/L	1	6010B		Total/NA
Nickel	0.000900	J	0.0100	0.00179	mg/L	1	6010B		Total/NA
Lead	0.0106		0.0100	0.00290	mg/L	1	6010B		Total/NA
Selenium	0.0978		0.0400	0.00417	mg/L	1	6010B		Total/NA
Zinc	0.156		0.0300	0.00217	mg/L	1	6010B		Total/NA
Sodium - DL	1260		20.0	0.400	mg/L	20	6010B		Total/NA
Chloride	275		40.0	2.70	mg/L	100	300.0		Total/NA
Sulfate	3330		50.0	8.30	mg/L	100	300.0		Total/NA
Nitrate Nitrite as N	19.7		12.5	4.25	mg/L	250	353.2		Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	203		10.0	10.0	mg/L	1	SM 2320B		Total/NA
Bicarbonate Alkalinity as CaCO ₃	203		10.0	10.0	mg/L	1	SM 2320B		Total/NA
Total Dissolved Solids	5460		20.0	20.0	mg/L	1	SM 2540C		Total/NA

Client Sample ID: San Juan-EquBlank04-12192013

Lab Sample ID: 600-84503-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.53	J	5.00	0.990	ug/L	1	8260B		Total/NA
Silver	0.00200	J	0.0100	0.00125	mg/L	1	6010B		Total/NA
Calcium	0.344	J	1.00	0.0219	mg/L	1	6010B		Total/NA
Magnesium	0.0458	J	1.00	0.0191	mg/L	1	6010B		Total/NA
Zinc	0.0679		0.0300	0.00217	mg/L	1	6010B		Total/NA
Sodium - DL	0.127	J	1.00	0.0200	mg/L	1	6010B		Total/NA
Chloride	1.01		0.400	0.0270	mg/L	1	300.0		Total/NA
Sulfate	0.715		0.500	0.0830	mg/L	1	300.0		Total/NA
Nitrate Nitrite as N	0.110		0.0500	0.0170	mg/L	1	353.2		Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity	27.9		10.0	10.0	mg/L	1	SM 2320B		Total/NA
Bicarbonate Alkalinity as CaCO ₃	27.9		10.0	10.0	mg/L	1	SM 2320B		Total/NA
Total Dissolved Solids	45.0		10.0	10.0	mg/L	1	SM 2540C		Total/NA

Client Sample ID: San Juan-MW06-12192013

Lab Sample ID: 600-84503-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.208	J	1.00	0.130	ug/L	1	8260B		Total/NA
Silver	0.00230	J	0.0100	0.00125	mg/L	1	6010B		Total/NA
Aluminum	14.8		0.500	0.0216	mg/L	1	6010B		Total/NA
Barium	0.0108	J	0.0200	0.00220	mg/L	1	6010B		Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Houston

Detection Summary

APPENDIX B (17 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

Client Sample ID: San Juan-MW06-12192013 (Continued)

Lab Sample ID: 600-84503-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	389		1.00	0.0219	mg/L	1	6010B		Total/NA
Cadmium	0.0116		0.00500	0.000350	mg/L	1	6010B		Total/NA
Cobalt	0.238		0.0100	0.000630	mg/L	1	6010B		Total/NA
Copper	0.0450		0.0100	0.00145	mg/L	1	6010B		Total/NA
Iron	0.418		0.400	0.0866	mg/L	1	6010B		Total/NA
Potassium	19.7		1.00	0.129	mg/L	1	6010B		Total/NA
Magnesium	318		1.00	0.0191	mg/L	1	6010B		Total/NA
Manganese	6.92		0.0100	0.000840	mg/L	1	6010B		Total/NA
Nickel	0.299		0.0100	0.00179	mg/L	1	6010B		Total/NA
Selenium	0.332		0.0400	0.00417	mg/L	1	6010B		Total/NA
Zinc	0.836		0.0300	0.00217	mg/L	1	6010B		Total/NA
Sodium - DL	3950		50.0	1.00	mg/L	50	6010B		Total/NA
Chloride	1310		400	27.0	mg/L	1000	300.0		Total/NA
Sulfate	9600		500	83.0	mg/L	1000	300.0		Total/NA
Nitrate Nitrite as N	137		12.5	4.25	mg/L	250	353.2		Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	16300		100	100	mg/L	1	SM 2540C		Total/NA

Client Sample ID: San Juan-MD03-12192013

Lab Sample ID: 600-84503-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.44	J	5.00	0.990	ug/L	1	8260B		Total/NA
Chloroform	0.215	J	1.00	0.130	ug/L	1	8260B		Total/NA
Silver	0.00230	J	0.0100	0.00125	mg/L	1	6010B		Total/NA
Aluminum	16.3		0.500	0.0216	mg/L	1	6010B		Total/NA
Barium	0.0108	J	0.0200	0.00220	mg/L	1	6010B		Total/NA
Calcium	400		1.00	0.0219	mg/L	1	6010B		Total/NA
Cadmium	0.0125		0.00500	0.000350	mg/L	1	6010B		Total/NA
Cobalt	0.256		0.0100	0.000630	mg/L	1	6010B		Total/NA
Chromium	0.00200	J	0.0100	0.00155	mg/L	1	6010B		Total/NA
Copper	0.0488		0.0100	0.00145	mg/L	1	6010B		Total/NA
Iron	0.467		0.400	0.0866	mg/L	1	6010B		Total/NA
Potassium	20.4		1.00	0.129	mg/L	1	6010B		Total/NA
Magnesium	327		1.00	0.0191	mg/L	1	6010B		Total/NA
Manganese	7.42		0.0100	0.000840	mg/L	1	6010B		Total/NA
Nickel	0.321		0.0100	0.00179	mg/L	1	6010B		Total/NA
Selenium	0.334		0.0400	0.00417	mg/L	1	6010B		Total/NA
Zinc	0.881		0.0300	0.00217	mg/L	1	6010B		Total/NA
Sodium - DL	4030		50.0	1.00	mg/L	50	6010B		Total/NA
Chloride	1300		400	27.0	mg/L	1000	300.0		Total/NA
Sulfate	9570		500	83.0	mg/L	1000	300.0		Total/NA
Nitrate Nitrite as N	226		12.5	4.25	mg/L	250	353.2		Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	16800		100	100	mg/L	1	SM 2540C		Total/NA

Client Sample ID: TB03-12192013

Lab Sample ID: 600-84503-9

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Houston

Client Sample Results

APPENDIX B (18 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

Client Sample ID: San Juan-MW08-12192013

Lab Sample ID: 600-84503-1

Matrix: Water

Date Collected: 12/19/13 11:20

Date Received: 12/21/13 10:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	6.60	U-EB	5.00	0.990	ug/L			12/24/13 20:58	1
Benzene	2.81		1.00	0.0800	ug/L			12/24/13 20:58	1
Chlorobromomethane	0.180	U	1.00	0.180	ug/L			12/24/13 20:58	1
Bromoform	0.190	U	1.00	0.190	ug/L			12/24/13 20:58	1
Bromomethane	0.250	U	2.00	0.250	ug/L			12/24/13 20:58	1
2-Butanone (MEK)	0.760	U	2.00	0.760	ug/L			12/24/13 20:58	1
Carbon disulfide	0.240	U UJ-CC	2.00	0.240	ug/L			12/24/13 20:58	1
Carbon tetrachloride	0.150	U	1.00	0.150	ug/L			12/24/13 20:58	1
Dibromochloromethane	0.150	U	1.00	0.150	ug/L			12/24/13 20:58	1
Chlorobenzene	0.120	U	1.00	0.120	ug/L			12/24/13 20:58	1
Chloroethane	0.0800	U	2.00	0.0800	ug/L			12/24/13 20:58	1
Chloroform	0.130	U	1.00	0.130	ug/L			12/24/13 20:58	1
Chloromethane	0.180	U UJ-CC	2.00	0.180	ug/L			12/24/13 20:58	1
1,1-Dichloroethane	0.110	U	1.00	0.110	ug/L			12/24/13 20:58	1
1,2-Dichloroethane	0.140	U	1.00	0.140	ug/L			12/24/13 20:58	1
1,1-Dichloroethene	0.190	U	1.00	0.190	ug/L			12/24/13 20:58	1
trans-1,2-Dichloroethene	0.0900	U UJ-CC	1.00	0.0900	ug/L			12/24/13 20:58	1
1,2-Dichloropropane	0.160	U	1.00	0.160	ug/L			12/24/13 20:58	1
cis-1,3-Dichloropropene	0.180	U	1.00	0.180	ug/L			12/24/13 20:58	1
trans-1,3-Dichloropropene	0.210	U	1.00	0.210	ug/L			12/24/13 20:58	1
Ethylbenzene	0.110	U	1.00	0.110	ug/L			12/24/13 20:58	1
2-Hexanone	0.350	U	2.00	0.350	ug/L			12/24/13 20:58	1
Methylene Chloride	0.150	U	5.00	0.150	ug/L			12/24/13 20:58	1
4-Methyl-2-pentanone (MIBK)	0.450	U	2.00	0.450	ug/L			12/24/13 20:58	1
Styrene	0.0700	U	1.00	0.0700	ug/L			12/24/13 20:58	1
1,1,2,2-Tetrachloroethane	0.220	U	1.00	0.220	ug/L			12/24/13 20:58	1
Tetrachloroethene	0.130	U	1.00	0.130	ug/L			12/24/13 20:58	1
Toluene	0.150	U	1.00	0.150	ug/L			12/24/13 20:58	1
1,1,1-Trichloroethane	0.150	U	1.00	0.150	ug/L			12/24/13 20:58	1
1,1,2-Trichloroethane	0.280	U	1.00	0.280	ug/L			12/24/13 20:58	1
Trichloroethene	0.180	U	1.00	0.180	ug/L			12/24/13 20:58	1
Vinyl acetate	0.210	U	2.00	0.210	ug/L			12/24/13 20:58	1
Vinyl chloride	0.110	U	2.00	0.110	ug/L			12/24/13 20:58	1
o-Xylene	0.120	U	1.00	0.120	ug/L			12/24/13 20:58	1
m-Xylene & p-Xylene	0.170	U	1.00	0.170	ug/L			12/24/13 20:58	1
Xylenes, Total	0.260	U	1.00	0.260	ug/L			12/24/13 20:58	1
cis-1,2-Dichloroethene	0.0600	U	1.00	0.0600	ug/L			12/24/13 20:58	1
Bromodichloromethane	0.160	U	1.00	0.160	ug/L			12/24/13 20:58	1
1,2-Dichloroethene, Total	0.300	U	1.00	0.300	ug/L			12/24/13 20:58	1

Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	110		70 - 130		12/24/13 20:58	1
Dibromofluoromethane	110		62 - 130		12/24/13 20:58	1
4-Bromofluorobenzene	119		67 - 139		12/24/13 20:58	1
1,2-Dichloroethane-d4 (Surr)	117		50 - 134		12/24/13 20:58	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.00125	U	0.0100	0.00125	mg/L		12/30/13 11:18	12/31/13 11:29	1
Arsenic	0.00328	U	0.0100	0.00328	mg/L		12/30/13 11:18	12/31/13 11:29	1

TestAmerica Houston

Client Sample Results

APPENDIX B (19 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

Client Sample ID: San Juan-MW08-12192013

Lab Sample ID: 600-84503-1

Matrix: Water

Date Collected: 12/19/13 11:20

Date Received: 12/21/13 10:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.651		0.500	0.0216	mg/L		12/30/13 11:18	12/31/13 11:29	1
Barium	0.0414		0.0200	0.00220	mg/L		12/30/13 11:18	12/31/13 11:29	1
Calcium	57.3		1.00	0.0219	mg/L		12/30/13 11:18	12/31/13 11:29	1
Cadmium	0.000350	U	0.00500	0.000350	mg/L		12/30/13 11:18	12/31/13 11:29	1
Cobalt	0.00170	J	0.0100	0.000630	mg/L		12/30/13 11:18	12/31/13 11:29	1
Chromium	0.00155	U	0.0100	0.00155	mg/L		12/30/13 11:18	12/31/13 11:29	1
Copper	0.0102		0.0100	0.00145	mg/L		12/30/13 11:18	12/31/13 11:29	1
Iron	0.650		0.400	0.0866	mg/L		12/30/13 11:18	12/31/13 11:29	1
Potassium	35.4		1.00	0.129	mg/L		12/30/13 11:18	12/31/13 11:29	1
Magnesium	166		1.00	0.0191	mg/L		12/30/13 11:18	12/31/13 11:29	1
Manganese	0.351		0.0100	0.000840	mg/L		12/30/13 11:18	12/31/13 11:29	1
Molybdenum	0.00870	J	0.0100	0.00273	mg/L		12/30/13 11:18	12/31/13 11:29	1
Nickel	0.00330	J	0.0100	0.00179	mg/L		12/30/13 11:18	12/31/13 11:29	1
Lead	0.00290	U	0.0100	0.00290	mg/L		12/30/13 11:18	12/31/13 11:29	1
Selenium	0.00417	U	0.0400	0.00417	mg/L		12/30/13 11:18	12/31/13 11:29	1
Zinc	0.399		0.0300	0.00217	mg/L		12/30/13 11:18	12/31/13 11:29	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	2280		20.0	0.400	mg/L		12/30/13 11:18	12/31/13 12:42	20

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0820	U	0.200	0.0820	ug/L		12/23/13 04:58	12/23/13 08:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	271		80.0	5.40	mg/L			12/23/13 20:26	200
Sulfate	2310		100	16.6	mg/L			12/23/13 20:26	200
Nitrate Nitrite as N	0.366	U-EB	0.0500	0.0170	mg/L			01/03/14 12:00	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	3150		10.0	10.0	mg/L			01/02/14 06:48	1
Bicarbonate Alkalinity as CaCO3	3150		10.0	10.0	mg/L			01/02/14 06:48	1
Carbonate Alkalinity as CaCO3	10.0	U	10.0	10.0	mg/L			01/02/14 06:48	1
Hydroxide Alkalinity	10.0	U	10.0	10.0	mg/L			01/02/14 06:48	1
Phenolphthalein Alkalinity	10.0	U	10.0	10.0	mg/L			01/02/14 06:48	1
Total Dissolved Solids	6540		40.0	40.0	mg/L			12/23/13 14:41	1

Client Sample ID: San Juan-MW09-12192013

Lab Sample ID: 600-84503-2

Matrix: Water

Date Collected: 12/19/13 12:35

Date Received: 12/21/13 10:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.990	U	5.00	0.990	ug/L			12/26/13 13:54	1
Chlorobromomethane	0.180	U	1.00	0.180	ug/L			12/26/13 13:54	1
Bromoform	0.318	J	1.00	0.190	ug/L			12/26/13 13:54	1
Bromomethane	0.250	U	2.00	0.250	ug/L			12/26/13 13:54	1
2-Butanone (MEK)	0.760	U	2.00	0.760	ug/L			12/26/13 13:54	1
Carbon disulfide	0.240	U J-CC	2.00	0.240	ug/L			12/26/13 13:54	1

TestAmerica Houston

Client Sample Results

APPENDIX B (20 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

Client Sample ID: San Juan-MW09-12192013

Lab Sample ID: 600-84503-2

Matrix: Water

Date Collected: 12/19/13 12:35

Date Received: 12/21/13 10:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	0.150	U	1.00	0.150	ug/L			12/26/13 13:54	1
Dibromochloromethane	0.209	J	1.00	0.150	ug/L			12/26/13 13:54	1
Chlorobenzene	0.164	J	1.00	0.120	ug/L			12/26/13 13:54	1
Chloroethane	0.0800	U	2.00	0.0800	ug/L			12/26/13 13:54	1
Chloroform	0.130	U	1.00	0.130	ug/L			12/26/13 13:54	1
Chloromethane	0.180	U	UJ-CC	2.00	0.180	ug/L		12/26/13 13:54	1
1,1-Dichloroethane	0.110	U	1.00	0.110	ug/L			12/26/13 13:54	1
1,2-Dichloroethane	0.227	J	1.00	0.140	ug/L			12/26/13 13:54	1
1,1-Dichloroethene	0.190	U	1.00	0.190	ug/L			12/26/13 13:54	1
trans-1,2-Dichloroethene	0.0900	U	1.00	0.0900	ug/L			12/26/13 13:54	1
1,2-Dichloropropane	0.160	U	1.00	0.160	ug/L			12/26/13 13:54	1
cis-1,3-Dichloropropene	0.180	U	1.00	0.180	ug/L			12/26/13 13:54	1
trans-1,3-Dichloropropene	0.210	U	1.00	0.210	ug/L			12/26/13 13:54	1
2-Hexanone	0.350	U	2.00	0.350	ug/L			12/26/13 13:54	1
Methylene Chloride	0.150	U	5.00	0.150	ug/L			12/26/13 13:54	1
4-Methyl-2-pentanone (MIBK)	0.450	U	2.00	0.450	ug/L			12/26/13 13:54	1
Styrene	0.185	J	1.00	0.0700	ug/L			12/26/13 13:54	1
1,1,2,2-Tetrachloroethane	0.220	U	1.00	0.220	ug/L			12/26/13 13:54	1
Tetrachloroethene	0.130	U	1.00	0.130	ug/L			12/26/13 13:54	1
Toluene	0.246	J	1.00	0.150	ug/L			12/26/13 13:54	1
1,1,1-Trichloroethane	0.150	U	1.00	0.150	ug/L			12/26/13 13:54	1
1,1,2-Trichloroethane	0.280	U	1.00	0.280	ug/L			12/26/13 13:54	1
Trichloroethene	0.180	U	1.00	0.180	ug/L			12/26/13 13:54	1
Vinyl acetate	0.210	U	2.00	0.210	ug/L			12/26/13 13:54	1
Vinyl chloride	0.110	U	2.00	0.110	ug/L			12/26/13 13:54	1
o-Xylene	0.242	J	1.00	0.120	ug/L			12/26/13 13:54	1
m-Xylene & p-Xylene	15.0		1.00	0.170	ug/L			12/26/13 13:54	1
Xylenes, Total	15.2		1.00	0.260	ug/L			12/26/13 13:54	1
cis-1,2-Dichloroethene	0.106	J	1.00	0.0600	ug/L			12/26/13 13:54	1
Bromodichloromethane	0.160	U	1.00	0.160	ug/L			12/26/13 13:54	1
1,2-Dichloroethene, Total	0.300	U	1.00	0.300	ug/L			12/26/13 13:54	1

Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	107		70 - 130		12/26/13 13:54	1
Dibromofluoromethane	104		62 - 130		12/26/13 13:54	1
4-Bromofluorobenzene	117		67 - 139		12/26/13 13:54	1
1,2-Dichloroethane-d4 (Surr)	111		50 - 134		12/26/13 13:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	186		10.0	0.800	ug/L			12/26/13 15:30	10
Ethylbenzene	57.5		10.0	1.10	ug/L			12/26/13 15:30	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		70 - 130		12/26/13 15:30	10
Dibromofluoromethane	97		62 - 130		12/26/13 15:30	10
4-Bromofluorobenzene	110		67 - 139		12/26/13 15:30	10
1,2-Dichloroethane-d4 (Surr)	99		50 - 134		12/26/13 15:30	10

Client Sample Results

APPENDIX B (21 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

Client Sample ID: San Juan-MW09-12192013

Lab Sample ID: 600-84503-2

Matrix: Water

Date Collected: 12/19/13 12:35

Date Received: 12/21/13 10:45

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.00160	J U-EB	0.0100	0.00125	mg/L		12/30/13 11:18	12/31/13 11:38	1
Arsenic	0.00328	U	0.0100	0.00328	mg/L		12/30/13 11:18	12/31/13 11:38	1
Aluminum	11.6		0.500	0.0216	mg/L		12/30/13 11:18	12/31/13 11:38	1
Barium	0.00980	J	0.0200	0.00220	mg/L		12/30/13 11:18	12/31/13 11:38	1
Calcium	375		1.00	0.0219	mg/L		12/30/13 11:18	12/31/13 11:38	1
Cadmium	0.00900		0.00500	0.000350	mg/L		12/30/13 11:18	12/31/13 11:38	1
Cobalt	0.216		0.0100	0.000630	mg/L		12/30/13 11:18	12/31/13 11:38	1
Chromium	0.00170	J	0.0100	0.00155	mg/L		12/30/13 11:18	12/31/13 11:38	1
Copper	0.0895		0.0100	0.00145	mg/L		12/30/13 11:18	12/31/13 11:38	1
Iron	7.75		0.400	0.0866	mg/L		12/30/13 11:18	12/31/13 11:38	1
Potassium	12.3		1.00	0.129	mg/L		12/30/13 11:18	12/31/13 11:38	1
Magnesium	225		1.00	0.0191	mg/L		12/30/13 11:18	12/31/13 11:38	1
Manganese	6.59		0.0100	0.000840	mg/L		12/30/13 11:18	12/31/13 11:38	1
Molybdenum	0.00273	U	0.0100	0.00273	mg/L		12/30/13 11:18	12/31/13 11:38	1
Nickel	0.339		0.0100	0.00179	mg/L		12/30/13 11:18	12/31/13 11:38	1
Lead	0.00290	U	0.0100	0.00290	mg/L		12/30/13 11:18	12/31/13 11:38	1
Selenium	0.00417	U	0.0400	0.00417	mg/L		12/30/13 11:18	12/31/13 11:38	1
Zinc	1.02		0.0300	0.00217	mg/L		12/30/13 11:18	12/31/13 11:38	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	4390		50.0	1.00	mg/L		12/30/13 11:18	12/31/13 12:45	50

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0820	U	0.200	0.0820	ug/L		12/23/13 04:58	12/23/13 08:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	398		40.0	2.70	mg/L			12/23/13 20:41	100
Sulfate	11200		250	41.5	mg/L			12/24/13 13:06	500
Nitrate Nitrite as N	0.147	U-EB	0.0500	0.0170	mg/L			01/03/14 12:05	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	46.5	U-EB	10.0	10.0	mg/L			01/02/14 06:48	1
Bicarbonate Alkalinity as CaCO3	46.5	U-EB	10.0	10.0	mg/L			01/02/14 06:48	1
Carbonate Alkalinity as CaCO3	10.0	U	10.0	10.0	mg/L			01/02/14 06:48	1
Hydroxide Alkalinity	10.0	U	10.0	10.0	mg/L			01/02/14 06:48	1
Phenolphthalein Alkalinity	10.0	U	10.0	10.0	mg/L			01/02/14 06:48	1
Total Dissolved Solids	15300		10.0	10.0	mg/L			12/23/13 14:41	1

Client Sample ID: San Juan-MW04-12192013

Lab Sample ID: 600-84503-3

Matrix: Water

Date Collected: 12/19/13 13:35

Date Received: 12/21/13 10:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	11.0	U-EB	5.00	0.990	ug/L			12/24/13 21:24	1
Benzene	0.208	J	1.00	0.0800	ug/L			12/24/13 21:24	1
Chlorobromomethane	0.180	U	1.00	0.180	ug/L			12/24/13 21:24	1
Bromoform	0.190	U	1.00	0.190	ug/L			12/24/13 21:24	1

TestAmerica Houston

Client Sample Results

APPENDIX B (22 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

Client Sample ID: San Juan-MW04-12192013

Lab Sample ID: 600-84503-3

Matrix: Water

Date Collected: 12/19/13 13:35

Date Received: 12/21/13 10:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	0.250	U	2.00	0.250	ug/L			12/24/13 21:24	1
2-Butanone (MEK)	1.88	J	2.00	0.760	ug/L			12/24/13 21:24	1
Carbon disulfide	0.297	J J-CC	2.00	0.240	ug/L			12/24/13 21:24	1
Carbon tetrachloride	0.150	U	1.00	0.150	ug/L			12/24/13 21:24	1
Dibromochloromethane	0.150	U	1.00	0.150	ug/L			12/24/13 21:24	1
Chlorobenzene	0.120	U	1.00	0.120	ug/L			12/24/13 21:24	1
Chloroethane	0.0800	U	2.00	0.0800	ug/L			12/24/13 21:24	1
Chloroform	0.130	U	1.00	0.130	ug/L			12/24/13 21:24	1
Chloromethane	0.180	U	2.00	0.180	ug/L			12/24/13 21:24	1
1,1-Dichloroethane	0.148	J	1.00	0.110	ug/L			12/24/13 21:24	1
1,2-Dichloroethane	0.140	U	1.00	0.140	ug/L			12/24/13 21:24	1
1,1-Dichloroethene	0.190	U	1.00	0.190	ug/L			12/24/13 21:24	1
trans-1,2-Dichloroethene	0.0900	U	2.00	0.0900	ug/L			12/24/13 21:24	1
1,2-Dichloropropane	0.160	U	1.00	0.160	ug/L			12/24/13 21:24	1
cis-1,3-Dichloropropene	0.180	U	1.00	0.180	ug/L			12/24/13 21:24	1
trans-1,3-Dichloropropene	0.210	U	1.00	0.210	ug/L			12/24/13 21:24	1
Ethylbenzene	0.110	U	1.00	0.110	ug/L			12/24/13 21:24	1
2-Hexanone	0.350	U	2.00	0.350	ug/L			12/24/13 21:24	1
Methylene Chloride	0.150	U	5.00	0.150	ug/L			12/24/13 21:24	1
4-Methyl-2-pentanone (MIBK)	0.450	U	2.00	0.450	ug/L			12/24/13 21:24	1
Styrene	0.0700	U	1.00	0.0700	ug/L			12/24/13 21:24	1
1,1,2,2-Tetrachloroethane	0.220	U	1.00	0.220	ug/L			12/24/13 21:24	1
Tetrachloroethene	0.130	U	1.00	0.130	ug/L			12/24/13 21:24	1
Toluene	0.150	U	1.00	0.150	ug/L			12/24/13 21:24	1
1,1,1-Trichloroethane	0.150	U	1.00	0.150	ug/L			12/24/13 21:24	1
1,1,2-Trichloroethane	0.280	U	1.00	0.280	ug/L			12/24/13 21:24	1
Trichloroethene	0.288	J	1.00	0.180	ug/L			12/24/13 21:24	1
Vinyl acetate	0.210	U	2.00	0.210	ug/L			12/24/13 21:24	1
Vinyl chloride	0.110	U	2.00	0.110	ug/L			12/24/13 21:24	1
o-Xylene	0.120	U	1.00	0.120	ug/L			12/24/13 21:24	1
m-Xylene & p-Xylene	0.170	U	1.00	0.170	ug/L			12/24/13 21:24	1
Xylenes, Total	0.260	U	1.00	0.260	ug/L			12/24/13 21:24	1
cis-1,2-Dichloroethene	0.619	J	1.00	0.0600	ug/L			12/24/13 21:24	1
Bromodichloromethane	0.160	U	1.00	0.160	ug/L			12/24/13 21:24	1
1,2-Dichloroethene, Total	0.619	J	1.00	0.300	ug/L			12/24/13 21:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	109		70 - 130			1
Dibromofluoromethane	110		62 - 130			1
4-Bromofluorobenzene	117		67 - 139			1
1,2-Dichloroethane-d4 (Surr)	115		50 - 134			1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.00125	U	0.0100	0.00125	mg/L		12/30/13 11:18	12/31/13 11:48	1
Arsenic	0.101		0.0100	0.00328	mg/L		12/30/13 11:18	12/31/13 11:48	1
Aluminum	0.702		0.500	0.0216	mg/L		12/30/13 11:18	12/31/13 11:48	1
Barium	0.0327		0.0200	0.00220	mg/L		12/30/13 11:18	12/31/13 11:48	1
Calcium	323		1.00	0.0219	mg/L		12/30/13 11:18	12/31/13 11:48	1
Cadmium	0.00150	J	0.00500	0.000350	mg/L		12/30/13 11:18	12/31/13 11:48	1

TestAmerica Houston

Client Sample Results

APPENDIX B (23 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

Client Sample ID: San Juan-MW04-12192013

Lab Sample ID: 600-84503-3

Matrix: Water

Date Collected: 12/19/13 13:35

Date Received: 12/21/13 10:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	0.201		0.0100	0.000630	mg/L		12/30/13 11:18	12/31/13 11:48	1
Chromium	0.00310	J	0.0100	0.00155	mg/L		12/30/13 11:18	12/31/13 11:48	1
Copper	0.0913		0.0100	0.00145	mg/L		12/30/13 11:18	12/31/13 11:48	1
Iron	24.9		0.400	0.0866	mg/L		12/30/13 11:18	12/31/13 11:48	1
Potassium	8.09		1.00	0.129	mg/L		12/30/13 11:18	12/31/13 11:48	1
Magnesium	123		1.00	0.0191	mg/L		12/30/13 11:18	12/31/13 11:48	1
Manganese	8.77		0.0100	0.000840	mg/L		12/30/13 11:18	12/31/13 11:48	1
Molybdenum	0.179		0.0100	0.00273	mg/L		12/30/13 11:18	12/31/13 11:48	1
Nickel	0.358		0.0100	0.00179	mg/L		12/30/13 11:18	12/31/13 11:48	1
Lead	0.0160		0.0100	0.00290	mg/L		12/30/13 11:18	12/31/13 11:48	1
Selenium	0.00860	J	0.0400	0.00417	mg/L		12/30/13 11:18	12/31/13 11:48	1
Zinc	0.157		0.0300	0.00217	mg/L		12/30/13 11:18	12/31/13 11:48	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	1310		20.0	0.400	mg/L		12/30/13 11:18	12/31/13 12:55	20

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0820	U	0.200	0.0820	ug/L		12/23/13 04:58	12/23/13 08:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	377		40.0	2.70	mg/L			12/23/13 21:28	100
Sulfate	2640		50.0	8.30	mg/L			12/23/13 21:28	100
Nitrate Nitrite as N	0.695		0.0500	0.0170	mg/L			01/03/14 12:00	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	765		10.0	10.0	mg/L			01/02/14 06:48	1
Bicarbonate Alkalinity as CaCO3	765		10.0	10.0	mg/L			01/02/14 06:48	1
Carbonate Alkalinity as CaCO3	10.0	U	10.0	10.0	mg/L			01/02/14 06:48	1
Hydroxide Alkalinity	10.0	U	10.0	10.0	mg/L			01/02/14 06:48	1
Phenolphthalein Alkalinity	10.0	U	10.0	10.0	mg/L			01/02/14 06:48	1
Total Dissolved Solids	5330		20.0	20.0	mg/L			12/23/13 14:41	1

Client Sample ID: San Juan-MW02-12192013

Lab Sample ID: 600-84503-4

Matrix: Water

Date Collected: 12/19/13 14:00

Date Received: 12/21/13 10:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.990	U	5.00	0.990	ug/L			12/26/13 17:39	1
Benzene	0.0800	U	1.00	0.0800	ug/L			12/26/13 17:39	1
Chlorobromomethane	0.180	U	1.00	0.180	ug/L			12/26/13 17:39	1
Bromoform	0.190	U	1.00	0.190	ug/L			12/26/13 17:39	1
Bromomethane	0.250	U	2.00	0.250	ug/L			12/26/13 17:39	1
2-Butanone (MEK)	0.760	U	2.00	0.760	ug/L			12/26/13 17:39	1
Carbon disulfide	0.240	U JJ-CC	2.00	0.240	ug/L			12/26/13 17:39	1
Carbon tetrachloride	0.150	U	1.00	0.150	ug/L			12/26/13 17:39	1
Dibromochloromethane	0.150	U	1.00	0.150	ug/L			12/26/13 17:39	1
Chlorobenzene	0.120	U	1.00	0.120	ug/L			12/26/13 17:39	1

TestAmerica Houston

Client Sample Results

APPENDIX B (24 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

Client Sample ID: San Juan-MW02-12192013

Lab Sample ID: 600-84503-4

Matrix: Water

Date Collected: 12/19/13 14:00

Date Received: 12/21/13 10:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	0.0800	U	2.00	0.0800	ug/L			12/26/13 17:39	1
Chloroform	0.130	U	1.00	0.130	ug/L			12/26/13 17:39	1
Chloromethane	0.180	U UJ-CC	2.00	0.180	ug/L			12/26/13 17:39	1
1,1-Dichloroethane	0.110	U	1.00	0.110	ug/L			12/26/13 17:39	1
1,2-Dichloroethane	0.140	U	1.00	0.140	ug/L			12/26/13 17:39	1
1,1-Dichloroethene	0.190	U	1.00	0.190	ug/L			12/26/13 17:39	1
trans-1,2-Dichloroethene	0.0900	U	1.00	0.0900	ug/L			12/26/13 17:39	1
1,2-Dichloropropane	0.160	U	1.00	0.160	ug/L			12/26/13 17:39	1
cis-1,3-Dichloropropene	0.180	U	1.00	0.180	ug/L			12/26/13 17:39	1
trans-1,3-Dichloropropene	0.210	U	1.00	0.210	ug/L			12/26/13 17:39	1
Ethylbenzene	0.110	U	1.00	0.110	ug/L			12/26/13 17:39	1
2-Hexanone	0.350	U	2.00	0.350	ug/L			12/26/13 17:39	1
Methylene Chloride	0.150	U	5.00	0.150	ug/L			12/26/13 17:39	1
4-Methyl-2-pentanone (MIBK)	0.450	U	2.00	0.450	ug/L			12/26/13 17:39	1
Styrene	0.0700	U	1.00	0.0700	ug/L			12/26/13 17:39	1
1,1,2,2-Tetrachloroethane	0.220	U	1.00	0.220	ug/L			12/26/13 17:39	1
Tetrachloroethene	0.130	U	1.00	0.130	ug/L			12/26/13 17:39	1
Toluene	0.150	U	1.00	0.150	ug/L			12/26/13 17:39	1
1,1,1-Trichloroethane	0.150	U	1.00	0.150	ug/L			12/26/13 17:39	1
1,1,2-Trichloroethane	0.280	U	1.00	0.280	ug/L			12/26/13 17:39	1
Trichloroethene	0.180	U	1.00	0.180	ug/L			12/26/13 17:39	1
Vinyl acetate	0.210	U	2.00	0.210	ug/L			12/26/13 17:39	1
Vinyl chloride	0.110	U	2.00	0.110	ug/L			12/26/13 17:39	1
o-Xylene	0.120	U	1.00	0.120	ug/L			12/26/13 17:39	1
m-Xylene & p-Xylene	0.170	U	1.00	0.170	ug/L			12/26/13 17:39	1
Xylenes, Total	0.260	U	1.00	0.260	ug/L			12/26/13 17:39	1
cis-1,2-Dichloroethene	0.0600	U	1.00	0.0600	ug/L			12/26/13 17:39	1
Bromodichloromethane	0.160	U	1.00	0.160	ug/L			12/26/13 17:39	1
1,2-Dichloroethene, Total	0.300	U	1.00	0.300	ug/L			12/26/13 17:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		70 - 130					12/26/13 17:39	1
Dibromofluoromethane	101		62 - 130					12/26/13 17:39	1
4-Bromofluorobenzene	105		67 - 139					12/26/13 17:39	1
1,2-Dichloroethane-d4 (Surr)	105		50 - 134					12/26/13 17:39	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.00130	J U-EB	0.0100	0.00125	mg/L		12/30/13 11:18	12/31/13 11:50	1
Arsenic	0.00480	J	0.0100	0.00328	mg/L		12/30/13 11:18	12/31/13 11:50	1
Aluminum	5.82		0.500	0.0216	mg/L		12/30/13 11:18	12/31/13 11:50	1
Barium	0.0346		0.0200	0.00220	mg/L		12/30/13 11:18	12/31/13 11:50	1
Calcium	384		1.00	0.0219	mg/L		12/30/13 11:18	12/31/13 11:50	1
Cadmium	0.000900	J	0.00500	0.000350	mg/L		12/30/13 11:18	12/31/13 11:50	1
Cobalt	0.00790	J	0.0100	0.000630	mg/L		12/30/13 11:18	12/31/13 11:50	1
Chromium	0.00810	J	0.0100	0.00155	mg/L		12/30/13 11:18	12/31/13 11:50	1
Copper	0.0309		0.0100	0.00145	mg/L		12/30/13 11:18	12/31/13 11:50	1
Iron	8.29		0.400	0.0866	mg/L		12/30/13 11:18	12/31/13 11:50	1
Potassium	4.02		1.00	0.129	mg/L		12/30/13 11:18	12/31/13 11:50	1
Magnesium	103		1.00	0.0191	mg/L		12/30/13 11:18	12/31/13 11:50	1

TestAmerica Houston

Client Sample Results

APPENDIX B (25 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

Client Sample ID: San Juan-MW02-12192013

Lab Sample ID: 600-84503-4

Matrix: Water

Date Collected: 12/19/13 14:00

Date Received: 12/21/13 10:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.487		0.0100	0.000840	mg/L		12/30/13 11:18	12/31/13 11:50	1
Molybdenum	0.00273	U	0.0100	0.00273	mg/L		12/30/13 11:18	12/31/13 11:50	1
Nickel	0.00900	J	0.0100	0.00179	mg/L		12/30/13 11:18	12/31/13 11:50	1
Lead	0.0106		0.0100	0.00290	mg/L		12/30/13 11:18	12/31/13 11:50	1
Selenium	0.0978		0.0400	0.00417	mg/L		12/30/13 11:18	12/31/13 11:50	1
Zinc	0.156		0.0300	0.00217	mg/L		12/30/13 11:18	12/31/13 11:50	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	1260		20.0	0.400	mg/L		12/30/13 11:18	12/31/13 12:57	20

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0820	U	0.200	0.0820	ug/L		12/23/13 04:58	12/23/13 08:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	275		40.0	2.70	mg/L			12/23/13 21:43	100
Sulfate	3330		50.0	8.30	mg/L			12/23/13 21:43	100
Nitrate Nitrite as N	19.7		12.5	4.25	mg/L			01/03/14 14:45	250
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	203		10.0	10.0	mg/L			01/02/14 06:48	1
Bicarbonate Alkalinity as CaCO3	203		10.0	10.0	mg/L			01/02/14 06:48	1
Carbonate Alkalinity as CaCO3	10.0	U	10.0	10.0	mg/L			01/02/14 06:48	1
Hydroxide Alkalinity	10.0	U	10.0	10.0	mg/L			01/02/14 06:48	1
Phenolphthalein Alkalinity	10.0	U	10.0	10.0	mg/L			01/02/14 06:48	1
Total Dissolved Solids	5460		20.0	20.0	mg/L			12/23/13 14:41	1

Client Sample ID: San Juan-EquBlank04-12192013

Lab Sample ID: 600-84503-5

Matrix: Water

Date Collected: 12/19/13 14:20

Date Received: 12/21/13 10:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	3.53	J	5.00	0.990	ug/L			12/24/13 20:33	1
Benzene	0.0800	U	1.00	0.0800	ug/L			12/24/13 20:33	1
Chlorobromomethane	0.180	U	1.00	0.180	ug/L			12/24/13 20:33	1
Bromoform	0.190	U	1.00	0.190	ug/L			12/24/13 20:33	1
Bromomethane	0.250	U	2.00	0.250	ug/L			12/24/13 20:33	1
2-Butanone (MEK)	0.760	U	2.00	0.760	ug/L			12/24/13 20:33	1
Carbon disulfide	0.240	U	2.00	0.240	ug/L			12/24/13 20:33	1
Carbon tetrachloride	0.150	U	1.00	0.150	ug/L			12/24/13 20:33	1
Dibromochloromethane	0.150	U	1.00	0.150	ug/L			12/24/13 20:33	1
Chlorobenzene	0.120	U	1.00	0.120	ug/L			12/24/13 20:33	1
Chloroethane	0.0800	U	2.00	0.0800	ug/L			12/24/13 20:33	1
Chloroform	0.130	U	1.00	0.130	ug/L			12/24/13 20:33	1
Chloromethane	0.180	U	2.00	0.180	ug/L			12/24/13 20:33	1
1,1-Dichloroethane	0.110	U	1.00	0.110	ug/L			12/24/13 20:33	1
1,2-Dichloroethane	0.140	U	1.00	0.140	ug/L			12/24/13 20:33	1
1,1-Dichloroethene	0.190	U	1.00	0.190	ug/L			12/24/13 20:33	1

TestAmerica Houston

Client Sample Results

APPENDIX B (26 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

Client Sample ID: San Juan-EquBlank04-12192013

Lab Sample ID: 600-84503-5

Matrix: Water

Date Collected: 12/19/13 14:20

Date Received: 12/21/13 10:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	0.0900	U	1.00	0.0900	ug/L			12/24/13 20:33	1
1,2-Dichloropropane	0.160	U	1.00	0.160	ug/L			12/24/13 20:33	1
cis-1,3-Dichloropropene	0.180	U	1.00	0.180	ug/L			12/24/13 20:33	1
trans-1,3-Dichloropropene	0.210	U	1.00	0.210	ug/L			12/24/13 20:33	1
Ethylbenzene	0.110	U	1.00	0.110	ug/L			12/24/13 20:33	1
2-Hexanone	0.350	U	2.00	0.350	ug/L			12/24/13 20:33	1
Methylene Chloride	0.150	U	5.00	0.150	ug/L			12/24/13 20:33	1
4-Methyl-2-pentanone (MIBK)	0.450	U	2.00	0.450	ug/L			12/24/13 20:33	1
Styrene	0.0700	U	1.00	0.0700	ug/L			12/24/13 20:33	1
1,1,2,2-Tetrachloroethane	0.220	U	1.00	0.220	ug/L			12/24/13 20:33	1
Tetrachloroethene	0.130	U	1.00	0.130	ug/L			12/24/13 20:33	1
Toluene	0.150	U	1.00	0.150	ug/L			12/24/13 20:33	1
1,1,1-Trichloroethane	0.150	U	1.00	0.150	ug/L			12/24/13 20:33	1
1,1,2-Trichloroethane	0.280	U	1.00	0.280	ug/L			12/24/13 20:33	1
Trichloroethene	0.180	U	1.00	0.180	ug/L			12/24/13 20:33	1
Vinyl acetate	0.210	U	2.00	0.210	ug/L			12/24/13 20:33	1
Vinyl chloride	0.110	U	2.00	0.110	ug/L			12/24/13 20:33	1
o-Xylene	0.120	U	1.00	0.120	ug/L			12/24/13 20:33	1
m-Xylene & p-Xylene	0.170	U	1.00	0.170	ug/L			12/24/13 20:33	1
Xylenes, Total	0.260	U	1.00	0.260	ug/L			12/24/13 20:33	1
cis-1,2-Dichloroethene	0.0600	U	1.00	0.0600	ug/L			12/24/13 20:33	1
Bromodichloromethane	0.160	U	1.00	0.160	ug/L			12/24/13 20:33	1
1,2-Dichloroethene, Total	0.300	U	1.00	0.300	ug/L			12/24/13 20:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	111		70 - 130		12/24/13 20:33	1
Dibromofluoromethane	106		62 - 130		12/24/13 20:33	1
4-Bromofluorobenzene	116		67 - 139		12/24/13 20:33	1
1,2-Dichloroethane-d4 (Surr)	110		50 - 134		12/24/13 20:33	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.00200	J	0.0100	0.00125	mg/L		12/30/13 11:18	12/31/13 11:53	1
Arsenic	0.00328	U	0.0100	0.00328	mg/L		12/30/13 11:18	12/31/13 11:53	1
Aluminum	0.0216	U	0.500	0.0216	mg/L		12/30/13 11:18	12/31/13 11:53	1
Barium	0.00220	U	0.0200	0.00220	mg/L		12/30/13 11:18	12/31/13 11:53	1
Calcium	0.344	J	1.00	0.0219	mg/L		12/30/13 11:18	12/31/13 11:53	1
Cadmium	0.000350	U	0.00500	0.000350	mg/L		12/30/13 11:18	12/31/13 11:53	1
Cobalt	0.000630	U	0.0100	0.000630	mg/L		12/30/13 11:18	12/31/13 11:53	1
Chromium	0.00155	U	0.0100	0.00155	mg/L		12/30/13 11:18	12/31/13 11:53	1
Copper	0.00145	U	0.0100	0.00145	mg/L		12/30/13 11:18	12/31/13 11:53	1
Iron	0.0866	U	0.400	0.0866	mg/L		12/30/13 11:18	12/31/13 11:53	1
Potassium	0.129	U	1.00	0.129	mg/L		12/30/13 11:18	12/31/13 11:53	1
Magnesium	0.0458	J	1.00	0.0191	mg/L		12/30/13 11:18	12/31/13 11:53	1
Manganese	0.000840	U	0.0100	0.000840	mg/L		12/30/13 11:18	12/31/13 11:53	1
Molybdenum	0.00273	U	0.0100	0.00273	mg/L		12/30/13 11:18	12/31/13 11:53	1
Nickel	0.00179	U	0.0100	0.00179	mg/L		12/30/13 11:18	12/31/13 11:53	1
Lead	0.00290	U	0.0100	0.00290	mg/L		12/30/13 11:18	12/31/13 11:53	1
Selenium	0.00417	U	0.0400	0.00417	mg/L		12/30/13 11:18	12/31/13 11:53	1
Zinc	0.0679		0.0300	0.00217	mg/L		12/30/13 11:18	12/31/13 11:53	1

TestAmerica Houston

Client Sample Results

APPENDIX B (27 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

Client Sample ID: San Juan-EquBlank04-12192013

Lab Sample ID: 600-84503-5

Matrix: Water

Date Collected: 12/19/13 14:20

Date Received: 12/21/13 10:45

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	0.127	J	1.00	0.0200	mg/L		12/30/13 11:18	12/31/13 12:59	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0820	U	0.200	0.0820	ug/L		12/23/13 04:58	12/23/13 08:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.01		0.400	0.0270	mg/L			12/23/13 21:59	1
Sulfate	0.715		0.500	0.0830	mg/L			12/23/13 21:59	1
Nitrate Nitrite as N	0.110		0.0500	0.0170	mg/L			01/03/14 12:02	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	27.9		10.0	10.0	mg/L			01/02/14 06:48	1
Bicarbonate Alkalinity as CaCO ₃	27.9		10.0	10.0	mg/L			01/02/14 06:48	1
Carbonate Alkalinity as CaCO ₃	10.0	U	10.0	10.0	mg/L			01/02/14 06:48	1
Hydroxide Alkalinity	10.0	U	10.0	10.0	mg/L			01/02/14 06:48	1
Phenolphthalein Alkalinity	10.0	U	10.0	10.0	mg/L			01/02/14 06:48	1
Total Dissolved Solids	45.0		10.0	10.0	mg/L			12/23/13 14:41	1

Client Sample ID: San Juan-MW06-12192013

Lab Sample ID: 600-84503-6

Matrix: Water

Date Collected: 12/19/13 15:00

Date Received: 12/21/13 10:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.990	U	5.00	0.990	ug/L			12/26/13 16:47	1
Benzene	0.0800	U	1.00	0.0800	ug/L			12/26/13 16:47	1
Chlorobromomethane	0.180	U	1.00	0.180	ug/L			12/26/13 16:47	1
Bromoform	0.190	U	1.00	0.190	ug/L			12/26/13 16:47	1
Bromomethane	0.250	U	2.00	0.250	ug/L			12/26/13 16:47	1
2-Butanone (MEK)	0.760	U	2.00	0.760	ug/L			12/26/13 16:47	1
Carbon disulfide	0.240	U	0.240	0.240	ug/L			12/26/13 16:47	1
Carbon tetrachloride	0.150	U	1.00	0.150	ug/L			12/26/13 16:47	1
Dibromochloromethane	0.150	U	1.00	0.150	ug/L			12/26/13 16:47	1
Chlorobenzene	0.120	U	1.00	0.120	ug/L			12/26/13 16:47	1
Chloroethane	0.0800	U	2.00	0.0800	ug/L			12/26/13 16:47	1
Chloroform	0.208	J	1.00	0.130	ug/L			12/26/13 16:47	1
Chloromethane	0.180	U	0.180	0.180	ug/L			12/26/13 16:47	1
1,1-Dichloroethane	0.110	U	1.00	0.110	ug/L			12/26/13 16:47	1
1,2-Dichloroethane	0.140	U	1.00	0.140	ug/L			12/26/13 16:47	1
1,1-Dichloroethene	0.190	U	1.00	0.190	ug/L			12/26/13 16:47	1
trans-1,2-Dichloroethene	0.0900	U	1.00	0.0900	ug/L			12/26/13 16:47	1
1,2-Dichloropropane	0.160	U	1.00	0.160	ug/L			12/26/13 16:47	1
cis-1,3-Dichloropropene	0.180	U	1.00	0.180	ug/L			12/26/13 16:47	1
trans-1,3-Dichloropropene	0.210	U	1.00	0.210	ug/L			12/26/13 16:47	1
Ethylbenzene	0.110	U	1.00	0.110	ug/L			12/26/13 16:47	1
2-Hexanone	0.350	U	2.00	0.350	ug/L			12/26/13 16:47	1
Methylene Chloride	0.150	U	5.00	0.150	ug/L			12/26/13 16:47	1
4-Methyl-2-pentanone (MIBK)	0.450	U	2.00	0.450	ug/L			12/26/13 16:47	1
Styrene	0.0700	U	1.00	0.0700	ug/L			12/26/13 16:47	1

TestAmerica Houston

Client Sample Results

APPENDIX B (28 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

Client Sample ID: San Juan-MW06-12192013

Lab Sample ID: 600-84503-6

Matrix: Water

Date Collected: 12/19/13 15:00

Date Received: 12/21/13 10:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	0.220	U	1.00	0.220	ug/L			12/26/13 16:47	1
Tetrachloroethene	0.130	U	1.00	0.130	ug/L			12/26/13 16:47	1
Toluene	0.150	U	1.00	0.150	ug/L			12/26/13 16:47	1
1,1,1-Trichloroethane	0.150	U	1.00	0.150	ug/L			12/26/13 16:47	1
1,1,2-Trichloroethane	0.280	U	1.00	0.280	ug/L			12/26/13 16:47	1
Trichloroethene	0.180	U	1.00	0.180	ug/L			12/26/13 16:47	1
Vinyl acetate	0.210	U	2.00	0.210	ug/L			12/26/13 16:47	1
Vinyl chloride	0.110	U	2.00	0.110	ug/L			12/26/13 16:47	1
o-Xylene	0.120	U	1.00	0.120	ug/L			12/26/13 16:47	1
m-Xylene & p-Xylene	0.170	U	1.00	0.170	ug/L			12/26/13 16:47	1
Xylenes, Total	0.260	U	1.00	0.260	ug/L			12/26/13 16:47	1
cis-1,2-Dichloroethene	0.0600	U	1.00	0.0600	ug/L			12/26/13 16:47	1
Bromodichloromethane	0.160	U	1.00	0.160	ug/L			12/26/13 16:47	1
1,2-Dichloroethene, Total	0.300	U	1.00	0.300	ug/L			12/26/13 16:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		70 - 130					12/26/13 16:47	1
Dibromofluoromethane	103		62 - 130					12/26/13 16:47	1
4-Bromofluorobenzene	105		67 - 139					12/26/13 16:47	1
1,2-Dichloroethane-d4 (Surr)	109		50 - 134					12/26/13 16:47	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.00230	J U-EB	0.0100	0.00125	mg/L		12/30/13 11:18	12/31/13 11:55	1
Arsenic	0.00328	U	0.0100	0.00328	mg/L		12/30/13 11:18	12/31/13 11:55	1
Aluminum	14.8		0.500	0.0216	mg/L		12/30/13 11:18	12/31/13 11:55	1
Barium	0.0108	J	0.0200	0.00220	mg/L		12/30/13 11:18	12/31/13 11:55	1
Calcium	389		1.00	0.0219	mg/L		12/30/13 11:18	12/31/13 11:55	1
Cadmium	0.0116		0.00500	0.000350	mg/L		12/30/13 11:18	12/31/13 11:55	1
Cobalt	0.238		0.0100	0.000630	mg/L		12/30/13 11:18	12/31/13 11:55	1
Chromium	0.00155	U	0.0100	0.00155	mg/L		12/30/13 11:18	12/31/13 11:55	1
Copper	0.0450		0.0100	0.00145	mg/L		12/30/13 11:18	12/31/13 11:55	1
Iron	0.418		0.400	0.0866	mg/L		12/30/13 11:18	12/31/13 11:55	1
Potassium	19.7		1.00	0.129	mg/L		12/30/13 11:18	12/31/13 11:55	1
Magnesium	318		1.00	0.0191	mg/L		12/30/13 11:18	12/31/13 11:55	1
Manganese	6.92		0.0100	0.000840	mg/L		12/30/13 11:18	12/31/13 11:55	1
Molybdenum	0.00273	U	0.0100	0.00273	mg/L		12/30/13 11:18	12/31/13 11:55	1
Nickel	0.299		0.0100	0.00179	mg/L		12/30/13 11:18	12/31/13 11:55	1
Lead	0.00290	U	0.0100	0.00290	mg/L		12/30/13 11:18	12/31/13 11:55	1
Selenium	0.332		0.0400	0.00417	mg/L		12/30/13 11:18	12/31/13 11:55	1
Zinc	0.836		0.0300	0.00217	mg/L		12/30/13 11:18	12/31/13 11:55	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	3950		50.0	1.00	mg/L		12/30/13 11:18	12/31/13 13:02	50

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0820	U	0.200	0.0820	ug/L		12/23/13 04:58	12/23/13 08:51	1

Client Sample Results

APPENDIX B (29 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

Client Sample ID: San Juan-MW06-12192013

Lab Sample ID: 600-84503-6

Matrix: Water

Date Collected: 12/19/13 15:00

Date Received: 12/21/13 10:45

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1310		400	27.0	mg/L			12/23/13 22:14	1000
Sulfate	9600		500	83.0	mg/L			12/23/13 22:14	1000
Nitrate Nitrite as N	137		12.5	4.25	mg/L			01/03/14 14:49	250
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	10.0	U	10.0	10.0	mg/L			01/02/14 06:48	1
Bicarbonate Alkalinity as CaCO ₃	10.0	U	10.0	10.0	mg/L			01/02/14 06:48	1
Carbonate Alkalinity as CaCO ₃	10.0	U	10.0	10.0	mg/L			01/02/14 06:48	1
Hydroxide Alkalinity	10.0	U	10.0	10.0	mg/L			01/02/14 06:48	1
Phenolphthalein Alkalinity	10.0	U	10.0	10.0	mg/L			01/02/14 06:48	1
Total Dissolved Solids	16300		100	100	mg/L			12/23/13 14:41	1

Client Sample ID: San Juan-MD03-12192013

Lab Sample ID: 600-84503-7

Matrix: Water

Date Collected: 12/19/13 17:00

Date Received: 12/21/13 10:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	3.44	J U-EB	5.00	0.990	ug/L			12/26/13 17:13	1
Benzene	0.0800	U	1.00	0.0800	ug/L			12/26/13 17:13	1
Chlorobromomethane	0.180	U	1.00	0.180	ug/L			12/26/13 17:13	1
Bromoform	0.190	U	1.00	0.190	ug/L			12/26/13 17:13	1
Bromomethane	0.250	U	2.00	0.250	ug/L			12/26/13 17:13	1
2-Butanone (MEK)	0.760	U	2.00	0.760	ug/L			12/26/13 17:13	1
Carbon disulfide	0.240	U UJ-CC	2.00	0.240	ug/L			12/26/13 17:13	1
Carbon tetrachloride	0.150	U	1.00	0.150	ug/L			12/26/13 17:13	1
Dibromochloromethane	0.150	U	1.00	0.150	ug/L			12/26/13 17:13	1
Chlorobenzene	0.120	U	1.00	0.120	ug/L			12/26/13 17:13	1
Chloroethane	0.0800	U	2.00	0.0800	ug/L			12/26/13 17:13	1
Chloroform	0.215	J	1.00	0.130	ug/L			12/26/13 17:13	1
Chloromethane	0.180	U UJ-CC	2.00	0.180	ug/L			12/26/13 17:13	1
1,1-Dichloroethane	0.110	U	1.00	0.110	ug/L			12/26/13 17:13	1
1,2-Dichloroethane	0.140	U	1.00	0.140	ug/L			12/26/13 17:13	1
1,1-Dichloroethene	0.190	U	1.00	0.190	ug/L			12/26/13 17:13	1
trans-1,2-Dichloroethene	0.0900	U	1.00	0.0900	ug/L			12/26/13 17:13	1
1,2-Dichloropropane	0.160	U	1.00	0.160	ug/L			12/26/13 17:13	1
cis-1,3-Dichloropropene	0.180	U	1.00	0.180	ug/L			12/26/13 17:13	1
trans-1,3-Dichloropropene	0.210	U	1.00	0.210	ug/L			12/26/13 17:13	1
Ethylbenzene	0.110	U	1.00	0.110	ug/L			12/26/13 17:13	1
2-Hexanone	0.350	U	2.00	0.350	ug/L			12/26/13 17:13	1
Methylene Chloride	0.150	U	5.00	0.150	ug/L			12/26/13 17:13	1
4-Methyl-2-pentanone (MIBK)	0.450	U	2.00	0.450	ug/L			12/26/13 17:13	1
Styrene	0.0700	U	1.00	0.0700	ug/L			12/26/13 17:13	1
1,1,2,2-Tetrachloroethane	0.220	U	1.00	0.220	ug/L			12/26/13 17:13	1
Tetrachloroethene	0.130	U	1.00	0.130	ug/L			12/26/13 17:13	1
Toluene	0.150	U	1.00	0.150	ug/L			12/26/13 17:13	1
1,1,1-Trichloroethane	0.150	U	1.00	0.150	ug/L			12/26/13 17:13	1
1,1,2-Trichloroethane	0.280	U	1.00	0.280	ug/L			12/26/13 17:13	1
Trichloroethene	0.180	U	1.00	0.180	ug/L			12/26/13 17:13	1
Vinyl acetate	0.210	U	2.00	0.210	ug/L			12/26/13 17:13	1

TestAmerica Houston

Client Sample Results

APPENDIX B (30 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

Client Sample ID: San Juan-MD03-12192013

Lab Sample ID: 600-84503-7

Matrix: Water

Date Collected: 12/19/13 17:00

Date Received: 12/21/13 10:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	0.110	U	2.00	0.110	ug/L			12/26/13 17:13	1
o-Xylene	0.120	U	1.00	0.120	ug/L			12/26/13 17:13	1
m-Xylene & p-Xylene	0.170	U	1.00	0.170	ug/L			12/26/13 17:13	1
Xylenes, Total	0.260	U	1.00	0.260	ug/L			12/26/13 17:13	1
cis-1,2-Dichloroethene	0.0600	U	1.00	0.0600	ug/L			12/26/13 17:13	1
Bromodichloromethane	0.160	U	1.00	0.160	ug/L			12/26/13 17:13	1
1,2-Dichloroethene, Total	0.300	U	1.00	0.300	ug/L			12/26/13 17:13	1
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98			70 - 130				12/26/13 17:13	1
Dibromofluoromethane	103			62 - 130				12/26/13 17:13	1
4-Bromofluorobenzene	105			67 - 139				12/26/13 17:13	1
1,2-Dichloroethane-d4 (Surr)	110			50 - 134				12/26/13 17:13	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.00230	J U-EB	0.0100	0.00125	mg/L		12/30/13 11:18	12/31/13 11:58	1
Arsenic	0.00328	U	0.0100	0.00328	mg/L		12/30/13 11:18	12/31/13 11:58	1
Aluminum	16.3		0.500	0.0216	mg/L		12/30/13 11:18	12/31/13 11:58	1
Barium	0.0108	J	0.0200	0.00220	mg/L		12/30/13 11:18	12/31/13 11:58	1
Calcium	400		1.00	0.0219	mg/L		12/30/13 11:18	12/31/13 11:58	1
Cadmium	0.0125		0.00500	0.000350	mg/L		12/30/13 11:18	12/31/13 11:58	1
Cobalt	0.256		0.0100	0.000630	mg/L		12/30/13 11:18	12/31/13 11:58	1
Chromium	0.00200	J	0.0100	0.00155	mg/L		12/30/13 11:18	12/31/13 11:58	1
Copper	0.0488		0.0100	0.00145	mg/L		12/30/13 11:18	12/31/13 11:58	1
Iron	0.467		0.400	0.0866	mg/L		12/30/13 11:18	12/31/13 11:58	1
Potassium	20.4		1.00	0.129	mg/L		12/30/13 11:18	12/31/13 11:58	1
Magnesium	327		1.00	0.0191	mg/L		12/30/13 11:18	12/31/13 11:58	1
Manganese	7.42		0.0100	0.000840	mg/L		12/30/13 11:18	12/31/13 11:58	1
Molybdenum	0.00273	U	0.0100	0.00273	mg/L		12/30/13 11:18	12/31/13 11:58	1
Nickel	0.321		0.0100	0.00179	mg/L		12/30/13 11:18	12/31/13 11:58	1
Lead	0.00290	U	0.0100	0.00290	mg/L		12/30/13 11:18	12/31/13 11:58	1
Selenium	0.334		0.0400	0.00417	mg/L		12/30/13 11:18	12/31/13 11:58	1
Zinc	0.881		0.0300	0.00217	mg/L		12/30/13 11:18	12/31/13 11:58	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	4030		50.0	1.00	mg/L		12/30/13 11:18	12/31/13 13:04	50

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0820	U	0.200	0.0820	ug/L		12/23/13 04:58	12/23/13 08:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1300		400	27.0	mg/L			12/23/13 22:30	1000
Sulfate	9570		500	83.0	mg/L			12/23/13 22:30	1000
Nitrate Nitrite as N	226		12.5	4.25	mg/L			01/03/14 14:46	250
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	10.0	U	10.0	10.0	mg/L			01/02/14 06:48	1

Client Sample Results

APPENDIX B (31 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

Client Sample ID: San Juan-MD03-12192013

Lab Sample ID: 600-84503-7

Matrix: Water

Date Collected: 12/19/13 17:00

Date Received: 12/21/13 10:45

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO ₃	10.0	U	10.0	10.0	mg/L			01/02/14 06:48	1
Carbonate Alkalinity as CaCO ₃	10.0	U	10.0	10.0	mg/L			01/02/14 06:48	1
Hydroxide Alkalinity	10.0	U	10.0	10.0	mg/L			01/02/14 06:48	1
Phenolphthalein Alkalinity	10.0	U	10.0	10.0	mg/L			01/02/14 06:48	1
Total Dissolved Solids	16800		100	100	mg/L			12/23/13 14:41	1

Client Sample ID: TB03-12192013

Lab Sample ID: 600-84503-9

Matrix: Water

Date Collected: 12/19/13 08:00

Date Received: 12/21/13 10:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.990	U	5.00	0.990	ug/L			12/24/13 18:24	1
Benzene	0.0800	U	1.00	0.0800	ug/L			12/24/13 18:24	1
Chlorobromomethane	0.180	U	1.00	0.180	ug/L			12/24/13 18:24	1
Bromoform	0.190	U	1.00	0.190	ug/L			12/24/13 18:24	1
Bromomethane	0.250	U	2.00	0.250	ug/L			12/24/13 18:24	1
2-Butanone (MEK)	0.760	U	2.00	0.760	ug/L			12/24/13 18:24	1
Carbon disulfide	0.240	U	2.00	0.240	ug/L			12/24/13 18:24	1
Carbon tetrachloride	0.150	U	1.00	0.150	ug/L			12/24/13 18:24	1
Dibromochloromethane	0.150	U	1.00	0.150	ug/L			12/24/13 18:24	1
Chlorobenzene	0.120	U	1.00	0.120	ug/L			12/24/13 18:24	1
Chloroethane	0.0800	U	2.00	0.0800	ug/L			12/24/13 18:24	1
Chloroform	0.130	U	1.00	0.130	ug/L			12/24/13 18:24	1
Chloromethane	0.180	U	2.00	0.180	ug/L			12/24/13 18:24	1
1,1-Dichloroethane	0.110	U	1.00	0.110	ug/L			12/24/13 18:24	1
1,2-Dichloroethane	0.140	U	1.00	0.140	ug/L			12/24/13 18:24	1
1,1-Dichloroethene	0.190	U	1.00	0.190	ug/L			12/24/13 18:24	1
trans-1,2-Dichloroethene	0.0900	U	1.00	0.0900	ug/L			12/24/13 18:24	1
1,2-Dichloropropane	0.160	U	1.00	0.160	ug/L			12/24/13 18:24	1
cis-1,3-Dichloropropene	0.180	U	1.00	0.180	ug/L			12/24/13 18:24	1
trans-1,3-Dichloropropene	0.210	U	1.00	0.210	ug/L			12/24/13 18:24	1
Ethylbenzene	0.110	U	1.00	0.110	ug/L			12/24/13 18:24	1
2-Hexanone	0.350	U	2.00	0.350	ug/L			12/24/13 18:24	1
Methylene Chloride	0.150	U	5.00	0.150	ug/L			12/24/13 18:24	1
4-Methyl-2-pentanone (MIBK)	0.450	U	2.00	0.450	ug/L			12/24/13 18:24	1
Styrene	0.0700	U	1.00	0.0700	ug/L			12/24/13 18:24	1
1,1,2,2-Tetrachloroethane	0.220	U	1.00	0.220	ug/L			12/24/13 18:24	1
Tetrachloroethene	0.130	U	1.00	0.130	ug/L			12/24/13 18:24	1
Toluene	0.150	U	1.00	0.150	ug/L			12/24/13 18:24	1
1,1,1-Trichloroethane	0.150	U	1.00	0.150	ug/L			12/24/13 18:24	1
1,1,2-Trichloroethane	0.280	U	1.00	0.280	ug/L			12/24/13 18:24	1
Trichloroethene	0.180	U	1.00	0.180	ug/L			12/24/13 18:24	1
Vinyl acetate	0.210	U	2.00	0.210	ug/L			12/24/13 18:24	1
Vinyl chloride	0.110	U	2.00	0.110	ug/L			12/24/13 18:24	1
o-Xylene	0.120	U	1.00	0.120	ug/L			12/24/13 18:24	1
m-Xylene & p-Xylene	0.170	U	1.00	0.170	ug/L			12/24/13 18:24	1
Xylenes, Total	0.260	U	1.00	0.260	ug/L			12/24/13 18:24	1
cis-1,2-Dichloroethene	0.0600	U	1.00	0.0600	ug/L			12/24/13 18:24	1
Bromodichloromethane	0.160	U	1.00	0.160	ug/L			12/24/13 18:24	1

TestAmerica Houston

Client Sample Results

APPENDIX B (32 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

Client Sample ID: TB03-12192013**Lab Sample ID: 600-84503-9**

Date Collected: 12/19/13 08:00

Matrix: Water

Date Received: 12/21/13 10:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethene, Total	0.300	U	1.00	0.300	ug/L	-		12/24/13 18:24	1
<hr/>									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surrogate)	116		70 - 130					12/24/13 18:24	1
Dibromofluoromethane	106		62 - 130					12/24/13 18:24	1
4-Bromofluorobenzene	117		67 - 139					12/24/13 18:24	1
1,2-Dichloroethane-d4 (Surrogate)	108		50 - 134					12/24/13 18:24	1

Definitions/Glossary

APPENDIX B (33 of 240)

TestAmerica Job ID: 600-84503-1

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

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.

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.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F	MS/MSD Recovery and/or RPD exceeds the control limits

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery exceeds the control limits
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
D	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
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

APPENDIX B (34 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TOL (70-130)	DBFM (62-130)	BFB (67-139)	12DCE (50-134)
600-84503-1	San Juan-MW08-12192013	110	110	119	117
600-84503-2	San Juan-MW09-12192013	107	104	117	111
600-84503-2 - DL	San Juan-MW09-12192013	100	97	110	99
600-84503-2 MS - DL	San Juan-MW09-12192013 MS	99	106	111	103
600-84503-2 MSD - DL	San Juan-MW09-12192013 MSD	102	105	113	102
600-84503-3	San Juan-MW04-12192013	109	110	117	115
600-84503-4	San Juan-MW02-12192013	96	101	105	105
600-84503-5	San Juan-EquBlank04-12192013	111	106	116	110
600-84503-6	San Juan-MW06-12192013	98	103	105	109
600-84503-7	San Juan-MD03-12192013	98	103	105	110
600-84503-9	TB03-12192013	116	106	117	108
LCS 600-123637/3	Lab Control Sample	97	112	110	117
LCS 600-123757/4	Lab Control Sample	113	113	123	107
MB 600-123637/4	Method Blank	97	109	105	123
MB 600-123757/3	Method Blank	108	103	114	105

Surrogate Legend

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane

BFB = 4-Bromofluorobenzene

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

QC Sample Results

APPENDIX B (35 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

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

Lab Sample ID: MB 600-123637/4

Matrix: Water

Analysis Batch: 123637

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Acetone	0.990	U	0.990	ug/L	5.00	0.990	ug/L		12/24/13 13:18		1
Benzene	0.0800	U	0.0800	ug/L	1.00	0.0800	ug/L		12/24/13 13:18		1
Chlorobromomethane	0.180	U	0.180	ug/L	1.00	0.180	ug/L		12/24/13 13:18		1
Bromoform	0.190	U	0.190	ug/L	1.00	0.190	ug/L		12/24/13 13:18		1
Bromomethane	0.250	U	0.250	ug/L	2.00	0.250	ug/L		12/24/13 13:18		1
2-Butanone (MEK)	0.760	U	0.760	ug/L	2.00	0.760	ug/L		12/24/13 13:18		1
Carbon disulfide	0.240	U	0.240	ug/L	2.00	0.240	ug/L		12/24/13 13:18		1
Carbon tetrachloride	0.150	U	0.150	ug/L	1.00	0.150	ug/L		12/24/13 13:18		1
Dibromochloromethane	0.150	U	0.150	ug/L	1.00	0.150	ug/L		12/24/13 13:18		1
Chlorobenzene	0.120	U	0.120	ug/L	1.00	0.120	ug/L		12/24/13 13:18		1
Chloroethane	0.0800	U	0.0800	ug/L	2.00	0.0800	ug/L		12/24/13 13:18		1
Chloroform	0.130	U	0.130	ug/L	1.00	0.130	ug/L		12/24/13 13:18		1
Chloromethane	0.180	U	0.180	ug/L	2.00	0.180	ug/L		12/24/13 13:18		1
1,1-Dichloroethane	0.110	U	0.110	ug/L	1.00	0.110	ug/L		12/24/13 13:18		1
1,2-Dichloroethane	0.140	U	0.140	ug/L	1.00	0.140	ug/L		12/24/13 13:18		1
1,1-Dichloroethene	0.190	U	0.190	ug/L	1.00	0.190	ug/L		12/24/13 13:18		1
trans-1,2-Dichloroethene	0.0900	U	0.0900	ug/L	1.00	0.0900	ug/L		12/24/13 13:18		1
1,2-Dichloropropane	0.160	U	0.160	ug/L	1.00	0.160	ug/L		12/24/13 13:18		1
cis-1,3-Dichloropropene	0.180	U	0.180	ug/L	1.00	0.180	ug/L		12/24/13 13:18		1
trans-1,3-Dichloropropene	0.210	U	0.210	ug/L	1.00	0.210	ug/L		12/24/13 13:18		1
Ethylbenzene	0.110	U	0.110	ug/L	1.00	0.110	ug/L		12/24/13 13:18		1
2-Hexanone	0.350	U	0.350	ug/L	2.00	0.350	ug/L		12/24/13 13:18		1
Methylene Chloride	0.150	U	0.150	ug/L	5.00	0.150	ug/L		12/24/13 13:18		1
4-Methyl-2-pentanone (MIBK)	0.450	U	0.450	ug/L	2.00	0.450	ug/L		12/24/13 13:18		1
Styrene	0.0700	U	0.0700	ug/L	1.00	0.0700	ug/L		12/24/13 13:18		1
1,1,2,2-Tetrachloroethane	0.220	U	0.220	ug/L	1.00	0.220	ug/L		12/24/13 13:18		1
Tetrachloroethene	0.130	U	0.130	ug/L	1.00	0.130	ug/L		12/24/13 13:18		1
Toluene	0.150	U	0.150	ug/L	1.00	0.150	ug/L		12/24/13 13:18		1
1,1,1-Trichloroethane	0.150	U	0.150	ug/L	1.00	0.150	ug/L		12/24/13 13:18		1
1,1,2-Trichloroethane	0.280	U	0.280	ug/L	1.00	0.280	ug/L		12/24/13 13:18		1
Trichloroethene	0.180	U	0.180	ug/L	1.00	0.180	ug/L		12/24/13 13:18		1
Vinyl acetate	0.210	U	0.210	ug/L	2.00	0.210	ug/L		12/24/13 13:18		1
Vinyl chloride	0.110	U	0.110	ug/L	2.00	0.110	ug/L		12/24/13 13:18		1
o-Xylene	0.120	U	0.120	ug/L	1.00	0.120	ug/L		12/24/13 13:18		1
m-Xylene & p-Xylene	0.170	U	0.170	ug/L	1.00	0.170	ug/L		12/24/13 13:18		1
Xylenes, Total	0.260	U	0.260	ug/L	1.00	0.260	ug/L		12/24/13 13:18		1
cis-1,2-Dichloroethene	0.0600	U	0.0600	ug/L	1.00	0.0600	ug/L		12/24/13 13:18		1
Bromodichloromethane	0.160	U	0.160	ug/L	1.00	0.160	ug/L		12/24/13 13:18		1
1,2-Dichloroethene, Total	0.300	U	0.300	ug/L	1.00	0.300	ug/L		12/24/13 13:18		1
Surrogate	MB	MB	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Toluene-d8 (Surr)	97				70 - 130			12/24/13 13:18		1	
Dibromofluoromethane	109				62 - 130			12/24/13 13:18		1	
4-Bromofluorobenzene	105				67 - 139			12/24/13 13:18		1	
1,2-Dichloroethane-d4 (Surr)	123				50 - 134			12/24/13 13:18		1	

QC Sample Results

APPENDIX B (36 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

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

Lab Sample ID: LCS 600-123637/3

Matrix: Water

Analysis Batch: 123637

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				Limits
Acetone	20.0	23.83		ug/L		119	28 - 152
Benzene	10.0	9.962		ug/L		100	69 - 131
Chlorobromomethane	10.0	10.37		ug/L		104	60 - 141
Bromoform	10.0	11.41		ug/L		114	39 - 149
Bromomethane	10.0	7.508		ug/L		75	52 - 146
2-Butanone (MEK)	20.0	22.54		ug/L		113	59 - 133
Carbon disulfide	10.0	10.02		ug/L		100	32 - 177
Carbon tetrachloride	10.0	9.981		ug/L		100	59 - 147
Dibromochloromethane	10.0	10.65		ug/L		106	58 - 132
Chlorobenzene	10.0	9.377		ug/L		94	60 - 136
Chloroethane	10.0	9.030		ug/L		90	56 - 144
Chloroform	10.0	10.36		ug/L		104	69 - 128
Chloromethane	10.0	4.759		ug/L		48	32 - 151
1,1-Dichloroethane	10.0	9.982		ug/L		100	66 - 126
1,2-Dichloroethane	10.0	10.84		ug/L		108	66 - 140
1,1-Dichloroethene	10.0	9.271		ug/L		93	59 - 145
trans-1,2-Dichloroethene	10.0	9.027		ug/L		90	70 - 132
1,2-Dichloropropane	10.0	10.47		ug/L		105	72 - 125
cis-1,3-Dichloropropene	10.0	9.983		ug/L		100	60 - 135
trans-1,3-Dichloropropene	10.0	10.03		ug/L		100	63 - 133
Ethylbenzene	10.0	8.975		ug/L		90	68 - 128
2-Hexanone	20.0	21.69		ug/L		108	51 - 130
Methylene Chloride	10.0	11.06		ug/L		111	62 - 134
4-Methyl-2-pentanone (MIBK)	20.0	21.87		ug/L		109	56 - 142
Styrene	10.0	9.298		ug/L		93	68 - 133
1,1,2,2-Tetrachloroethane	10.0	11.68		ug/L		117	68 - 134
Tetrachloroethene	10.0	9.005		ug/L		90	61 - 142
Toluene	10.0	9.259		ug/L		93	67 - 130
1,1,1-Trichloroethane	10.0	9.877		ug/L		99	65 - 142
1,1,2-Trichloroethane	10.0	10.57		ug/L		106	68 - 130
Trichloroethene	10.0	9.362		ug/L		94	68 - 130
Vinyl acetate	20.0	18.52		ug/L		93	58 - 175
Vinyl chloride	10.0	6.599		ug/L		66	47 - 146
o-Xylene	10.0	9.380		ug/L		94	68 - 134
m-Xylene & p-Xylene	10.0	8.764		ug/L		88	67 - 132
Xylenes, Total	20.0	18.14		ug/L		91	68 - 132
cis-1,2-Dichloroethene	10.0	10.10		ug/L		101	69 - 129
Bromodichloromethane	10.0	11.12		ug/L		111	73 - 130
1,2-Dichloroethene, Total	20.0	19.13		ug/L		96	65 - 127
Surrogate		LCS	LCS				
Surrogate		%Recovery	Qualifier	Limits			
Toluene-d8 (Surr)		97		70 - 130			
Dibromofluoromethane		112		62 - 130			
4-Bromofluorobenzene		110		67 - 139			
1,2-Dichloroethane-d4 (Surr)		117		50 - 134			

TestAmerica Houston

QC Sample Results

APPENDIX B (37 of 240)

TestAmerica Job ID: 600-84503-1

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

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

Lab Sample ID: MB 600-123757/3

Matrix: Water

Analysis Batch: 123757

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.990	U	0.990	U	5.00	0.990	ug/L			12/26/13 12:24	1
Benzene	0.0800	U	0.0800	U	1.00	0.0800	ug/L			12/26/13 12:24	1
Chlorobromomethane	0.180	U	0.180	U	1.00	0.180	ug/L			12/26/13 12:24	1
Bromoform	0.190	U	0.190	U	1.00	0.190	ug/L			12/26/13 12:24	1
Bromomethane	0.250	U	0.250	U	2.00	0.250	ug/L			12/26/13 12:24	1
2-Butanone (MEK)	0.760	U	0.760	U	2.00	0.760	ug/L			12/26/13 12:24	1
Carbon disulfide	0.240	U	0.240	U	2.00	0.240	ug/L			12/26/13 12:24	1
Carbon tetrachloride	0.150	U	0.150	U	1.00	0.150	ug/L			12/26/13 12:24	1
Dibromochloromethane	0.150	U	0.150	U	1.00	0.150	ug/L			12/26/13 12:24	1
Chlorobenzene	0.120	U	0.120	U	1.00	0.120	ug/L			12/26/13 12:24	1
Chloroethane	0.0800	U	0.0800	U	2.00	0.0800	ug/L			12/26/13 12:24	1
Chloroform	0.130	U	0.130	U	1.00	0.130	ug/L			12/26/13 12:24	1
Chloromethane	0.180	U	0.180	U	2.00	0.180	ug/L			12/26/13 12:24	1
1,1-Dichloroethane	0.110	U	0.110	U	1.00	0.110	ug/L			12/26/13 12:24	1
1,2-Dichloroethane	0.140	U	0.140	U	1.00	0.140	ug/L			12/26/13 12:24	1
1,1-Dichloroethene	0.190	U	0.190	U	1.00	0.190	ug/L			12/26/13 12:24	1
trans-1,2-Dichloroethene	0.0900	U	0.0900	U	1.00	0.0900	ug/L			12/26/13 12:24	1
1,2-Dichloropropane	0.160	U	0.160	U	1.00	0.160	ug/L			12/26/13 12:24	1
cis-1,3-Dichloropropene	0.180	U	0.180	U	1.00	0.180	ug/L			12/26/13 12:24	1
trans-1,3-Dichloropropene	0.210	U	0.210	U	1.00	0.210	ug/L			12/26/13 12:24	1
Ethylbenzene	0.110	U	0.110	U	1.00	0.110	ug/L			12/26/13 12:24	1
2-Hexanone	0.350	U	0.350	U	2.00	0.350	ug/L			12/26/13 12:24	1
Methylene Chloride	0.150	U	0.150	U	5.00	0.150	ug/L			12/26/13 12:24	1
4-Methyl-2-pentanone (MIBK)	0.450	U	0.450	U	2.00	0.450	ug/L			12/26/13 12:24	1
Styrene	0.0700	U	0.0700	U	1.00	0.0700	ug/L			12/26/13 12:24	1
1,1,2,2-Tetrachloroethane	0.220	U	0.220	U	1.00	0.220	ug/L			12/26/13 12:24	1
Tetrachloroethene	0.130	U	0.130	U	1.00	0.130	ug/L			12/26/13 12:24	1
Toluene	0.150	U	0.150	U	1.00	0.150	ug/L			12/26/13 12:24	1
1,1,1-Trichloroethane	0.150	U	0.150	U	1.00	0.150	ug/L			12/26/13 12:24	1
1,1,2-Trichloroethane	0.280	U	0.280	U	1.00	0.280	ug/L			12/26/13 12:24	1
Trichloroethene	0.180	U	0.180	U	1.00	0.180	ug/L			12/26/13 12:24	1
Vinyl acetate	0.210	U	0.210	U	2.00	0.210	ug/L			12/26/13 12:24	1
Vinyl chloride	0.110	U	0.110	U	2.00	0.110	ug/L			12/26/13 12:24	1
o-Xylene	0.120	U	0.120	U	1.00	0.120	ug/L			12/26/13 12:24	1
m-Xylene & p-Xylene	0.170	U	0.170	U	1.00	0.170	ug/L			12/26/13 12:24	1
Xylenes, Total	0.260	U	0.260	U	1.00	0.260	ug/L			12/26/13 12:24	1
cis-1,2-Dichloroethene	0.0600	U	0.0600	U	1.00	0.0600	ug/L			12/26/13 12:24	1
Bromodichloromethane	0.160	U	0.160	U	1.00	0.160	ug/L			12/26/13 12:24	1
1,2-Dichloroethene, Total	0.300	U	0.300	U	1.00	0.300	ug/L			12/26/13 12:24	1
Surrogate	MB	MB	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	108				70 - 130					12/26/13 12:24	1
Dibromofluoromethane	103				62 - 130					12/26/13 12:24	1
4-Bromofluorobenzene	114				67 - 139					12/26/13 12:24	1
1,2-Dichloroethane-d4 (Surr)	105				50 - 134					12/26/13 12:24	1

QC Sample Results

APPENDIX B (38 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

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

Lab Sample ID: LCS 600-123757/4

Matrix: Water

Analysis Batch: 123757

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				Limits
Acetone	20.0	14.84		ug/L		74	28 - 152
Benzene	10.0	9.785		ug/L		98	69 - 131
Chlorobromomethane	10.0	8.811		ug/L		88	60 - 141
Bromoform	10.0	9.204		ug/L		92	39 - 149
Bromomethane	10.0	9.261		ug/L		93	52 - 146
2-Butanone (MEK)	20.0	16.94		ug/L		85	59 - 133
Carbon disulfide	10.0	10.20		ug/L		102	32 - 177
Carbon tetrachloride	10.0	10.40		ug/L		104	59 - 147
Dibromochloromethane	10.0	8.745		ug/L		87	58 - 132
Chlorobenzene	10.0	9.337		ug/L		93	60 - 136
Chloroethane	10.0	11.38		ug/L		114	56 - 144
Chloroform	10.0	9.577		ug/L		96	69 - 128
Chloromethane	10.0	10.05		ug/L		100	32 - 151
1,1-Dichloroethane	10.0	9.890		ug/L		99	66 - 126
1,2-Dichloroethane	10.0	8.853		ug/L		89	66 - 140
1,1-Dichloroethene	10.0	9.511		ug/L		95	59 - 145
trans-1,2-Dichloroethene	10.0	9.548		ug/L		95	70 - 132
1,2-Dichloropropane	10.0	9.152		ug/L		92	72 - 125
cis-1,3-Dichloropropene	10.0	8.828		ug/L		88	60 - 135
trans-1,3-Dichloropropene	10.0	8.456		ug/L		85	63 - 133
Ethylbenzene	10.0	9.803		ug/L		98	68 - 128
2-Hexanone	20.0	13.54		ug/L		68	51 - 130
Methylene Chloride	10.0	11.81		ug/L		118	62 - 134
4-Methyl-2-pentanone (MIBK)	20.0	14.08		ug/L		70	56 - 142
Styrene	10.0	8.910		ug/L		89	68 - 133
1,1,2,2-Tetrachloroethane	10.0	7.912		ug/L		79	68 - 134
Tetrachloroethene	10.0	10.07		ug/L		101	61 - 142
Toluene	10.0	9.860		ug/L		99	67 - 130
1,1,1-Trichloroethane	10.0	9.970		ug/L		100	65 - 142
1,1,2-Trichloroethane	10.0	8.456		ug/L		85	68 - 130
Trichloroethene	10.0	9.568		ug/L		96	68 - 130
Vinyl acetate	20.0	12.97		ug/L		65	58 - 175
Vinyl chloride	10.0	10.88		ug/L		109	47 - 146
o-Xylene	10.0	9.484		ug/L		95	68 - 134
m-Xylene & p-Xylene	10.0	9.517		ug/L		95	67 - 132
Xylenes, Total	20.0	19.00		ug/L		95	68 - 132
cis-1,2-Dichloroethene	10.0	9.576		ug/L		96	69 - 129
Bromodichloromethane	10.0	9.232		ug/L		92	73 - 130
1,2-Dichloroethene, Total	20.0	19.12		ug/L		96	65 - 127
Surrogate		LCS	LCS				
		%Recovery	Qualifier	Limits			
Toluene-d8 (Surr)		113		70 - 130			
Dibromofluoromethane		113		62 - 130			
4-Bromofluorobenzene		123		67 - 139			
1,2-Dichloroethane-d4 (Surr)		107		50 - 134			

TestAmerica Houston

QC Sample Results

APPENDIX B (39 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

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

Lab Sample ID: 600-84503-2 MS

Matrix: Water

Analysis Batch: 123757

Client Sample ID: San Juan-MW09-12192013 MS

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Acetone - DL	9.90		200	182.4		ug/L		91	60 - 140
Benzene - DL	186		100	272.4		ug/L		86	65 - 125
Chlorobromomethane - DL	1.90		100	97.54		ug/L		96	60 - 140
Bromoform - DL	3.72		100	105.8		ug/L		102	60 - 140
Bromomethane - DL	2.50		100	89.87		ug/L		90	60 - 140
2-Butanone (MEK) - DL	7.60		200	202.8		ug/L		101	60 - 140
Carbon disulfide - DL	2.40		100	106.2		ug/L		106	60 - 140
Carbon tetrachloride - DL	1.50		100	105.9		ug/L		106	60 - 140
Dibromochloromethane - DL	2.09		100	97.83		ug/L		96	60 - 140
Chlorobenzene - DL	1.63		100	96.87		ug/L		95	72 - 122
Chloroethane - DL	0.800		100	99.12		ug/L		99	60 - 140
Chloroform - DL	1.30		100	103.6		ug/L		104	60 - 140
Chloromethane - DL	1.80		100	92.92		ug/L		93	60 - 140
1,1-Dichloroethane - DL	1.10		100	105.4		ug/L		105	60 - 140
1,2-Dichloroethane - DL	2.15		100	98.12		ug/L		96	60 - 140
1,1-Dichloroethene - DL	1.90		100	101.1		ug/L		101	22 - 143
trans-1,2-Dichloroethene - DL	0.900		100	99.40		ug/L		99	60 - 140
1,2-Dichloropropane - DL	1.60		100	101.4		ug/L		101	60 - 140
cis-1,3-Dichloropropene - DL	1.80		100	96.51		ug/L		97	60 - 140
trans-1,3-Dichloropropene - DL	2.10		100	93.36		ug/L		93	60 - 140
Ethylbenzene - DL	57.5		100	148.8		ug/L		91	60 - 140
2-Hexanone - DL	3.50		200	174.0		ug/L		87	60 - 140
Methylene Chloride - DL	5.09		100	119.5		ug/L		114	60 - 140
4-Methyl-2-pentanone (MIBK) - DL	4.50		200	183.8		ug/L		92	60 - 140
Styrene - DL	1.71		100	94.93		ug/L		93	60 - 140
1,1,2,2-Tetrachloroethane - DL	2.20		100	95.61		ug/L		96	60 - 140
Tetrachloroethene - DL	1.30		100	100.8		ug/L		101	60 - 140
Toluene - DL	1.50		100	100.1		ug/L		100	76 - 125
1,1,1-Trichloroethane - DL	1.50		100	104.8		ug/L		105	60 - 140
1,1,2-Trichloroethane - DL	2.80		100	95.45		ug/L		95	60 - 140
Trichloroethene - DL	1.80		100	100.5		ug/L		100	56 - 118
Vinyl acetate - DL	2.10		200	158.3		ug/L		79	60 - 140
Vinyl chloride - DL	1.10		100	98.04		ug/L		98	60 - 140
o-Xylene - DL	1.44		100	98.31		ug/L		97	60 - 140
m-Xylene & p-Xylene - DL	15.7		100	111.3		ug/L		96	60 - 140
Xylenes, Total - DL	17.1		200	209.6		ug/L		96	60 - 140
cis-1,2-Dichloroethene - DL	1.01		100	102.8		ug/L		102	60 - 140
Bromodichloromethane - DL	1.60		100	104.4		ug/L		104	60 - 140
1,2-Dichloroethene, Total - DL	3.00		200	202.2		ug/L		101	60 - 140
Surrogate		MS	MS						
		%Recovery	Qualifier	Limits					
Toluene-d8 (Surr) - DL		99		70 - 130					
Dibromofluoromethane - DL		106		62 - 130					
4-Bromofluorobenzene - DL		111		67 - 139					
1,2-Dichloroethane-d4 (Surr) - DL		103		50 - 134					

TestAmerica Houston

QC Sample Results

APPENDIX B (40 of 240)

TestAmerica Job ID: 600-84503-1

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

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

Lab Sample ID: 600-84503-2 MSD

Matrix: Water

Analysis Batch: 123757

Client Sample ID: San Juan-MW09-12192013 MSD

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits			
Acetone - DL	9.90		200	173.1		ug/L		87	60 - 140	5		30
Benzene - DL	186		100	256.3		ug/L		70	65 - 125	6		30
Chlorobromomethane - DL	1.90		100	92.35		ug/L		90	60 - 140	5		30
Bromoform - DL	3.72		100	96.85		ug/L		93	60 - 140	9		30
Bromomethane - DL	2.50		100	102.5		ug/L		102	60 - 140	13		30
2-Butanone (MEK) - DL	7.60		200	183.3		ug/L		92	60 - 140	10		30
Carbon disulfide - DL	2.40		100	101.3		ug/L		101	60 - 140	5		30
Carbon tetrachloride - DL	1.50		100	100.9		ug/L		101	60 - 140	5		30
Dibromochloromethane - DL	2.09		100	92.72		ug/L		91	60 - 140	5		30
Chlorobenzene - DL	1.63		100	92.25		ug/L		91	72 - 122	5		30
Chloroethane - DL	0.800		100	109.3		ug/L		109	60 - 140	10		30
Chloroform - DL	1.30		100	97.36		ug/L		97	60 - 140	6		30
Chloromethane - DL	1.80		100	102.5		ug/L		103	60 - 140	10		30
1,1-Dichloroethane - DL	1.10		100	98.81		ug/L		99	60 - 140	6		30
1,2-Dichloroethane - DL	2.15		100	94.90		ug/L		93	60 - 140	3		30
1,1-Dichloroethene - DL	1.90		100	95.41		ug/L		95	22 - 143	6		30
trans-1,2-Dichloroethene - DL	0.900		100	95.29		ug/L		95	60 - 140	4		30
1,2-Dichloropropane - DL	1.60		100	94.47		ug/L		94	60 - 140	7		30
cis-1,3-Dichloropropene - DL	1.80		100	90.80		ug/L		91	60 - 140	6		30
trans-1,3-Dichloropropene - DL	2.10		100	88.04		ug/L		88	60 - 140	6		30
Ethylbenzene - DL	57.5		100	140.9		ug/L		83	60 - 140	5		30
2-Hexanone - DL	3.50		200	158.6		ug/L		79	60 - 140	9		30
Methylene Chloride - DL	5.09		100	115.0		ug/L		110	60 - 140	4		30
4-Methyl-2-pentanone (MIBK) - DL	4.50		200	165.8		ug/L		83	60 - 140	10		30
Styrene - DL	1.71		100	90.99		ug/L		89	60 - 140	4		30
1,1,2,2-Tetrachloroethane - DL	2.20		100	94.26		ug/L		94	60 - 140	1		30
Tetrachloroethene - DL	1.30		100	96.93		ug/L		97	60 - 140	4		30
Toluene - DL	1.50		100	95.91		ug/L		96	76 - 125	4		30
1,1,1-Trichloroethane - DL	1.50		100	99.96		ug/L		100	60 - 140	5		30
1,1,2-Trichloroethane - DL	2.80		100	88.33		ug/L		88	60 - 140	8		30
Trichloroethene - DL	1.80		100	94.42		ug/L		94	56 - 118	6		30
Vinyl acetate - DL	2.10		200	145.8		ug/L		73	60 - 140	8		30
Vinyl chloride - DL	1.10		100	107.8		ug/L		108	60 - 140	10		30
o-Xylene - DL	1.44		100	94.47		ug/L		93	60 - 140	4		30
m-Xylene & p-Xylene - DL	15.7		100	106.1		ug/L		90	60 - 140	5		30
Xylenes, Total - DL	17.1		200	200.6		ug/L		92	60 - 140	4		30
cis-1,2-Dichloroethene - DL	1.01		100	97.34		ug/L		96	60 - 140	5		30
Bromodichloromethane - DL	1.60		100	96.66		ug/L		97	60 - 140	8		30
1,2-Dichloroethene, Total - DL	3.00		200	192.6		ug/L		96	60 - 140	5		30
Surrogate	MSD	MSD										
	%Recovery	Qualifier				Limits						
Toluene-d8 (Surr) - DL	102					70 - 130						
Dibromofluoromethane - DL	105					62 - 130						
4-Bromofluorobenzene - DL	113					67 - 139						
1,2-Dichloroethane-d4 (Surr) - DL	102					50 - 134						

TestAmerica Houston

QC Sample Results

APPENDIX B (41 of 240)

TestAmerica Job ID: 600-84503-1

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

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 600-123931/1-A

Matrix: Water

Analysis Batch: 124038

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 123931

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.00125	U	0.0100	0.00125	mg/L		12/30/13 11:18	12/31/13 11:10	1
Arsenic	0.00328	U	0.0100	0.00328	mg/L		12/30/13 11:18	12/31/13 11:10	1
Aluminum	0.0216	U	0.500	0.0216	mg/L		12/30/13 11:18	12/31/13 11:10	1
Barium	0.00220	U	0.0200	0.00220	mg/L		12/30/13 11:18	12/31/13 11:10	1
Calcium	0.0219	U	1.00	0.0219	mg/L		12/30/13 11:18	12/31/13 11:10	1
Cadmium	0.000350	U	0.00500	0.000350	mg/L		12/30/13 11:18	12/31/13 11:10	1
Cobalt	0.000630	U	0.0100	0.000630	mg/L		12/30/13 11:18	12/31/13 11:10	1
Chromium	0.00155	U	0.0100	0.00155	mg/L		12/30/13 11:18	12/31/13 11:10	1
Copper	0.00145	U	0.0100	0.00145	mg/L		12/30/13 11:18	12/31/13 11:10	1
Iron	0.0866	U	0.400	0.0866	mg/L		12/30/13 11:18	12/31/13 11:10	1
Potassium	0.129	U	1.00	0.129	mg/L		12/30/13 11:18	12/31/13 11:10	1
Magnesium	0.0191	U	1.00	0.0191	mg/L		12/30/13 11:18	12/31/13 11:10	1
Manganese	0.000840	U	0.0100	0.000840	mg/L		12/30/13 11:18	12/31/13 11:10	1
Molybdenum	0.00273	U	0.0100	0.00273	mg/L		12/30/13 11:18	12/31/13 11:10	1
Sodium	0.0200	U	1.00	0.0200	mg/L		12/30/13 11:18	12/31/13 11:10	1
Nickel	0.00179	U	0.0100	0.00179	mg/L		12/30/13 11:18	12/31/13 11:10	1
Lead	0.00290	U	0.0100	0.00290	mg/L		12/30/13 11:18	12/31/13 11:10	1
Selenium	0.00417	U	0.0400	0.00417	mg/L		12/30/13 11:18	12/31/13 11:10	1
Zinc	0.00217	U	0.0300	0.00217	mg/L		12/30/13 11:18	12/31/13 11:10	1

Lab Sample ID: LCS 600-123931/2-A

Matrix: Water

Analysis Batch: 124038

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 123931

Analyte	Spike			LCS			%Rec.		
	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Silver	0.500	0.5140		mg/L		103	80 - 120		
Arsenic	1.00	1.006		mg/L		101	80 - 120		
Aluminum	10.0	10.33		mg/L		103	80 - 120		
Barium	1.00	1.020		mg/L		102	80 - 120		
Calcium	10.0	10.30		mg/L		103	80 - 120		
Cadmium	0.500	0.5058		mg/L		101	80 - 120		
Cobalt	1.00	0.9984		mg/L		100	80 - 120		
Chromium	1.00	1.011		mg/L		101	80 - 120		
Copper	1.00	1.008		mg/L		101	80 - 120		
Iron	10.0	10.28		mg/L		103	80 - 120		
Potassium	10.0	10.19		mg/L		102	80 - 120		
Magnesium	10.0	10.13		mg/L		101	80 - 120		
Manganese	1.00	1.007		mg/L		101	80 - 120		
Molybdenum	1.00	1.034		mg/L		103	80 - 120		
Sodium	10.0	10.22		mg/L		102	80 - 120		
Nickel	1.00	0.9980		mg/L		100	80 - 120		
Lead	1.00	1.005		mg/L		101	80 - 120		
Selenium	1.00	1.015		mg/L		102	80 - 120		
Zinc	1.00	0.9908		mg/L		99	80 - 120		

QC Sample Results

APPENDIX B (42 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

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

Lab Sample ID: 600-84503-2 MS

Matrix: Water

Analysis Batch: 124038

Client Sample ID: San Juan-MW09-12192013 MS

Prep Type: Total/NA

Prep Batch: 123931

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Silver	0.00160	J	0.500	0.6048		mg/L		121	75 - 125
Arsenic	0.00328	U	1.00	1.133		mg/L		113	75 - 125
Aluminum	11.6		10.0	22.81		mg/L		112	75 - 125
Barium	0.00980	J	1.00	0.9892		mg/L		98	75 - 125
Calcium	375		10.0	384.0	4	mg/L		88	75 - 125
Cadmium	0.00900		0.500	0.5590		mg/L		110	75 - 125
Cobalt	0.216		1.00	1.338		mg/L		112	75 - 125
Chromium	0.00170	J	1.00	0.9009		mg/L		90	75 - 125
Copper	0.0895		1.00	1.220		mg/L		113	75 - 125
Iron	7.75		10.0	17.88		mg/L		101	75 - 125
Potassium	12.3		10.0	23.04		mg/L		107	75 - 125
Magnesium	225		10.0	231.0	4	mg/L		64	75 - 125
Manganese	6.59		1.00	7.168	4	mg/L		58	75 - 125
Molybdenum	0.00273	U	1.00	0.9878		mg/L		99	75 - 125
Nickel	0.339		1.00	1.463		mg/L		112	75 - 125
Lead	0.00290	U	1.00	1.057		mg/L		106	75 - 125
Selenium	0.00417	U	1.00	1.285	F	mg/L		129	75 - 125
Zinc	1.02		1.00	2.239		mg/L		122	75 - 125

Lab Sample ID: 600-84503-2 MSD

Matrix: Water

Analysis Batch: 124038

Client Sample ID: San Juan-MW09-12192013 MSD

Prep Type: Total/NA

Prep Batch: 123931

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD
	Result	Qualifier	Added	Result	Qualifier					
Silver	0.00160	J	0.500	0.6186		mg/L		123	75 - 125	2
Arsenic	0.00328	U	1.00	1.134		mg/L		113	75 - 125	0
Aluminum	11.6		10.0	23.06		mg/L		115	75 - 125	1
Barium	0.00980	J	1.00	1.017		mg/L		101	75 - 125	3
Calcium	375		10.0	385.0	4	mg/L		98	75 - 125	0
Cadmium	0.00900		0.500	0.5612		mg/L		110	75 - 125	0
Cobalt	0.216		1.00	1.339		mg/L		112	75 - 125	0
Chromium	0.00170	J	1.00	0.9130		mg/L		91	75 - 125	1
Copper	0.0895		1.00	1.227		mg/L		114	75 - 125	1
Iron	7.75		10.0	18.20		mg/L		105	75 - 125	2
Potassium	12.3		10.0	23.21		mg/L		109	75 - 125	1
Magnesium	225		10.0	230.6	4	mg/L		60	75 - 125	0
Manganese	6.59		1.00	7.070	4	mg/L		48	75 - 125	1
Molybdenum	0.00273	U	1.00	1.011		mg/L		101	75 - 125	2
Nickel	0.339		1.00	1.453		mg/L		111	75 - 125	1
Lead	0.00290	U	1.00	1.054		mg/L		105	75 - 125	0
Selenium	0.00417	U	1.00	1.284	F	mg/L		128	75 - 125	0
Zinc	1.02		1.00	2.269		mg/L		125	75 - 125	1

QC Sample Results

APPENDIX B (43 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

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

Lab Sample ID: 600-84503-2 DU

Matrix: Water

Analysis Batch: 124038

Client Sample ID: San Juan-MW09-12192013

Prep Type: Total/NA

Prep Batch: 123931

Analyte	Sample	Sample	DU		DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier	Unit	D				
Silver	0.00160	J	0.001600	J	mg/L				0	20
Arsenic	0.00328	U	0.00328	U	mg/L				NC	20
Aluminum	11.6		11.61		mg/L				0.2	20
Barium	0.00980	J	0.01040	J	mg/L				6	20
Calcium	375		372.9		mg/L				0.6	20
Cadmium	0.00900		0.009000		mg/L				0	20
Cobalt	0.216		0.2168		mg/L				0.3	20
Chromium	0.00170	J	0.00155	U	mg/L				NC	20
Copper	0.0895		0.08760		mg/L				2	20
Iron	7.75		7.682		mg/L				0.9	20
Potassium	12.3		12.40		mg/L				0.6	20
Magnesium	225		225.2		mg/L				0.3	20
Manganese	6.59		6.405		mg/L				3	20
Molybdenum	0.00273	U	0.00273	U	mg/L				NC	20
Nickel	0.339		0.3430		mg/L				1	20
Lead	0.00290	U	0.00290	U	mg/L				NC	20
Selenium	0.00417	U	0.00417	U	mg/L				NC	20
Zinc	1.02		1.009		mg/L				0.7	20

Method: 6010B - Metals (ICP) - DL

Lab Sample ID: 600-84503-2 MS

Matrix: Water

Analysis Batch: 124038

Client Sample ID: San Juan-MW09-12192013 MS

Prep Type: Total/NA

Prep Batch: 123931

Analyte	Sample	Sample	Spike	MS		MS		Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier	Unit	D				
Sodium - DL	4390		10.0	4420	4	mg/L	310	75 - 125			

Lab Sample ID: 600-84503-2 MSD

Matrix: Water

Analysis Batch: 124038

Client Sample ID: San Juan-MW09-12192013 MSD

Prep Type: Total/NA

Prep Batch: 123931

Analyte	Sample	Sample	Spike	MSD		MSD		Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier	Unit	D				
Sodium - DL	4390		10.0	4279	4	mg/L	-1100	75 - 125			

Lab Sample ID: 600-84503-2 DU

Matrix: Water

Analysis Batch: 124038

Client Sample ID: San Juan-MW09-12192013

Prep Type: Total/NA

Prep Batch: 123931

Analyte	Sample	Sample	DU	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier	Unit				
Sodium - DL	4390		4298		mg/L			2	20

QC Sample Results

APPENDIX B (44 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 600-123454/7-A

Matrix: Water

Analysis Batch: 123495

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	0.0820	U	0.200	0.0820	ug/L		12/23/13 04:58	12/23/13 08:13	1

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 123454

Lab Sample ID: LCS 600-123454/8-A

Matrix: Water

Analysis Batch: 123495

Analyte	Spike		LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
	Added								
Mercury	3.00		3.013		ug/L		100	70 - 130	

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 123454

Lab Sample ID: 600-84503-2 MS

Matrix: Water

Analysis Batch: 123495

Analyte	Sample		Spike Added	MS		Unit	D	%Rec	Limits	
	Result	Qualifier		Result	Qualifier					
Mercury	0.0820	U	3.00	2.755		ug/L		92	75 - 125	

Client Sample ID: San Juan-MW09-12192013 MS

Prep Type: Total/NA

Prep Batch: 123454

Lab Sample ID: 600-84503-2 MSD

Matrix: Water

Analysis Batch: 123495

Analyte	Sample		Spike Added	MSD		Unit	D	%Rec	Limits	RPD
	Result	Qualifier		Result	Qualifier					
Mercury	0.0820	U	3.00	2.848		ug/L		95	75 - 125	3

Client Sample ID: San Juan-MW09-12192013 MSD

Prep Type: Total/NA

Prep Batch: 123454

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-123582/3

Matrix: Water

Analysis Batch: 123582

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	0.0270	U	0.400	0.0270	mg/L			12/23/13 17:20	1
Sulfate	0.0830	U	0.500	0.0830	mg/L			12/23/13 17:20	1

Client Sample ID: Method Blank

Prep Type: Total/NA

Lab Sample ID: LCS 600-123582/4

Matrix: Water

Analysis Batch: 123582

Analyte	Spike		LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
	Added								
Chloride	20.0		20.28		mg/L		101	90 - 110	
Sulfate	20.0		20.34		mg/L		102	90 - 110	

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Lab Sample ID: 600-84503-2 MS

Matrix: Water

Analysis Batch: 123582

Analyte	Sample		Spike Added	MS		Unit	D	%Rec	Limits
	Result	Qualifier		Result	Qualifier				
Chloride	398		1000	1227		mg/L		83	80 - 120
Sulfate	12100		1000	12000	4	mg/L		-14	80 - 120

Client Sample ID: San Juan-MW09-12192013 MS

Prep Type: Total/NA

QC Sample Results

APPENDIX B (45 of 240)

TestAmerica Job ID: 600-84503-1

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

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 600-84503-2 MSD

Matrix: Water

Analysis Batch: 123582

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.	%Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
Chloride	398		1000	1224		mg/L		83	80 - 120	0	20
Sulfate	12100		1000	11770	4	mg/L		-36	80 - 120	2	20

Lab Sample ID: MB 600-124058/3

Matrix: Water

Analysis Batch: 124058

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	0.0270	U	0.400	0.0270	mg/L			12/24/13 10:46	1
Sulfate	0.0830	U	0.500	0.0830	mg/L			12/24/13 10:46	1

Lab Sample ID: LCS 600-124058/4

Matrix: Water

Analysis Batch: 124058

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	%Limits	Dil Fac
	Added	Result	Qualifier					
Chloride	20.0	20.47		mg/L		102	90 - 110	
Sulfate	20.0	20.58		mg/L		103	90 - 110	

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 600-124343/10

Matrix: Water

Analysis Batch: 124343

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Nitrate Nitrite as N	0.0170	U	0.0500	0.0170	mg/L			01/03/14 11:28	1

Lab Sample ID: LCS 600-124343/11

Matrix: Water

Analysis Batch: 124343

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	%Limits	Dil Fac
	Added	Result	Qualifier					
Nitrate Nitrite as N	1.00	1.050		mg/L		105	90 - 110	

Lab Sample ID: 600-84503-2 MS

Matrix: Water

Analysis Batch: 124343

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec.	%Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
Nitrate Nitrite as N	0.147		1.00	0.7810	F1	mg/L		63	80 - 120		

Lab Sample ID: 600-84503-2 MSD

Matrix: Water

Analysis Batch: 124343

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.	%Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
Nitrate Nitrite as N	0.147		1.00	0.7187	F1	mg/L		57	80 - 120	8	20

APPENDIX B (45 of 240)

TestAmerica Job ID: 600-84503-1

QC Sample Results

APPENDIX B (46 of 240)

TestAmerica Job ID: 600-84503-1

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

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

Lab Sample ID: 600-84503-6 MS

Matrix: Water

Analysis Batch: 124343

Client Sample ID: San Juan-MW06-12192013

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
Nitrate Nitrite as N	137		250	850.5	F1	mg/L		285	80 - 120

Lab Sample ID: 600-84503-6 MSD

Matrix: Water

Analysis Batch: 124343

Client Sample ID: San Juan-MW06-12192013

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Nitrate Nitrite as N	137		250	671.4	F1 F2	mg/L		214	80 - 120	24	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 600-124080/1

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 124080

Analyte	MB	MB	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Alkalinity	5.00	U	5.00	5.00	mg/L			01/02/14 06:48	1
Bicarbonate Alkalinity as CaCO ₃	5.00	U	5.00	5.00	mg/L			01/02/14 06:48	1
Carbonate Alkalinity as CaCO ₃	5.00	U	5.00	5.00	mg/L			01/02/14 06:48	1
Hydroxide Alkalinity	5.00	U	5.00	5.00	mg/L			01/02/14 06:48	1
Phenolphthalein Alkalinity	5.00	U	5.00	5.00	mg/L			01/02/14 06:48	1

Lab Sample ID: LCS 600-124080/2

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 124080

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added						
Alkalinity	1000	968.2		mg/L		97	90 - 110

Lab Sample ID: 600-84503-2 MS

Client Sample ID: San Juan-MW09-12192013 MS

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 124080

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Alkalinity	46.5		250	273.7		mg/L		91	75 - 125

Lab Sample ID: 600-84503-2 MSD

Client Sample ID: San Juan-MW09-12192013 MSD

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 124080

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Alkalinity	46.5		250	275.6		mg/L		92	75 - 125

TestAmerica Houston

QC Sample Results

APPENDIX B (47 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

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

Lab Sample ID: MB 600-123544/49

Matrix: Water

Analysis Batch: 123544

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	-		12/23/13 14:41	1

Lab Sample ID: LCS 600-123544/50

Matrix: Water

Analysis Batch: 123544

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	1878		mg/L	-	104		90 - 110

QC Association Summary

APPENDIX B (48 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

GC/MS VOA

Analysis Batch: 123637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84503-1	San Juan-MW08-12192013	Total/NA	Water	8260B	
600-84503-3	San Juan-MW04-12192013	Total/NA	Water	8260B	
600-84503-5	San Juan-EquBlank04-12192013	Total/NA	Water	8260B	
600-84503-9	TB03-12192013	Total/NA	Water	8260B	
LCS 600-123637/3	Lab Control Sample	Total/NA	Water	8260B	
MB 600-123637/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 123757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84503-2	San Juan-MW09-12192013	Total/NA	Water	8260B	
600-84503-2 - DL	San Juan-MW09-12192013	Total/NA	Water	8260B	
600-84503-2 MS - DL	San Juan-MW09-12192013 MS	Total/NA	Water	8260B	
600-84503-2 MSD - DL	San Juan-MW09-12192013 MSD	Total/NA	Water	8260B	
600-84503-4	San Juan-MW02-12192013	Total/NA	Water	8260B	
600-84503-6	San Juan-MW06-12192013	Total/NA	Water	8260B	
600-84503-7	San Juan-MD03-12192013	Total/NA	Water	8260B	
LCS 600-123757/4	Lab Control Sample	Total/NA	Water	8260B	
MB 600-123757/3	Method Blank	Total/NA	Water	8260B	

Metals

Prep Batch: 123454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84503-1	San Juan-MW08-12192013	Total/NA	Water	7470A	
600-84503-2	San Juan-MW09-12192013	Total/NA	Water	7470A	
600-84503-2 MS	San Juan-MW09-12192013 MS	Total/NA	Water	7470A	
600-84503-2 MSD	San Juan-MW09-12192013 MSD	Total/NA	Water	7470A	
600-84503-3	San Juan-MW04-12192013	Total/NA	Water	7470A	
600-84503-4	San Juan-MW02-12192013	Total/NA	Water	7470A	
600-84503-5	San Juan-EquBlank04-12192013	Total/NA	Water	7470A	
600-84503-6	San Juan-MW06-12192013	Total/NA	Water	7470A	
600-84503-7	San Juan-MD03-12192013	Total/NA	Water	7470A	
LCS 600-123454/8-A	Lab Control Sample	Total/NA	Water	7470A	
MB 600-123454/7-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 123495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84503-1	San Juan-MW08-12192013	Total/NA	Water	7470A	123454
600-84503-2	San Juan-MW09-12192013	Total/NA	Water	7470A	123454
600-84503-2 MS	San Juan-MW09-12192013 MS	Total/NA	Water	7470A	123454
600-84503-2 MSD	San Juan-MW09-12192013 MSD	Total/NA	Water	7470A	123454
600-84503-3	San Juan-MW04-12192013	Total/NA	Water	7470A	123454
600-84503-4	San Juan-MW02-12192013	Total/NA	Water	7470A	123454
600-84503-5	San Juan-EquBlank04-12192013	Total/NA	Water	7470A	123454
600-84503-6	San Juan-MW06-12192013	Total/NA	Water	7470A	123454
600-84503-7	San Juan-MD03-12192013	Total/NA	Water	7470A	123454
CRA 600-123495/10	DL		Water	7470A	
LCS 600-123454/8-A	Lab Control Sample	Total/NA	Water	7470A	123454
MB 600-123454/7-A	Method Blank	Total/NA	Water	7470A	123454

TestAmerica Houston

QC Association Summary

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TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

Metals (Continued)

Prep Batch: 123931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84503-1	San Juan-MW08-12192013	Total/NA	Water	3010A	
600-84503-1 - DL	San Juan-MW08-12192013	Total/NA	Water	3010A	
600-84503-2	San Juan-MW09-12192013	Total/NA	Water	3010A	
600-84503-2 - DL	San Juan-MW09-12192013	Total/NA	Water	3010A	
600-84503-2 DU	San Juan-MW09-12192013	Total/NA	Water	3010A	
600-84503-2 DU - DL	San Juan-MW09-12192013	Total/NA	Water	3010A	
600-84503-2 MS	San Juan-MW09-12192013 MS	Total/NA	Water	3010A	
600-84503-2 MS - DL	San Juan-MW09-12192013 MS	Total/NA	Water	3010A	
600-84503-2 MSD - DL	San Juan-MW09-12192013 MSD	Total/NA	Water	3010A	
600-84503-2 MSD	San Juan-MW09-12192013 MSD	Total/NA	Water	3010A	
600-84503-3	San Juan-MW04-12192013	Total/NA	Water	3010A	
600-84503-3 - DL	San Juan-MW04-12192013	Total/NA	Water	3010A	
600-84503-4	San Juan-MW02-12192013	Total/NA	Water	3010A	
600-84503-4 - DL	San Juan-MW02-12192013	Total/NA	Water	3010A	
600-84503-5 - DL	San Juan-EquBlank04-12192013	Total/NA	Water	3010A	
600-84503-5	San Juan-EquBlank04-12192013	Total/NA	Water	3010A	
600-84503-6	San Juan-MW06-12192013	Total/NA	Water	3010A	
600-84503-6 - DL	San Juan-MW06-12192013	Total/NA	Water	3010A	
600-84503-7	San Juan-MD03-12192013	Total/NA	Water	3010A	
600-84503-7 - DL	San Juan-MD03-12192013	Total/NA	Water	3010A	
LCS 600-123931/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 600-123931/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 124038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84503-1	San Juan-MW08-12192013	Total/NA	Water	6010B	123931
600-84503-1 - DL	San Juan-MW08-12192013	Total/NA	Water	6010B	123931
600-84503-2	San Juan-MW09-12192013	Total/NA	Water	6010B	123931
600-84503-2 - DL	San Juan-MW09-12192013	Total/NA	Water	6010B	123931
600-84503-2 DU	San Juan-MW09-12192013	Total/NA	Water	6010B	123931
600-84503-2 DU - DL	San Juan-MW09-12192013	Total/NA	Water	6010B	123931
600-84503-2 MS	San Juan-MW09-12192013 MS	Total/NA	Water	6010B	123931
600-84503-2 MS - DL	San Juan-MW09-12192013 MS	Total/NA	Water	6010B	123931
600-84503-2 MSD	San Juan-MW09-12192013 MSD	Total/NA	Water	6010B	123931
600-84503-2 MSD - DL	San Juan-MW09-12192013 MSD	Total/NA	Water	6010B	123931
600-84503-3	San Juan-MW04-12192013	Total/NA	Water	6010B	123931
600-84503-3 - DL	San Juan-MW04-12192013	Total/NA	Water	6010B	123931
600-84503-4	San Juan-MW02-12192013	Total/NA	Water	6010B	123931
600-84503-4 - DL	San Juan-MW02-12192013	Total/NA	Water	6010B	123931
600-84503-5	San Juan-EquBlank04-12192013	Total/NA	Water	6010B	123931
600-84503-5 - DL	San Juan-EquBlank04-12192013	Total/NA	Water	6010B	123931
600-84503-6	San Juan-MW06-12192013	Total/NA	Water	6010B	123931
600-84503-6 - DL	San Juan-MW06-12192013	Total/NA	Water	6010B	123931
600-84503-7	San Juan-MD03-12192013	Total/NA	Water	6010B	123931
600-84503-7 - DL	San Juan-MD03-12192013	Total/NA	Water	6010B	123931
ICSA 600-124038/13	ICS		Water	6010B	
ICSAB 600-124038/14	ICS		Water	6010B	
LCS 600-123931/2-A	Lab Control Sample	Total/NA	Water	6010B	123931
MB 600-123931/1-A	Method Blank	Total/NA	Water	6010B	123931

TestAmerica Houston

QC Association Summary

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TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

General Chemistry

Analysis Batch: 123544

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84503-1	San Juan-MW08-12192013	Total/NA	Water	SM 2540C	
600-84503-2	San Juan-MW09-12192013	Total/NA	Water	SM 2540C	
600-84503-3	San Juan-MW04-12192013	Total/NA	Water	SM 2540C	
600-84503-4	San Juan-MW02-12192013	Total/NA	Water	SM 2540C	
600-84503-5	San Juan-EquBlank04-12192013	Total/NA	Water	SM 2540C	
600-84503-6	San Juan-MW06-12192013	Total/NA	Water	SM 2540C	
600-84503-7	San Juan-MD03-12192013	Total/NA	Water	SM 2540C	
LCS 600-123544/50	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 600-123544/49	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 123582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84503-1	San Juan-MW08-12192013	Total/NA	Water	300.0	
600-84503-2	San Juan-MW09-12192013	Total/NA	Water	300.0	
600-84503-2 MS	San Juan-MW09-12192013 MS	Total/NA	Water	300.0	
600-84503-2 MSD	San Juan-MW09-12192013 MSD	Total/NA	Water	300.0	
600-84503-3	San Juan-MW04-12192013	Total/NA	Water	300.0	
600-84503-4	San Juan-MW02-12192013	Total/NA	Water	300.0	
600-84503-5	San Juan-EquBlank04-12192013	Total/NA	Water	300.0	
600-84503-6	San Juan-MW06-12192013	Total/NA	Water	300.0	
600-84503-7	San Juan-MD03-12192013	Total/NA	Water	300.0	
LCS 600-123582/4	Lab Control Sample	Total/NA	Water	300.0	
MB 600-123582/3	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 124058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84503-2	San Juan-MW09-12192013	Total/NA	Water	300.0	
LCS 600-124058/4	Lab Control Sample	Total/NA	Water	300.0	
MB 600-124058/3	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 124080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84503-1	San Juan-MW08-12192013	Total/NA	Water	SM 2320B	
600-84503-2	San Juan-MW09-12192013	Total/NA	Water	SM 2320B	
600-84503-2 MS	San Juan-MW09-12192013 MS	Total/NA	Water	SM 2320B	
600-84503-2 MSD	San Juan-MW09-12192013 MSD	Total/NA	Water	SM 2320B	
600-84503-3	San Juan-MW04-12192013	Total/NA	Water	SM 2320B	
600-84503-4	San Juan-MW02-12192013	Total/NA	Water	SM 2320B	
600-84503-5	San Juan-EquBlank04-12192013	Total/NA	Water	SM 2320B	
600-84503-6	San Juan-MW06-12192013	Total/NA	Water	SM 2320B	
600-84503-7	San Juan-MD03-12192013	Total/NA	Water	SM 2320B	
LCS 600-124080/2	Lab Control Sample	Total/NA	Water	SM 2320B	
MB 600-124080/1	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 124343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84503-1	San Juan-MW08-12192013	Total/NA	Water	353.2	
600-84503-2	San Juan-MW09-12192013	Total/NA	Water	353.2	
600-84503-2 MS	San Juan-MW09-12192013 MS	Total/NA	Water	353.2	
600-84503-2 MSD	San Juan-MW09-12192013 MSD	Total/NA	Water	353.2	
600-84503-3	San Juan-MW04-12192013	Total/NA	Water	353.2	

TestAmerica Houston

QC Association Summary

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TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

General Chemistry (Continued)

Analysis Batch: 124343 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84503-4	San Juan-MW02-12192013	Total/NA	Water	353.2	
600-84503-5	San Juan-EquBlank04-12192013	Total/NA	Water	353.2	
600-84503-6	San Juan-MW06-12192013	Total/NA	Water	353.2	
600-84503-6 MS	San Juan-MW06-12192013	Total/NA	Water	353.2	
600-84503-7	San Juan-MD03-12192013	Total/NA	Water	353.2	
LCS 600-124343/11	Lab Control Sample	Total/NA	Water	353.2	
MB 600-124343/10	Method Blank	Total/NA	Water	353.2	

Lab Chronicle

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TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

Client Sample ID: San Juan-MW08-12192013**Lab Sample ID: 600-84503-1**

Matrix: Water

Date Collected: 12/19/13 11:20

Date Received: 12/21/13 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	123637	12/24/13 20:58	WS1	TAL HOU
Total/NA	Prep	7470A			123454	12/23/13 04:58	MJT	TAL HOU
Total/NA	Analysis	7470A		1	123495	12/23/13 08:38	MJT	TAL HOU
Total/NA	Prep	3010A			123931	12/30/13 11:18	NER	TAL HOU
Total/NA	Analysis	6010B		1	124038	12/31/13 11:29	DCL	TAL HOU
Total/NA	Prep	3010A	DL		123931	12/30/13 11:18	NER	TAL HOU
Total/NA	Analysis	6010B	DL	20	124038	12/31/13 12:42	DCL	TAL HOU
Total/NA	Analysis	SM 2540C		1	123544	12/23/13 14:41	AYS	TAL HOU
Total/NA	Analysis	300.0		200	123582	12/23/13 20:26	DAW	TAL HOU
Total/NA	Analysis	SM 2320B		1	124080	01/02/14 06:48	SC1	TAL HOU
Total/NA	Analysis	353.2		1	124343	01/03/14 12:00	KRD	TAL HOU

Client Sample ID: San Juan-MW09-12192013**Lab Sample ID: 600-84503-2**

Matrix: Water

Date Collected: 12/19/13 12:35

Date Received: 12/21/13 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	123757	12/26/13 13:54	WS1	TAL HOU
Total/NA	Analysis	8260B	DL	10	123757	12/26/13 15:30	WS1	TAL HOU
Total/NA	Prep	7470A			123454	12/23/13 04:58	MJT	TAL HOU
Total/NA	Analysis	7470A		1	123495	12/23/13 08:40	MJT	TAL HOU
Total/NA	Prep	3010A			123931	12/30/13 11:18	NER	TAL HOU
Total/NA	Analysis	6010B		1	124038	12/31/13 11:38	DCL	TAL HOU
Total/NA	Prep	3010A	DL		123931	12/30/13 11:18	NER	TAL HOU
Total/NA	Analysis	6010B	DL	50	124038	12/31/13 12:45	DCL	TAL HOU
Total/NA	Analysis	SM 2540C		1	123544	12/23/13 14:41	AYS	TAL HOU
Total/NA	Analysis	300.0		100	123582	12/23/13 20:41	DAW	TAL HOU
Total/NA	Analysis	300.0		500	124058	12/24/13 13:06	BDG	TAL HOU
Total/NA	Analysis	SM 2320B		1	124080	01/02/14 06:48	SC1	TAL HOU
Total/NA	Analysis	353.2		1	124343	01/03/14 12:05	KRD	TAL HOU

Client Sample ID: San Juan-MW04-12192013**Lab Sample ID: 600-84503-3**

Matrix: Water

Date Collected: 12/19/13 13:35

Date Received: 12/21/13 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	123637	12/24/13 21:24	WS1	TAL HOU
Total/NA	Prep	7470A			123454	12/23/13 04:58	MJT	TAL HOU
Total/NA	Analysis	7470A		1	123495	12/23/13 08:45	MJT	TAL HOU
Total/NA	Prep	3010A			123931	12/30/13 11:18	NER	TAL HOU
Total/NA	Analysis	6010B		1	124038	12/31/13 11:48	DCL	TAL HOU
Total/NA	Prep	3010A	DL		123931	12/30/13 11:18	NER	TAL HOU

TestAmerica Houston

Lab Chronicle

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TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

Client Sample ID: San Juan-MW04-12192013**Lab Sample ID: 600-84503-3**

Matrix: Water

Date Collected: 12/19/13 13:35

Date Received: 12/21/13 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B	DL	20	124038	12/31/13 12:55	DCL	TAL HOU
Total/NA	Analysis	SM 2540C		1	123544	12/23/13 14:41	AYS	TAL HOU
Total/NA	Analysis	300.0		100	123582	12/23/13 21:28	DAW	TAL HOU
Total/NA	Analysis	SM 2320B		1	124080	01/02/14 06:48	SC1	TAL HOU
Total/NA	Analysis	353.2		1	124343	01/03/14 12:00	KRD	TAL HOU

Client Sample ID: San Juan-MW02-12192013**Lab Sample ID: 600-84503-4**

Matrix: Water

Date Collected: 12/19/13 14:00

Date Received: 12/21/13 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	123757	12/26/13 17:39	WS1	TAL HOU
Total/NA	Prep	7470A			123454	12/23/13 04:58	MJT	TAL HOU
Total/NA	Analysis	7470A		1	123495	12/23/13 08:47	MJT	TAL HOU
Total/NA	Prep	3010A			123931	12/30/13 11:18	NER	TAL HOU
Total/NA	Analysis	6010B		1	124038	12/31/13 11:50	DCL	TAL HOU
Total/NA	Prep	3010A	DL		123931	12/30/13 11:18	NER	TAL HOU
Total/NA	Analysis	6010B	DL	20	124038	12/31/13 12:57	DCL	TAL HOU
Total/NA	Analysis	SM 2540C		1	123544	12/23/13 14:41	AYS	TAL HOU
Total/NA	Analysis	300.0		100	123582	12/23/13 21:43	DAW	TAL HOU
Total/NA	Analysis	SM 2320B		1	124080	01/02/14 06:48	SC1	TAL HOU
Total/NA	Analysis	353.2		250	124343	01/03/14 14:45	KRD	TAL HOU

Client Sample ID: San Juan-EquBlank04-12192013**Lab Sample ID: 600-84503-5**

Matrix: Water

Date Collected: 12/19/13 14:20

Date Received: 12/21/13 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	123637	12/24/13 20:33	WS1	TAL HOU
Total/NA	Prep	7470A			123454	12/23/13 04:58	MJT	TAL HOU
Total/NA	Analysis	7470A		1	123495	12/23/13 08:49	MJT	TAL HOU
Total/NA	Prep	3010A			123931	12/30/13 11:18	NER	TAL HOU
Total/NA	Analysis	6010B		1	124038	12/31/13 11:53	DCL	TAL HOU
Total/NA	Prep	3010A	DL		123931	12/30/13 11:18	NER	TAL HOU
Total/NA	Analysis	6010B	DL	1	124038	12/31/13 12:59	DCL	TAL HOU
Total/NA	Analysis	SM 2540C		1	123544	12/23/13 14:41	AYS	TAL HOU
Total/NA	Analysis	300.0		1	123582	12/23/13 21:59	DAW	TAL HOU
Total/NA	Analysis	SM 2320B		1	124080	01/02/14 06:48	SC1	TAL HOU
Total/NA	Analysis	353.2		1	124343	01/03/14 12:02	KRD	TAL HOU

TestAmerica Houston

Lab Chronicle

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TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

Client Sample ID: San Juan-MW06-12192013**Lab Sample ID: 600-84503-6**

Matrix: Water

Date Collected: 12/19/13 15:00

Date Received: 12/21/13 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	123757	12/26/13 16:47	WS1	TAL HOU
Total/NA	Prep	7470A			123454	12/23/13 04:58	MJT	TAL HOU
Total/NA	Analysis	7470A		1	123495	12/23/13 08:51	MJT	TAL HOU
Total/NA	Prep	3010A			123931	12/30/13 11:18	NER	TAL HOU
Total/NA	Analysis	6010B		1	124038	12/31/13 11:55	DCL	TAL HOU
Total/NA	Prep	3010A	DL		123931	12/30/13 11:18	NER	TAL HOU
Total/NA	Analysis	6010B	DL	50	124038	12/31/13 13:02	DCL	TAL HOU
Total/NA	Analysis	SM 2540C		1	123544	12/23/13 14:41	AYS	TAL HOU
Total/NA	Analysis	300.0		1000	123582	12/23/13 22:14	DAW	TAL HOU
Total/NA	Analysis	SM 2320B		1	124080	01/02/14 06:48	SC1	TAL HOU
Total/NA	Analysis	353.2		250	124343	01/03/14 14:49	KRD	TAL HOU

Client Sample ID: San Juan-MD03-12192013**Lab Sample ID: 600-84503-7**

Matrix: Water

Date Collected: 12/19/13 17:00

Date Received: 12/21/13 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	123757	12/26/13 17:13	WS1	TAL HOU
Total/NA	Prep	7470A			123454	12/23/13 04:58	MJT	TAL HOU
Total/NA	Analysis	7470A		1	123495	12/23/13 08:52	MJT	TAL HOU
Total/NA	Prep	3010A			123931	12/30/13 11:18	NER	TAL HOU
Total/NA	Analysis	6010B		1	124038	12/31/13 11:58	DCL	TAL HOU
Total/NA	Prep	3010A	DL		123931	12/30/13 11:18	NER	TAL HOU
Total/NA	Analysis	6010B	DL	50	124038	12/31/13 13:04	DCL	TAL HOU
Total/NA	Analysis	SM 2540C		1	123544	12/23/13 14:41	AYS	TAL HOU
Total/NA	Analysis	300.0		1000	123582	12/23/13 22:30	DAW	TAL HOU
Total/NA	Analysis	SM 2320B		1	124080	01/02/14 06:48	SC1	TAL HOU
Total/NA	Analysis	353.2		250	124343	01/03/14 14:46	KRD	TAL HOU

Client Sample ID: TB03-12192013**Lab Sample ID: 600-84503-9**

Matrix: Water

Date Collected: 12/19/13 08:00

Date Received: 12/21/13 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	123637	12/24/13 18:24	WS1	TAL HOU

Laboratory References:

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

TestAmerica Houston

Default Detection Limits

APPENDIX B (55 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: San Juan

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

Analyte	RL	MDL	Units	Method
1,1,1-Trichloroethane	1.00	0.150	ug/L	8260B
1,1,2,2-Tetrachloroethane	1.00	0.220	ug/L	8260B
1,1,2-Trichloroethane	1.00	0.280	ug/L	8260B
1,1-Dichloroethane	1.00	0.110	ug/L	8260B
1,1-Dichloroethene	1.00	0.190	ug/L	8260B
1,2-Dichloroethane	1.00	0.140	ug/L	8260B
1,2-Dichloroethene, Total	1.00	0.300	ug/L	8260B
1,2-Dichloropropane	1.00	0.160	ug/L	8260B
2-Butanone (MEK)	2.00	0.760	ug/L	8260B
2-Hexanone	2.00	0.350	ug/L	8260B
4-Methyl-2-pentanone (MIBK)	2.00	0.450	ug/L	8260B
Acetone	5.00	0.990	ug/L	8260B
Benzene	1.00	0.0800	ug/L	8260B
Bromodichloromethane	1.00	0.160	ug/L	8260B
Bromoform	1.00	0.190	ug/L	8260B
Bromomethane	2.00	0.250	ug/L	8260B
Carbon disulfide	2.00	0.240	ug/L	8260B
Carbon tetrachloride	1.00	0.150	ug/L	8260B
Chlorobenzene	1.00	0.120	ug/L	8260B
Chlorobromomethane	1.00	0.180	ug/L	8260B
Chloroethane	2.00	0.0800	ug/L	8260B
Chloroform	1.00	0.130	ug/L	8260B
Chloromethane	2.00	0.180	ug/L	8260B
cis-1,2-Dichloroethene	1.00	0.0600	ug/L	8260B
cis-1,3-Dichloropropene	1.00	0.180	ug/L	8260B
Dibromochloromethane	1.00	0.150	ug/L	8260B
Ethylbenzene	1.00	0.110	ug/L	8260B
Methylene Chloride	5.00	0.150	ug/L	8260B
m-Xylene & p-Xylene	1.00	0.170	ug/L	8260B
o-Xylene	1.00	0.120	ug/L	8260B
Styrene	1.00	0.0700	ug/L	8260B
Tetrachloroethene	1.00	0.130	ug/L	8260B
Toluene	1.00	0.150	ug/L	8260B
trans-1,2-Dichloroethene	1.00	0.0900	ug/L	8260B
trans-1,3-Dichloropropene	1.00	0.210	ug/L	8260B
Trichloroethene	1.00	0.180	ug/L	8260B
Vinyl acetate	2.00	0.210	ug/L	8260B
Vinyl chloride	2.00	0.110	ug/L	8260B
Xylenes, Total	1.00	0.260	ug/L	8260B

Method: 6010B - Metals (ICP)

Analyte	RL	MDL	Units	Method
Aluminum	0.500	0.0216	mg/L	6010B
Arsenic	0.0100	0.00328	mg/L	6010B
Barium	0.0200	0.00220	mg/L	6010B
Cadmium	0.00500	0.000350	mg/L	6010B
Calcium	1.00	0.0219	mg/L	6010B
Chromium	0.0100	0.00155	mg/L	6010B
Cobalt	0.0100	0.000630	mg/L	6010B
Copper	0.0100	0.00145	mg/L	6010B
Iron	0.400	0.0866	mg/L	6010B

Default Detection Limits

APPENDIX B (56 of 240)

Client: CH2M Hill Constructors, Inc.

TestAmerica Job ID: 600-84503-1

Project/Site: San Juan

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

Analyte	RL	MDL	Units	Method
Lead	0.0100	0.00290	mg/L	6010B
Magnesium	1.00	0.0191	mg/L	6010B
Manganese	0.0100	0.000840	mg/L	6010B
Molybdenum	0.0100	0.00273	mg/L	6010B
Nickel	0.0100	0.00179	mg/L	6010B
Potassium	1.00	0.129	mg/L	6010B
Selenium	0.0400	0.00417	mg/L	6010B
Silver	0.0100	0.00125	mg/L	6010B
Sodium	1.00	0.0200	mg/L	6010B
Zinc	0.0300	0.00217	mg/L	6010B

Method: 7470A - Mercury (CVAA)

Analyte	RL	MDL	Units	Method
Mercury	0.200	0.0820	ug/L	7470A

General Chemistry

Analyte	RL	MDL	Units	Method
Chloride	0.400	0.0270	mg/L	300.0
Sulfate	0.500	0.0830	mg/L	300.0
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
Hydroxide Alkalinity	5.00	5.00	mg/L	SM 2320B
Phenolphthalein Alkalinity	5.00	5.00	mg/L	SM 2320B
Total Dissolved Solids	10.0	10.0	mg/L	SM 2540C

Certification Summary

APPENDIX B (57 of 240)

TestAmerica Job ID: 600-84503-1

Client: CH2M Hill Constructors, Inc.

Project/Site: 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	88-0759	08-04-14
Louisiana	NELAP	6	30643	06-30-14
Oklahoma	State Program	6	1309	08-31-14
Texas	NELAP	6	T104704223	10-31-14
USDA	Federal		P330-08-00217	04-01-14
Utah	NELAP	8	TX00083	10-31-14

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
CCV_00023	02/01/14	11/06/13	DI WATER, Lot NONE	1000 mL	WETSICCCL_00019	20 mL	Chloride	20 mg/L
					WETSICCSO4_00011	20 mL	Sulfate	20 mg/L
.WETSICCCL_00019	02/01/14		INORGANIC-VENTURE, Lot E-2_CL01097		(Purchased Reagent)		Chloride	1000 mg/L
.WETSICCSO4_00011	02/01/14		INORGANIC-VENTURE, Lot E2-SOX01095		(Purchased Reagent)		Sulfate	1000 mg/L
ICSMS_00031	01/31/14	11/15/13	DI WATER, Lot NONE	50 mL	WETSIC_ICV_00003	10 mL	Chloride	200 mg/L
					WETSICISO4_00008	10 mL	Sulfate	200 mg/L
.WETSIC_ICV_00003	04/30/15		ACCUSTD, Lot 213045104		(Purchased Reagent)		Chloride	1000 mg/L
.WETSICISO4_00008	04/30/14		ACCUSTANDARD, Lot 212045034		(Purchased Reagent)		Sulfate	1000 mg/L
ICV/LCS_00026	01/31/14	11/05/13	DI WATER, Lot NONE	200 mL	WETSIC_ICV_00003	4 mL	Chloride	20 mg/L
					WETSICISO4_00008	4 mL	Sulfate	20 mg/L
.WETSIC_ICV_00003	04/30/15		ACCUSTD, Lot 213045104		(Purchased Reagent)		Chloride	1000 mg/L
.WETSICISO4_00008	04/30/14		ACCUSTANDARD, Lot 212045034		(Purchased Reagent)		Sulfate	1000 mg/L
MER01213HS_00001	05/30/15	12/09/13	DI WATER, Lot n/a	2000 mL	MERNACL_00005	240 g	Stock Chemical	0 ug/mL
					MERNH20H_00011	240 g	Stock Chemical	0 ug/mL
.MERNACL_00005	05/30/15		Mallinckrodt, Lot J39604		(Purchased Reagent)		Stock Chemical	0 %
.MERNH20H_00011	12/04/17		Aqua Solutions, Lot 133411		(Purchased Reagent)		Stock Chemical	0 %
MER1113PP_00001	08/01/17	11/18/13	DI WATER, Lot n/a	2000 mL	MERK2S208_00005	100 g	Stock Chemical	0 ug/mL
.MERK2S208_00005	08/01/17		Macron Chemicals, Lot K41H09		(Purchased Reagent)		Stock Chemical	0 %
MER1213KM_00001	09/21/15	12/09/13	DI WATER, Lot n/a	2000 mL	MERKMNO4_00005	100 g	Stock Chemical	0 ug/mL
.MERKMNO4_00005	09/21/15		JT Baker, Lot J25603		(Purchased Reagent)		Stock Chemical	0 g
MER1213S1_00011	12/24/13	12/23/13	DI WATER, Lot n/a	100 mL	MER1213I1_00004	1 mL	Mercury	100 ug/L
.MER1213I1_00004	12/30/13	12/23/13	DI WATER, Lot n/a	100 mL	MERSTOCK_00016	100 uL	Mercury	10000 ug/L
.MERSTOCK_00016	02/08/15		CPI, Lot 12F126		(Purchased Reagent)		Mercury	10000 mg/L
MER1213S2_00011	12/24/13	12/23/13	DI WATER, Lot n/a	100 mL	MER1213I2_00004	1 mL	Mercury	100 ug/L
					METHNO3_00026	1 mL	Stock Chemical	0 ug/L
.MER1213I2_00004	12/30/13	12/23/13	DI WATER, Lot n/a	100 mL	MERSTOCK_00015	1 mL	Mercury	10000 ug/L
.MERSTOCK_00015	09/01/14		Inorganics Ventures, Lot F2-HG02105		METHNO3_00031	1 mL	Stock Chemical	0 ug/L
.METHNO3_00031	07/25/17		Macron, Lot K50029		(Purchased Reagent)		Stock Chemical	0 mL
.METHNO3_00026	12/11/16		Mallinkrodt, Lot K35026		(Purchased Reagent)		Stock Chemical	0 mL
MERSUL_00034	07/25/17		J.T. Baker, Lot 0000036761		(Purchased Reagent)		Stock Chemical	0 mL
MET1213CCV_00005	04/01/14	12/18/13	DI WATER, Lot NA	500 mL	ICPCAL2A_00011	2.5 mL	Aluminum	2.5 mg/L
							Arsenic	0.5 mg/L
							Barium	0.5 mg/L
							Cadmium	0.5 mg/L
							Calcium	12.5 mg/L
							Chromium	0.5 mg/L
							Cobalt	0.5 mg/L
							Copper	0.5 mg/L
							Iron	2.5 mg/L
							Lead	0.5 mg/L
							Magnesium	5 mg/L
							Manganese	0.5 mg/L

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Nickel	0.5 mg/L
							Potassium	12.5 mg/L
							Selenium	0.5 mg/L
							Silver	0.25 mg/L
							Sodium	12.5 mg/L
							Zinc	0.5 mg/L
					ICPCAL2B_00011	2.5 mL	Molybdenum	0.5 mg/L
.ICPCAL2A_00011	08/01/14	INORG VENTURES, Lot G2-MEB482135			(Purchased Reagent)		Aluminum	500 ug/mL
							Arsenic	100 ug/mL
							Barium	100 ug/mL
							Cadmium	100 ug/mL
							Calcium	2500 ug/mL
							Chromium	100 ug/mL
							Cobalt	100 ug/mL
							Copper	100 ug/mL
							Iron	500 ug/mL
							Lead	100 ug/mL
							Magnesium	1000 ug/mL
							Manganese	100 ug/mL
							Nickel	100 ug/mL
							Potassium	2500 ug/mL
							Selenium	100 ug/mL
							Silver	50 ug/mL
							Sodium	2500 ug/mL
							Zinc	100 ug/mL
.ICPCAL2B_00011	08/01/14	INORG VENTURES, Lot G2-MEB482136			(Purchased Reagent)		Molybdenum	100 ug/mL
METCALA_00015	11/20/14	ENVIRONMENTAL EXPRESS, Lot 1313318			(Purchased Reagent)		Aluminum	2000 ug/mL
							Arsenic	200 ug/mL
							B	200 ug/mL
							Barium	200 ug/mL
							Be	100 ug/mL
							Cadmium	100 ug/mL
							Calcium	2000 ug/mL
							Chromium	200 ug/mL
							Cobalt	200 ug/mL
							Copper	200 ug/mL
							Iron	2000 ug/mL
							Lead	200 ug/mL
							Li	200 ug/mL
							Magnesium	2000 ug/mL
							Manganese	200 ug/mL
							Nickel	200 ug/mL
							Potassium	2000 ug/mL
							Selenium	200 ug/mL
							Sodium	2000 ug/mL
							Sr	100 ug/mL
							V	200 ug/mL

REAGENT TRACEABILITY SUMMARY

APPENDIX B (60 of 240)

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Zinc	200 ug/mL
METCALB_00013	11/20/14	ENVIRONMENTAL EXPRESS, Lot 1332214		(Purchased Reagent)			Molybdenum	200 ug/mL
							Sb	200 ug/mL
							Si	200 ug/mL
							Silver	100 ug/mL
							Sn	200 ug/mL
							Ti	200 ug/mL
							Tl	200 ug/mL
METHCL_00057	08/15/17	Macron, Lot 0000053959		(Purchased Reagent)			Stock Chemical	0 mL
METHNO3_00042	07/25/18	Macron, Lot 0000031507		(Purchased Reagent)			Stock Chemical	0 mL
METHNO3_00043	07/25/18	Macron, Lot 0000050049		(Purchased Reagent)			Stock Chemical	0 mL
METISA_00101	06/01/14	12/18/13	DI WATER, Lot NA	500 mL	METICSA_00020	50 mL	Aluminum	500 mg/L
							Calcium	500 mg/L
							Iron	200 mg/L
							Magnesium	500 mg/L
.METICSA_00020	11/01/14	INORG VENTURES, Lot F2-MEB454028		(Purchased Reagent)			Aluminum	5000 ug/mL
							Calcium	5000 ug/mL
							Iron	2000 ug/mL
							Magnesium	5000 ug/mL
METISB_00100	05/15/14	12/18/13	DI WATER, Lot NA	500 mL	METCALA_00014	2.5 mL	Aluminum	510 mg/L
							Arsenic	1 mg/L
							B	1 mg/L
							Barium	1 mg/L
							Be	0.5 mg/L
							Cadmium	0.5 mg/L
							Calcium	510 mg/L
							Chromium	1 mg/L
							Cobalt	1 mg/L
							Copper	1 mg/L
							Iron	210 mg/L
							Lead	1 mg/L
							Li	1 mg/L
							Magnesium	510 mg/L
							Manganese	1 mg/L
							Nickel	1 mg/L
							Potassium	10 mg/L
							Selenium	1 mg/L
							Sodium	10 mg/L
							Sr	0.5 mg/L
							V	1 mg/L
							Zinc	1 mg/L
					METCALB_00012	2.5 mL	Molybdenum	1 mg/L
							Sb	1 mg/L
							Si	1 mg/L
							Silver	0.5 mg/L
							Sn	1 mg/L

REAGENT TRACEABILITY SUMMARY

APPENDIX B (61 of 240)

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.METCALA_00014	10/21/14	ENVIRONMENTAL EXPRESS, Lot 1328919			(Purchased Reagent)	50 mL	Ti	1 mg/L
							Tl	1 mg/L
							Aluminum	510 mg/L
							Calcium	510 mg/L
							Iron	210 mg/L
							Magnesium	510 mg/L
.METCALB_00012	10/21/14	ENVIRONMENTAL EXPRESS, Lot 1328920			(Purchased Reagent)		Aluminum	2000 ug/mL
							Arsenic	200 ug/mL
							B	200 ug/mL
							Barium	200 ug/mL
							Be	100 ug/mL
							Cadmium	100 ug/mL
							Calcium	2000 ug/mL
.METICSA_00020	11/01/14	INORG VENTURES, Lot F2-MEB454028			(Purchased Reagent)		Chromium	200 ug/mL
							Cobalt	200 ug/mL
							Copper	200 ug/mL
							Iron	2000 ug/mL
							Lead	200 ug/mL
							Li	200 ug/mL
							Magnesium	2000 ug/mL
TDSILCS_00069	06/24/14	DI WATER, Lot N/A		2 L	WETDSODCHL_00003	3.6 g	Manganese	200 ug/mL
							Nickel	200 ug/mL
							Potassium	2000 ug/mL
							Selenium	200 ug/mL
							Sodium	2000 ug/mL
							Sr	100 ug/mL
							V	200 ug/mL
.WETDSODCHL_00003	03/11/15	Mallinckrodt, Lot J04609			(Purchased Reagent)		Zinc	200 ug/mL
							Molybdenum	200 ug/mL
							Sb	200 ug/mL
							Si	200 ug/mL
							Silver	100 ug/mL
							Sn	200 ug/mL
							Ti	200 ug/mL
VOALCGASPT_00040	12/30/13	12/23/13	Methanol, Lot V081313A	1 mL	VOARGASLCS_00001	25 uL	Tl	200 ug/mL
							Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VOARGASLCS_00001	02/28/15	RESTEK, Lot A093618			(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
VOALCSPT_00020	01/06/14	12/23/13	Methanol, Lot V081313A	1 mL	VOARKETONLCS_00001	10 uL	2-Butanone (MEK)	100 ug/mL
					VOARMegMixLcs_00001	25 uL	2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloroethene, Total	100 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
					VOARVALCS_00003	25 uL	Vinyl acetate	100 ug/mL
.VOARKETONLCS_00001	02/29/16	Restek, Lot A093472			(Purchased Reagent)		2-Butanone (MEK)	10000 ug/mL
.VOARMegMixLcs_00001	02/29/16	Restek, Lot A093733			(Purchased Reagent)		2-Hexanone	10000 ug/mL
							4-Methyl-2-pentanone (MIBK)	10000 ug/mL
							Acetone	10000 ug/mL
							1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

APPENDIX B (63 of 240)

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloroethene, Total	4000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							Benzene	2000 ug/mL
							Bromodichloromethane	2000 ug/mL
							Bromoform	2000 ug/mL
							Carbon disulfide	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL
							Chlorobenzene	2000 ug/mL
							Chlorobromomethane	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,2-Dichloroethene	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Dibromochloromethane	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							m-Xylene & p-Xylene	2000 ug/mL
							Methylene Chloride	2000 ug/mL
							o-Xylene	2000 ug/mL
							Styrene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							Trichloroethene	2000 ug/mL
							Xylenes, Total	4000 ug/mL
.VOARVALCS_00003	05/31/14	Restek, Lot A098982	(Purchased Reagent)	Vinyl acetate	4000 ug/mL			
VOARIST_00002	02/28/18	Restek, Lot A093504	(Purchased Reagent)	1,4-Dichlorobenzene-d4	250 ug/mL			
				1,4-Dioxane-d8	5000 ug/mL			
				Chlorobenzene-d5	250 ug/mL			
				Fluorobenzene	250 ug/mL			
VOASS50PPM_00147	01/06/14	12/23/13	Methanol, Lot V081313A	1 mL	VOARSS_00002	20 uL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene	50 ug/mL
							Dibromofluoromethane	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.VOARSS_00002	02/28/18	Restek, Lot A093505	(Purchased Reagent)	1,2-Dichloroethane-d4 (Surr)	2500 ug/mL			
				4-Bromofluorobenzene	2500 ug/mL			
				Dibromofluoromethane	2500 ug/mL			
				Toluene-d8 (Surr)	2500 ug/mL			
VOASTDGASPT_00037	12/09/13	12/02/13	Methanol, Lot V081313A	1 mL	VOARGAS_00001	25 uL	Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VOARGAS_00001	12/31/14	Restek, Lot A092242	(Purchased Reagent)	Bromomethane	2000 ug/mL			
				Butadiene	2000 ug/mL			

REAGENT TRACEABILITY SUMMARY

APPENDIX B (64 of 240)

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Dichlorofluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
VOASTDGASPT_00040	12/30/13	12/23/13	Methanol, Lot V081313A	1 mL	VOARGAS_00002	25 uL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VOARGAS_00002	02/28/15		RESTEK, Lot A093341		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
VOASTDPT_00020	12/09/13	11/25/13	Methanol, Lot V081313A	1 mL	VOAR2CEVE_00001	50 uL	2-Chloroethyl vinyl ether	100 ug/mL
					VOARAcrolein_00006	50 uL	Acrolein	250 ug/mL
					VOARADDOM_00002	25 uL	1,2,3-Trimethylbenzene	50 ug/mL
							1,3,5-Trichlorobenzene	50 ug/mL
							2-Chloro-1,3-butadiene	50 ug/mL
							2-Nitropropane	100 ug/mL
							Acetonitrile	500 ug/mL
							Benzyl chloride	50 ug/mL
							Ethanol	2500 ug/mL
							Ethyl acetate	100 ug/mL
							Ethyl acrylate	50 ug/mL
							Isopropyl alcohol	500 ug/mL
							Isopropyl ether	50 ug/mL
							Methacrylonitrile	500 ug/mL
							Methyl methacrylate	100 ug/mL
							n-Butyl acetate	50 ug/mL
							Propionitrile	500 ug/mL
							Tert-amyl methyl ether	50 ug/mL
							Tert-butyl ethyl ether	50 ug/mL
					VOARCYCHONE_00001	125 uL	Cyclohexanone	2500 ug/mL
					VOARKETON_00001	10 uL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VOARMegMix_00002	25 uL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

APPENDIX B (65 of 240)

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	250 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL

REAGENT TRACEABILITY SUMMARY

APPENDIX B (66 of 240)

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					n-Butylbenzene	50 ug/mL		
					n-Heptane	50 ug/mL		
					N-Propylbenzene	50 ug/mL		
					Naphthalene	50 ug/mL		
					o-Xylene	50 ug/mL		
					sec-Butylbenzene	50 ug/mL		
					Styrene	50 ug/mL		
					tert-Butylbenzene	50 ug/mL		
					Tetrachloroethene	50 ug/mL		
					Tetrahydrofuran	100 ug/mL		
					Toluene	50 ug/mL		
					trans-1,2-Dichloroethene	50 ug/mL		
					trans-1,3-Dichloropropene	50 ug/mL		
					trans-1,4-Dichloro-2-butene	50 ug/mL		
					Trichloroethene	50 ug/mL		
					VOARNR2_00001	25 uL	2-Methylnaphthalene	50 ug/mL
							Pentachloroethane	50 ug/mL
					VOARSS_00002	20 uL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene	50 ug/mL
							Dibromofluoromethane	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
					VOARVA_00001	25 uL	Vinyl acetate	100 ug/mL
.VOAR2CEVE_00001	12/31/15	Restek, Lot A092294			(Purchased Reagent)		2-Chloroethyl vinyl ether	2000 ug/mL
.VOARAcrolein_00006	01/31/14	Restek, Lot A098249			(Purchased Reagent)		Acrolein	5000 ug/mL
.VOARADDCOM_00002	08/31/14	Restek, Lot A093634			(Purchased Reagent)		1,2,3-Trimethylbenzene	2000 ug/mL
							1,3,5-Trichlorobenzene	2000 ug/mL
							2-Chloro-1,3-butadiene	2000 ug/mL
							2-Nitropropane	4000 ug/mL
							Acetonitrile	20000 ug/mL
							Benzyl chloride	2000 ug/mL
							Ethanol	100000 ug/mL
							Ethyl acetate	4000 ug/mL
							Ethyl acrylate	2000 ug/mL
							Isopropyl alcohol	20000 ug/mL
							Isopropyl ether	2000 ug/mL
							Methacrylonitrile	20000 ug/mL
							Methyl methacrylate	4000 ug/mL
							n-Butyl acetate	2000 ug/mL
							Propionitrile	20000 ug/mL
							Tert-amyl methyl ether	2000 ug/mL
							Tert-butyl ethyl ether	2000 ug/mL
.VOARCYCHONE_00001	12/31/15	Restek, Lot A092211			(Purchased Reagent)		Cyclohexanone	20000 ug/mL
.VOARKETON_00001	12/31/15	RESTEK, Lot A092220			(Purchased Reagent)		2-Butanone (MEK)	10000 ug/mL
							2-Hexanone	10000 ug/mL
							4-Methyl-2-pentanone (MIBK)	10000 ug/mL
							Acetone	10000 ug/mL
.VOARMegMix_00002	02/29/16	Restek, Lot A093581			(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2000 ug/mL
							1,1,1-Trichloroethane	2000 ug/mL

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					1,1,2,2-Tetrachloroethane	2000 ug/mL	1,1,2,2-Tetrachloroethane	2000 ug/mL
					1,1,2-Trichloro-1,2,2-trifluor oethane	2000 ug/mL	1,1,2-Trichloroethane	2000 ug/mL
					1,1-Dichloroethane	2000 ug/mL	1,1-Dichloroethene	2000 ug/mL
					1,1-Dichloropropene	2000 ug/mL	1,2,3-Trichlorobenzene	2000 ug/mL
					1,2,3-Trichloropropane	2000 ug/mL	1,2,4-Trichlorobenzene	2000 ug/mL
					1,2,4-Trimethylbenzene	2000 ug/mL	1,2-Dibromo-3-Chloropropane	2000 ug/mL
					1,2-Dichlorobenzene	2000 ug/mL	1,2-Dichloroethane	2000 ug/mL
					1,2-Dichloropropane	2000 ug/mL	1,3,5-Trimethylbenzene	2000 ug/mL
					1,3-Dichlorobenzene	2000 ug/mL	1,3-Dichloropropane	2000 ug/mL
					1,4-Dichlorobenzene	2000 ug/mL	1,4-Dioxane	40000 ug/mL
					2,2-Dichloropropane	2000 ug/mL	2-Chlorotoluene	2000 ug/mL
					2-Methyl-2-propanol	20000 ug/mL	3-Chloro-1-propene	2000 ug/mL
					4-Chlorotoluene	2000 ug/mL	4-Isopropyltoluene	2000 ug/mL
					Acrylonitrile	20000 ug/mL	Benzene	2000 ug/mL
					Bromobenzene	2000 ug/mL	Bromodichloromethane	2000 ug/mL
					Bromoform	2000 ug/mL	Carbon disulfide	2000 ug/mL
					Carbon tetrachloride	2000 ug/mL	Chlorobenzene	2000 ug/mL
					Chlorobromomethane	2000 ug/mL	Chloroform	2000 ug/mL
					Cis-1,2-Dichloroethene	2000 ug/mL	Cis-1,3-Dichloropropene	2000 ug/mL
					Cyclohexane	2000 ug/mL	Dibromochloromethane	2000 ug/mL
					Dibromomethane	2000 ug/mL	Ethyl ether	2000 ug/mL
					Ethyl methacrylate	2000 ug/mL	Ethylbenzene	2000 ug/mL
					Ethylene Dibromide	2000 ug/mL	Hexachlorobutadiene	2000 ug/mL
					Hexane	2000 ug/mL	Iodomethane	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

APPENDIX B (68 of 240)

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isobutyl alcohol	50000 ug/mL
							Isopropylbenzene	2000 ug/mL
							m-Xylene & p-Xylene	2000 ug/mL
							Methyl acetate	10000 ug/mL
							Methyl tert-butyl ether	2000 ug/mL
							Methylcyclohexane	2000 ug/mL
							Methylene Chloride	2000 ug/mL
							n-Butylbenzene	2000 ug/mL
							n-Heptane	2000 ug/mL
							N-Propylbenzene	2000 ug/mL
							Naphthalene	2000 ug/mL
							o-Xylene	2000 ug/mL
							sec-Butylbenzene	2000 ug/mL
							Styrene	2000 ug/mL
							tert-Butylbenzene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Tetrahydrofuran	4000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							trans-1,4-Dichloro-2-butene	2000 ug/mL
							Trichloroethene	2000 ug/mL
.VOARNR2_00001	02/28/15	Restek, Lot A093359			(Purchased Reagent)		2-Methylnaphthalene	2000 ug/mL
.VOARSS_00002	02/28/18	Restek, Lot A093505			(Purchased Reagent)		Pentachloroethane	2000 ug/mL
.VOARVA_00001	06/30/14	Restek, Lot A092212			(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
VOASTDPT_00022	01/06/14	12/23/13	Methanol, Lot V081313A	1 mL	VOARKETON_00001	10 uL	4-Bromofluorobenzene	2500 ug/mL
					VOARMegMix_00002	25 uL	Dibromofluoromethane	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
							Vinyl acetate	4000 ug/mL
							2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloroethene, Total	100 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

APPENDIX B (69 of 240)

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorobromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
					VOARSS_00002	20 uL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene	50 ug/mL
							Dibromofluoromethane	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
					VOARVA_00001	25 uL	Vinyl acetate	100 ug/mL
.VOARKETON_00001	12/31/15	RESTEK, Lot A092220			(Purchased Reagent)		2-Butanone (MEK)	10000 ug/mL
							2-Hexanone	10000 ug/mL
							4-Methyl-2-pentanone (MIBK)	10000 ug/mL
							Acetone	10000 ug/mL
.VOARMegMix_00002	02/29/16	Restek, Lot A093581			(Purchased Reagent)		1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloroethene, Total	4000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							Benzene	2000 ug/mL
							Bromodichloromethane	2000 ug/mL
							Bromoform	2000 ug/mL
							Carbon disulfide	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL
							Chlorobenzene	2000 ug/mL
							Chlorobromomethane	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,2-Dichloroethene	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Dibromochloromethane	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							m-Xylene & p-Xylene	2000 ug/mL
							Methylene Chloride	2000 ug/mL
							o-Xylene	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

APPENDIX B (70 of 240)

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Styrene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							Trichloroethene	2000 ug/mL
							Xylenes, Total	4000 ug/mL
.VOARSS_00002	02/28/18	Restek, Lot A093505		(Purchased Reagent)			1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene	2500 ug/mL
							Dibromofluoromethane	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
.VOARVA_00001	06/30/14	Restek, Lot A092212		(Purchased Reagent)			Vinyl acetate	4000 ug/mL
WETSICCNO3_00010	02/01/14	INORGANIC VENTURES, Lot F2-NOXO2101		(Purchased Reagent)			Nitrate Nitrite as N	1000 mg/L
WETSICINO3_00009	02/28/14	ACCUSTANDARD, Lot 212025030		(Purchased Reagent)			Nitrate Nitrite as N	1000 mg/L
WETSNA2CO3_00017	03/31/14	RICCA, Lot 1303A38		(Purchased Reagent)			Alkalinity	2500 N
							Bicarbonate Alkalinity as CaCO3	2500 N
							Carbonate Alkalinity as CaCO3	2500 N
							Hydroxide Alkalinity	2500 N
							Phenolphthalein Alkalinity	2500 N
WETSNA2CO3L_00020	03/30/14	Aqua Solutions, Lot 3060701		(Purchased Reagent)			Alkalinity	1000 mg/L

8260B LL

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

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Matrix: Water Level: LowGC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
San Juan-MW08-12192013	600-84503-1	110	117	110	119
San Juan-MW09-12192013	600-84503-2	104	111	107	117
San Juan-MW09-12192013 DL	600-84503-2 DL	97	99	100	110
San Juan-MW04-12192013	600-84503-3	110	115	109	117
San Juan-MW02-12192013	600-84503-4	101	105	96	105
San Juan-EquBlank04-12 192013	600-84503-5	106	110	111	116
San Juan-MW06-12192013	600-84503-6	103	109	98	105
San Juan-MD03-12192013	600-84503-7	103	110	98	105
TB03-12192013	600-84503-9	106	108	116	117
	MB 600-123637/4	109	123	97	105
	MB 600-123757/3	103	105	108	114
	LCS 600-123637/3	112	117	97	110
	LCS 600-123757/4	113	107	113	123
San Juan-MW09-12192013 MS MS DL	600-84503-2 MS DL	106	103	99	111
San Juan-MW09-12192013 MSD MSD DL	600-84503-2 MSD DL	105	102	102	113

QC LIMITS

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 II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Matrix: Water Level: Low Lab File ID: C35802.D

Lab ID: LCS 600-123637/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acetone	20.0	23.83	119	28-152	
Benzene	10.0	9.962	100	69-131	
Chlorobromomethane	10.0	10.37	104	60-141	
Bromoform	10.0	11.41	114	39-149	
Bromomethane	10.0	7.508	75	52-146	
2-Butanone (MEK)	20.0	22.54	113	59-133	
Carbon disulfide	10.0	10.02	100	32-177	
Carbon tetrachloride	10.0	9.981	100	59-147	
Dibromochloromethane	10.0	10.65	106	58-132	
Chlorobenzene	10.0	9.377	94	60-136	
Chloroethane	10.0	9.030	90	56-144	
Chloroform	10.0	10.36	104	69-128	
Chloromethane	10.0	4.759	48	32-151	
1,1-Dichloroethane	10.0	9.982	100	66-126	
1,2-Dichloroethane	10.0	10.84	108	66-140	
1,1-Dichloroethene	10.0	9.271	93	59-145	
trans-1,2-Dichloroethene	10.0	9.027	90	70-132	
1,2-Dichloropropane	10.0	10.47	105	72-125	
cis-1,3-Dichloropropene	10.0	9.983	100	60-135	
trans-1,3-Dichloropropene	10.0	10.03	100	63-133	
Ethylbenzene	10.0	8.975	90	68-128	
2-Hexanone	20.0	21.69	108	51-130	
Methylene Chloride	10.0	11.06	111	62-134	
4-Methyl-2-pentanone (MIBK)	20.0	21.87	109	56-142	
Styrene	10.0	9.298	93	68-133	
1,1,2,2-Tetrachloroethane	10.0	11.68	117	68-134	
Tetrachloroethene	10.0	9.005	90	61-142	
Toluene	10.0	9.259	93	67-130	
1,1,1-Trichloroethane	10.0	9.877	99	65-142	
1,1,2-Trichloroethane	10.0	10.57	106	68-130	
Trichloroethene	10.0	9.362	94	68-130	
Vinyl acetate	20.0	18.52	93	58-175	
Vinyl chloride	10.0	6.599	66	47-146	
o-Xylene	10.0	9.380	94	68-134	
m-Xylene & p-Xylene	10.0	8.764	88	67-132	
Xylenes, Total	20.0	18.14	91	68-132	
cis-1,2-Dichloroethene	10.0	10.10	101	69-129	
Bromodichloromethane	10.0	11.12	111	73-130	
1,2-Dichloroethene, Total	20.0	19.13	96	65-127	

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.: 600-84503-1

SDG No.:

Matrix: Water Level: Low Lab File ID: C36006.D

Lab ID: LCS 600-123757/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acetone	20.0	14.84	74	28-152	
Benzene	10.0	9.785	98	69-131	
Chlorobromomethane	10.0	8.811	88	60-141	
Bromoform	10.0	9.204	92	39-149	
Bromomethane	10.0	9.261	93	52-146	
2-Butanone (MEK)	20.0	16.94	85	59-133	
Carbon disulfide	10.0	10.20	102	32-177	
Carbon tetrachloride	10.0	10.40	104	59-147	
Dibromochloromethane	10.0	8.745	87	58-132	
Chlorobenzene	10.0	9.337	93	60-136	
Chloroethane	10.0	11.38	114	56-144	
Chloroform	10.0	9.577	96	69-128	
Chloromethane	10.0	10.05	100	32-151	
1,1-Dichloroethane	10.0	9.890	99	66-126	
1,2-Dichloroethane	10.0	8.853	89	66-140	
1,1-Dichloroethene	10.0	9.511	95	59-145	
trans-1,2-Dichloroethene	10.0	9.548	95	70-132	
1,2-Dichloropropane	10.0	9.152	92	72-125	
cis-1,3-Dichloropropene	10.0	8.828	88	60-135	
trans-1,3-Dichloropropene	10.0	8.456	85	63-133	
Ethylbenzene	10.0	9.803	98	68-128	
2-Hexanone	20.0	13.54	68	51-130	
Methylene Chloride	10.0	11.81	118	62-134	
4-Methyl-2-pentanone (MIBK)	20.0	14.08	70	56-142	
Styrene	10.0	8.910	89	68-133	
1,1,2,2-Tetrachloroethane	10.0	7.912	79	68-134	
Tetrachloroethene	10.0	10.07	101	61-142	
Toluene	10.0	9.860	99	67-130	
1,1,1-Trichloroethane	10.0	9.970	100	65-142	
1,1,2-Trichloroethane	10.0	8.456	85	68-130	
Trichloroethene	10.0	9.568	96	68-130	
Vinyl acetate	20.0	12.97	65	58-175	
Vinyl chloride	10.0	10.88	109	47-146	
o-Xylene	10.0	9.484	95	68-134	
m-Xylene & p-Xylene	10.0	9.517	95	67-132	
Xylenes, Total	20.0	19.00	95	68-132	
cis-1,2-Dichloroethene	10.0	9.576	96	69-129	
Bromodichloromethane	10.0	9.232	92	73-130	
1,2-Dichloroethene, Total	20.0	19.12	96	65-127	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Matrix: Water Level: Low Lab File ID: C36009.D

Lab ID: 600-84503-2 MS DL Client ID: San Juan-MW09-12192013 MS MS DL

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Acetone	200	9.90 U	182.4	91	60-140	
Benzene	100	186	272.4	86	65-125	
Chlorobromomethane	100	1.90 J	97.54	96	60-140	
Bromoform	100	3.72 J	105.8	102	60-140	
Bromomethane	100	2.50 U	89.87	90	60-140	
2-Butanone (MEK)	200	7.60 U	202.8	101	60-140	
Carbon disulfide	100	2.40 U	106.2	106	60-140	
Carbon tetrachloride	100	1.50 U	105.9	106	60-140	
Dibromochloromethane	100	2.09 J	97.83	96	60-140	
Chlorobenzene	100	1.63 J	96.87	95	72-122	
Chloroethane	100	0.800 U	99.12	99	60-140	
Chloroform	100	1.30 U	103.6	104	60-140	
Chloromethane	100	1.80 U	92.92	93	60-140	
1,1-Dichloroethane	100	1.10 U	105.4	105	60-140	
1,2-Dichloroethane	100	2.15 J	98.12	96	60-140	
1,1-Dichloroethene	100	1.90 U	101.1	101	22-143	
trans-1,2-Dichloroethene	100	0.900 U	99.40	99	60-140	
1,2-Dichloropropane	100	1.60 U	101.4	101	60-140	
cis-1,3-Dichloropropene	100	1.80 U	96.51	97	60-140	
trans-1,3-Dichloropropene	100	2.10 U	93.36	93	60-140	
Ethylbenzene	100	57.5	148.8	91	60-140	
2-Hexanone	200	3.50 U	174.0	87	60-140	
Methylene Chloride	100	5.09 J	119.5	114	60-140	
4-Methyl-2-pentanone (MIBK)	200	4.50 U	183.8	92	60-140	
Styrene	100	1.71 J	94.93	93	60-140	
1,1,2,2-Tetrachloroethane	100	2.20 U	95.61	96	60-140	
Tetrachloroethene	100	1.30 U	100.8	101	60-140	
Toluene	100	1.50 U	100.1	100	76-125	
1,1,1-Trichloroethane	100	1.50 U	104.8	105	60-140	
1,1,2-Trichloroethane	100	2.80 U	95.45	95	60-140	
Trichloroethene	100	1.80 U	100.5	100	56-118	
Vinyl acetate	200	2.10 U	158.3	79	60-140	
Vinyl chloride	100	1.10 U	98.04	98	60-140	
o-Xylene	100	1.44 J	98.31	97	60-140	
m-Xylene & p-Xylene	100	15.7	111.3	96	60-140	
Xylenes, Total	200	17.1	209.6	96	60-140	
cis-1,2-Dichloroethene	100	1.01 J	102.8	102	60-140	
Bromodichloromethane	100	1.60 U	104.4	104	60-140	
1,2-Dichloroethene, Total	200	3.00 U	202.2	101	60-140	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Matrix: Water Level: Low Lab File ID: C36010.D

Lab ID: 600-84503-2 MSD DL Client ID: San Juan-MW09-12192013 MSD MSD DL

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Acetone	200	173.1	87	5	30	60-140	
Benzene	100	256.3	70	6	30	65-125	
Chlorobromomethane	100	92.35	90	5	30	60-140	
Bromoform	100	96.85	93	9	30	60-140	
Bromomethane	100	102.5	102	13	30	60-140	
2-Butanone (MEK)	200	183.3	92	10	30	60-140	
Carbon disulfide	100	101.3	101	5	30	60-140	
Carbon tetrachloride	100	100.9	101	5	30	60-140	
Dibromochloromethane	100	92.72	91	5	30	60-140	
Chlorobenzene	100	92.25	91	5	30	72-122	
Chloroethane	100	109.3	109	10	30	60-140	
Chloroform	100	97.36	97	6	30	60-140	
Chloromethane	100	102.5	103	10	30	60-140	
1,1-Dichloroethane	100	98.81	99	6	30	60-140	
1,2-Dichloroethane	100	94.90	93	3	30	60-140	
1,1-Dichloroethene	100	95.41	95	6	30	22-143	
trans-1,2-Dichloroethene	100	95.29	95	4	30	60-140	
1,2-Dichloropropane	100	94.47	94	7	30	60-140	
cis-1,3-Dichloropropene	100	90.80	91	6	30	60-140	
trans-1,3-Dichloropropene	100	88.04	88	6	30	60-140	
Ethylbenzene	100	140.9	83	5	30	60-140	
2-Hexanone	200	158.6	79	9	30	60-140	
Methylene Chloride	100	115.0	110	4	30	60-140	
4-Methyl-2-pentanone (MIBK)	200	165.8	83	10	30	60-140	
Styrene	100	90.99	89	4	30	60-140	
1,1,2,2-Tetrachloroethane	100	94.26	94	1	30	60-140	
Tetrachloroethene	100	96.93	97	4	30	60-140	
Toluene	100	95.91	96	4	30	76-125	
1,1,1-Trichloroethane	100	99.96	100	5	30	60-140	
1,1,2-Trichloroethane	100	88.33	88	8	30	60-140	
Trichloroethene	100	94.42	94	6	30	56-118	
Vinyl acetate	200	145.8	73	8	30	60-140	
Vinyl chloride	100	107.8	108	10	30	60-140	
o-Xylene	100	94.47	93	4	30	60-140	
m-Xylene & p-Xylene	100	106.1	90	5	30	60-140	
Xylenes, Total	200	200.6	92	4	30	60-140	
cis-1,2-Dichloroethene	100	97.34	96	5	30	60-140	
Bromodichloromethane	100	96.66	97	8	30	60-140	
1,2-Dichloroethene, Total	200	192.6	96	5	30	60-140	

Column to be used to flag recovery and RPD values

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Lab File ID: C35805.DLab Sample ID: MB 600-123637/4Matrix: WaterHeated Purge: (Y/N) NInstrument ID: VOAMS01Date Analyzed: 12/24/2013 13:18GC Column: DB-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
TB03-12192013	LCS 600-123637/3	C35802.D	12/24/2013 12:01
San Juan-EquBlank04-12192013	600-84503-9	C35817.D	12/24/2013 18:24
San Juan-MW08-12192013	600-84503-5	C35822.D	12/24/2013 20:33
San Juan-MW04-12192013	600-84503-1	C35823.D	12/24/2013 20:58
	600-84503-3	C35824.D	12/24/2013 21:24

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Houston Job No.: 600-84503-1
SDG No.: _____
Lab File ID: C36004.D Lab Sample ID: MB 600-123757/3
Matrix: Water Heated Purge: (Y/N) N
Instrument ID: VOAMS01 Date Analyzed: 12/26/2013 12:24
GC Column: DB-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 600-123757/4	C36006.D	12/26/2013 13:30
San Juan-MW09-12192013	600-84503-2	C36007.D	12/26/2013 13:54
San Juan-MW09-12192013 MS MS DL	600-84503-2 MS DL	C36009.D	12/26/2013 14:41
San Juan-MW09-12192013 MSD MSD DL	600-84503-2 MSD DL	C36010.D	12/26/2013 15:05
San Juan-MW09-12192013 DL	600-84503-2 DL	C36011.D	12/26/2013 15:30
San Juan-MW06-12192013	600-84503-6	C36014.D	12/26/2013 16:47
San Juan-MD03-12192013	600-84503-7	C36015.D	12/26/2013 17:13
San Juan-MW02-12192013	600-84503-4	C36016.D	12/26/2013 17:39

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

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Lab File ID: C33700.D BFB Injection Date: 12/03/2013Instrument ID: VOAMS01 BFB Injection Time: 11:03Analysis Batch No.: 122189

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	17.1
75	30.0 - 60.0 % of mass 95	47.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	7.3
173	Less than 2.0 % of mass 174	0.0 (0.0)1
174	50.0 - 120.00 % of mass 95	85.7
175	5.0 - 9.0 % of mass 174	6.3 (7.3)1
176	95.0 - 101.0 % of mass 174	83.2 (97.0)1
177	5.0 - 9.0 % of mass 176	5.8 (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
	IC 600-122189/2	C33702.D	12/03/2013	12:01
	IC 600-122189/3	C33703.D	12/03/2013	12:26
	IC 600-122189/4	C33704.D	12/03/2013	12:52
	ICIS 600-122189/5	C33705.D	12/03/2013	13:16
	IC 600-122189/6	C33706.D	12/03/2013	13:40
	IC 600-122189/7	C33707.D	12/03/2013	14:05

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

Lab Name: TestAmerica HoustonJob No.: 600-84503-1SDG No.: Lab File ID: C35800.D BFB Injection Date: 12/24/2013Instrument ID: VOAMS01 BFB Injection Time: 10:10Analysis Batch No.: 123637

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	17.4
75	30.0 - 60.0 % of mass 95	49.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	7.2
173	Less than 2.0 % of mass 174	0.4 (0.4)1
174	50.0 - 120.00 % of mass 95	90.0
175	5.0 - 9.0 % of mass 174	6.9 (7.6)1
176	95.0 - 101.0 % of mass 174	85.5 (95.1)1
177	5.0 - 9.0 % of mass 176	6.2 (7.2)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 600-123637/2	C35801.D	12/24/2013	11:25
	LCS 600-123637/3	C35802.D	12/24/2013	12:01
	MB 600-123637/4	C35805.D	12/24/2013	13:18
TB03-12192013	600-84503-9	C35817.D	12/24/2013	18:24
San Juan-EquBlank04-12192013	600-84503-5	C35822.D	12/24/2013	20:33
San Juan-MW08-12192013	600-84503-1	C35823.D	12/24/2013	20:58
San Juan-MW04-12192013	600-84503-3	C35824.D	12/24/2013	21:24

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

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Lab File ID: C36000.D BFB Injection Date: 12/26/2013Instrument ID: VOAMS01 BFB Injection Time: 09:43Analysis Batch No.: 123757

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	16.6
75	30.0 - 60.0 % of mass 95	48.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	7.7
173	Less than 2.0 % of mass 174	0.3 (0.3)1
174	50.0 - 120.00 % of mass 95	90.0
175	5.0 - 9.0 % of mass 174	7.1 (7.9)1
176	95.0 - 101.0 % of mass 174	88.1 (97.9)1
177	5.0 - 9.0 % of mass 176	6.3 (7.2)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 600-123757/2	C36001.D	12/26/2013	10:56
	MB 600-123757/3	C36004.D	12/26/2013	12:24
	LCS 600-123757/4	C36006.D	12/26/2013	13:30
San Juan-MW09-12192013	600-84503-2	C36007.D	12/26/2013	13:54
San Juan-MW09-12192013	600-84503-2 MS DL	C36009.D	12/26/2013	14:41
San Juan-MW09-12192013	600-84503-2 MSD DL	C36010.D	12/26/2013	15:05
San Juan-MW09-12192013	600-84503-2 DL	C36011.D	12/26/2013	15:30
San Juan-MW06-12192013	600-84503-6	C36014.D	12/26/2013	16:47
San Juan-MD03-12192013	600-84503-7	C36015.D	12/26/2013	17:13
San Juan-MW02-12192013	600-84503-4	C36016.D	12/26/2013	17:39

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

Lab Name: TestAmerica Houston Job No.: 600-84503-1
SDG No.: _____
Sample No.: CCVIS 600-123637/2 Date Analyzed: 12/24/2013 11:25
Instrument ID: VOAMS01 GC Column: DB-624 ID: 0.18 (mm)
Lab File ID (Standard): C35801.D Heated Purge: (Y/N) N
Calibration ID: 2640

	FB		DXE		CBZ	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD	570506	8.66	9957	9.06	236866	11.66
UPPER LIMIT	1141012	9.16	19914	9.56	473732	12.16
LOWER LIMIT	285253	8.16	4979	8.56	118433	11.16
LAB SAMPLE ID	CLIENT SAMPLE ID					
LCS 600-123637/3		624736	8.67	8434	9.07	252849
MB 600-123637/4		492004	8.68	6964	9.07	193300
600-84503-9	TB03-12192013	574747	8.67	6151	9.07	211693
600-84503-5	San Juan-EquBlank04-12192 013	562480	8.67	7079	9.07	210511
600-84503-1	San Juan-MW08-12192013	571022	8.67	7615	9.07	215986
600-84503-3	San Juan-MW04-12192013	555313	8.67	7827	9.07	217412

FB = Fluorobenzene

DXE = 1,4-Dioxane-d8

CBZ = Chlorobenzene-d5

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

RT Limit = ± 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.: 600-84503-1
SDG No.: _____
Sample No.: CCVIS 600-123637/2 Date Analyzed: 12/24/2013 11:25
Instrument ID: VOAMS01 GC Column: DB-624 ID: 0.18 (mm)
Lab File ID (Standard): C35801.D Heated Purge: (Y/N) N
Calibration ID: 2640

	DCB		AREA #	RT #	AREA #	RT #	AREA #	RT #
	AREA #	RT #						
12/24 HOUR STD	266884	14.23						
UPPER LIMIT	533768	14.73						
LOWER LIMIT	133442	13.73						
LAB SAMPLE ID	CLIENT SAMPLE ID							
LCS 600-123637/3		280479	14.23					
MB 600-123637/4		198042	14.23					
600-84503-9	TB03-12192013	224332	14.23					
600-84503-5	San Juan-EquBlank04-12192 013	223865	14.23					
600-84503-1	San Juan-MW08-12192013	236011	14.23					
600-84503-3	San Juan-MW04-12192013	228060	14.23					

DCB = 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 HoustonJob No.: 600-84503-1

SDG No.: _____

Sample No.: CCVIS 600-123757/2 Date Analyzed: 12/26/2013 10:56Instrument ID: VOAMS01 GC Column: DB-624 ID: 0.18 (mm)Lab File ID (Standard): C36001.D Heated Purge: (Y/N) NCalibration ID: 2640

	FB		DXE		CBZ	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD	641382	8.67	9222	9.06	246443	11.66
UPPER LIMIT	1282764	9.17	18444	9.56	492886	12.16
LOWER LIMIT	320691	8.17	4611	8.56	123222	11.16
LAB SAMPLE ID	CLIENT SAMPLE ID					
MB 600-123757/3		614809	8.67	7117	9.06	229146
LCS 600-123757/4		616409	8.67	8361	9.07	234349
600-84503-2	San Juan-MW09-12192013	638277	8.68	7713	9.07	239442
600-84503-2 MS DL	San Juan-MW09-12192013 MS DL	632439	8.67	8318	9.07	251408
600-84503-2 MSD DL	San Juan-MW09-12192013 MSD MSD DL	635704	8.67	8804	9.07	247620
600-84503-2 DL	San Juan-MW09-12192013 DL	590426	8.67	6879	9.07	221389
600-84503-6	San Juan-MW06-12192013	575474	8.67	7591	9.07	224175
600-84503-7	San Juan-MD03-12192013	543333	8.67	7107	9.06	213474
600-84503-4	San Juan-MW02-12192013	547383	8.67	7055	9.07	214583

FB = Fluorobenzene

DXE = 1,4-Dioxane-d8

CBZ = Chlorobenzene-d5

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

RT Limit = ± 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.: 600-84503-1
SDG No.: _____
Sample No.: CCVIS 600-123757/2 Date Analyzed: 12/26/2013 10:56
Instrument ID: VOAMS01 GC Column: DB-624 ID: 0.18 (mm)
Lab File ID (Standard): C36001.D Heated Purge: (Y/N) N
Calibration ID: 2640

	DCB		AREA #	RT #	AREA #	RT #	AREA #	RT #
	AREA #	RT #						
12/24 HOUR STD	258837	14.23						
UPPER LIMIT	517674	14.73						
LOWER LIMIT	129419	13.73						
LAB SAMPLE ID	CLIENT SAMPLE ID							
MB 600-123757/3		231072	14.23					
LCS 600-123757/4		245307	14.23					
600-84503-2	San Juan-MW09-12192013	263377	14.23					
600-84503-2 MS DL	San Juan-MW09-12192013 MS MS DL	261729	14.23					
600-84503-2 MSD DL	San Juan-MW09-12192013 MSD MSD DL	261899	14.23					
600-84503-2 DL	San Juan-MW09-12192013 DL	228075	14.23					
600-84503-6	San Juan-MW06-12192013	242270	14.23					
600-84503-7	San Juan-MD03-12192013	227502	14.23					
600-84503-4	San Juan-MW02-12192013	219222	14.23					

DCB = 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 HoustonJob No.: 600-84503-1

SDG No.: _____

Client Sample ID: San Juan-MW08-12192013Lab Sample ID: 600-84503-1Matrix: WaterLab File ID: C35823.DAnalysis Method: 8260BDate Collected: 12/19/2013 11:20Sample wt/vol: 20 (mL)Date Analyzed: 12/24/2013 20:58

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: _____

Level: (low/med) LowAnalysis Batch No.: 123637Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	6.60		5.00	0.990
71-43-2	Benzene	2.81		1.00	0.0800
74-97-5	Chlorobromomethane	0.180	U	1.00	0.180
75-25-2	Bromoform	0.190	U	1.00	0.190
74-83-9	Bromomethane	0.250	U	2.00	0.250
78-93-3	2-Butanone (MEK)	0.760	U	2.00	0.760
75-15-0	Carbon disulfide	0.240	U	2.00	0.240
56-23-5	Carbon tetrachloride	0.150	U	1.00	0.150
124-48-1	Dibromochloromethane	0.150	U	1.00	0.150
108-90-7	Chlorobenzene	0.120	U	1.00	0.120
75-00-3	Chloroethane	0.0800	U	2.00	0.0800
67-66-3	Chloroform	0.130	U	1.00	0.130
74-87-3	Chloromethane	0.180	U	2.00	0.180
75-34-3	1,1-Dichloroethane	0.110	U	1.00	0.110
107-06-2	1,2-Dichloroethane	0.140	U	1.00	0.140
75-35-4	1,1-Dichloroethene	0.190	U	1.00	0.190
156-60-5	trans-1,2-Dichloroethene	0.0900	U	1.00	0.0900
78-87-5	1,2-Dichloropropane	0.160	U	1.00	0.160
10061-01-5	cis-1,3-Dichloropropene	0.180	U	1.00	0.180
10061-02-6	trans-1,3-Dichloropropene	0.210	U	1.00	0.210
100-41-4	Ethylbenzene	0.110	U	1.00	0.110
591-78-6	2-Hexanone	0.350	U	2.00	0.350
75-09-2	Methylene Chloride	0.150	U	5.00	0.150
108-10-1	4-Methyl-2-pentanone (MIBK)	0.450	U	2.00	0.450
100-42-5	Styrene	0.0700	U	1.00	0.0700
79-34-5	1,1,2,2-Tetrachloroethane	0.220	U	1.00	0.220
127-18-4	Tetrachloroethene	0.130	U	1.00	0.130
108-88-3	Toluene	0.150	U	1.00	0.150
71-55-6	1,1,1-Trichloroethane	0.150	U	1.00	0.150
79-00-5	1,1,2-Trichloroethane	0.280	U	1.00	0.280
79-01-6	Trichloroethene	0.180	U	1.00	0.180
108-05-4	Vinyl acetate	0.210	U	2.00	0.210
75-01-4	Vinyl chloride	0.110	U	2.00	0.110
95-47-6	o-Xylene	0.120	U	1.00	0.120
179601-23-1	m-Xylene & p-Xylene	0.170	U	1.00	0.170
1330-20-7	Xylenes, Total	0.260	U	1.00	0.260

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston Job No.: 600-84503-1
SDG No.: _____
Client Sample ID: San Juan-MW08-12192013 Lab Sample ID: 600-84503-1
Matrix: Water Lab File ID: C35823.D
Analysis Method: 8260B Date Collected: 12/19/2013 11:20
Sample wt/vol: 20 (mL) Date Analyzed: 12/24/2013 20:58
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 123637 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-59-2	cis-1,2-Dichloroethene	0.0600	U	1.00	0.0600
75-27-4	Bromodichloromethane	0.160	U	1.00	0.160
540-59-0	1,2-Dichloroethene, Total	0.300	U	1.00	0.300

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	110		70-130
1868-53-7	Dibromofluoromethane	110		62-130
460-00-4	4-Bromofluorobenzene	119		67-139
17060-07-0	1,2-Dichloroethane-d4 (Surr)	117		50-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Client Sample ID: San Juan-MW09-12192013 Lab Sample ID: 600-84503-2Matrix: Water Lab File ID: C36007.DAnalysis Method: 8260B Date Collected: 12/19/2013 12:35Sample wt/vol: 20 (mL) Date Analyzed: 12/26/2013 13:54Soil Aliquot Vol: _____ Dilution Factor: 1Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)% Moisture: _____ Level: (low/med) LowAnalysis Batch No.: 123757 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	0.990	U	5.00	0.990
74-97-5	Chlorobromomethane	0.180	U	1.00	0.180
75-25-2	Bromoform	0.318	J	1.00	0.190
74-83-9	Bromomethane	0.250	U	2.00	0.250
78-93-3	2-Butanone (MEK)	0.760	U	2.00	0.760
75-15-0	Carbon disulfide	0.240	U	2.00	0.240
56-23-5	Carbon tetrachloride	0.150	U	1.00	0.150
124-48-1	Dibromochloromethane	0.209	J	1.00	0.150
108-90-7	Chlorobenzene	0.164	J	1.00	0.120
75-00-3	Chloroethane	0.0800	U	2.00	0.0800
67-66-3	Chloroform	0.130	U	1.00	0.130
74-87-3	Chloromethane	0.180	U	2.00	0.180
75-34-3	1,1-Dichloroethane	0.110	U	1.00	0.110
107-06-2	1,2-Dichloroethane	0.227	J	1.00	0.140
75-35-4	1,1-Dichloroethene	0.190	U	1.00	0.190
156-60-5	trans-1,2-Dichloroethene	0.0900	U	1.00	0.0900
78-87-5	1,2-Dichloropropane	0.160	U	1.00	0.160
10061-01-5	cis-1,3-Dichloropropene	0.180	U	1.00	0.180
10061-02-6	trans-1,3-Dichloropropene	0.210	U	1.00	0.210
591-78-6	2-Hexanone	0.350	U	2.00	0.350
75-09-2	Methylene Chloride	0.150	U	5.00	0.150
108-10-1	4-Methyl-2-pentanone (MIBK)	0.450	U	2.00	0.450
100-42-5	Styrene	0.185	J	1.00	0.0700
79-34-5	1,1,2,2-Tetrachloroethane	0.220	U	1.00	0.220
127-18-4	Tetrachloroethene	0.130	U	1.00	0.130
108-88-3	Toluene	0.246	J	1.00	0.150
71-55-6	1,1,1-Trichloroethane	0.150	U	1.00	0.150
79-00-5	1,1,2-Trichloroethane	0.280	U	1.00	0.280
79-01-6	Trichloroethene	0.180	U	1.00	0.180
108-05-4	Vinyl acetate	0.210	U	2.00	0.210
75-01-4	Vinyl chloride	0.110	U	2.00	0.110
95-47-6	o-Xylene	0.242	J	1.00	0.120
179601-23-1	m-Xylene & p-Xylene	15.0		1.00	0.170
1330-20-7	Xylenes, Total	15.2		1.00	0.260
156-59-2	cis-1,2-Dichloroethene	0.106	J	1.00	0.0600
75-27-4	Bromodichloromethane	0.160	U	1.00	0.160

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston Job No.: 600-84503-1

SDG No.: _____

Client Sample ID: San Juan-MW09-12192013 Lab Sample ID: 600-84503-2

Matrix: Water Lab File ID: C36007.D

Analysis Method: 8260B Date Collected: 12/19/2013 12:35

Sample wt/vol: 20 (mL) Date Analyzed: 12/26/2013 13:54

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)

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

Analysis Batch No.: 123757 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
540-59-0	1,2-Dichloroethene, Total	0.300	U	1.00	0.300

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	107		70-130
1868-53-7	Dibromofluoromethane	104		62-130
460-00-4	4-Bromofluorobenzene	117		67-139
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		50-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston Job No.: 600-84503-1

SDG No.: _____

Client Sample ID: San Juan-MW09-12192013 DL Lab Sample ID: 600-84503-2 DL

Matrix: Water Lab File ID: C36011.D

Analysis Method: 8260B Date Collected: 12/19/2013 12:35

Sample wt/vol: 20 (mL) Date Analyzed: 12/26/2013 15:30

Soil Aliquot Vol: _____ Dilution Factor: 10

Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)

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

Analysis Batch No.: 123757 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	186		10.0	0.800
100-41-4	Ethylbenzene	57.5		10.0	1.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	100		70-130
1868-53-7	Dibromofluoromethane	97		62-130
460-00-4	4-Bromofluorobenzene	110		67-139
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		50-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Client Sample ID: San Juan-MW04-12192013 Lab Sample ID: 600-84503-3Matrix: Water Lab File ID: C35824.DAnalysis Method: 8260B Date Collected: 12/19/2013 13:35Sample wt/vol: 20 (mL) Date Analyzed: 12/24/2013 21:24Soil Aliquot Vol: _____ Dilution Factor: 1Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)% Moisture: _____ Level: (low/med) LowAnalysis Batch No.: 123637 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	11.0		5.00	0.990
71-43-2	Benzene	0.208	J	1.00	0.0800
74-97-5	Chlorobromomethane	0.180	U	1.00	0.180
75-25-2	Bromoform	0.190	U	1.00	0.190
74-83-9	Bromomethane	0.250	U	2.00	0.250
78-93-3	2-Butanone (MEK)	1.88	J	2.00	0.760
75-15-0	Carbon disulfide	0.297	J	2.00	0.240
56-23-5	Carbon tetrachloride	0.150	U	1.00	0.150
124-48-1	Dibromochloromethane	0.150	U	1.00	0.150
108-90-7	Chlorobenzene	0.120	U	1.00	0.120
75-00-3	Chloroethane	0.0800	U	2.00	0.0800
67-66-3	Chloroform	0.130	U	1.00	0.130
74-87-3	Chloromethane	0.180	U	2.00	0.180
75-34-3	1,1-Dichloroethane	0.148	J	1.00	0.110
107-06-2	1,2-Dichloroethane	0.140	U	1.00	0.140
75-35-4	1,1-Dichloroethene	0.190	U	1.00	0.190
156-60-5	trans-1,2-Dichloroethene	0.0900	U	1.00	0.0900
78-87-5	1,2-Dichloropropane	0.160	U	1.00	0.160
10061-01-5	cis-1,3-Dichloropropene	0.180	U	1.00	0.180
10061-02-6	trans-1,3-Dichloropropene	0.210	U	1.00	0.210
100-41-4	Ethylbenzene	0.110	U	1.00	0.110
591-78-6	2-Hexanone	0.350	U	2.00	0.350
75-09-2	Methylene Chloride	0.150	U	5.00	0.150
108-10-1	4-Methyl-2-pentanone (MIBK)	0.450	U	2.00	0.450
100-42-5	Styrene	0.0700	U	1.00	0.0700
79-34-5	1,1,2,2-Tetrachloroethane	0.220	U	1.00	0.220
127-18-4	Tetrachloroethene	0.130	U	1.00	0.130
108-88-3	Toluene	0.150	U	1.00	0.150
71-55-6	1,1,1-Trichloroethane	0.150	U	1.00	0.150
79-00-5	1,1,2-Trichloroethane	0.280	U	1.00	0.280
79-01-6	Trichloroethene	0.288	J	1.00	0.180
108-05-4	Vinyl acetate	0.210	U	2.00	0.210
75-01-4	Vinyl chloride	0.110	U	2.00	0.110
95-47-6	o-Xylene	0.120	U	1.00	0.120
179601-23-1	m-Xylene & p-Xylene	0.170	U	1.00	0.170
1330-20-7	Xylenes, Total	0.260	U	1.00	0.260

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston Job No.: 600-84503-1
SDG No.: _____
Client Sample ID: San Juan-MW04-12192013 Lab Sample ID: 600-84503-3
Matrix: Water Lab File ID: C35824.D
Analysis Method: 8260B Date Collected: 12/19/2013 13:35
Sample wt/vol: 20 (mL) Date Analyzed: 12/24/2013 21:24
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 123637 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-59-2	cis-1,2-Dichloroethene	0.619	J	1.00	0.0600
75-27-4	Bromodichloromethane	0.160	U	1.00	0.160
540-59-0	1,2-Dichloroethene, Total	0.619	J	1.00	0.300

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	109		70-130
1868-53-7	Dibromofluoromethane	110		62-130
460-00-4	4-Bromofluorobenzene	117		67-139
17060-07-0	1,2-Dichloroethane-d4 (Surr)	115		50-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Client Sample ID: San Juan-MW02-12192013Lab Sample ID: 600-84503-4Matrix: WaterLab File ID: C36016.DAnalysis Method: 8260BDate Collected: 12/19/2013 14:00Sample wt/vol: 20 (mL)Date Analyzed: 12/26/2013 17:39

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: _____

Level: (low/med) LowAnalysis Batch No.: 123757Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	0.990	U	5.00	0.990
71-43-2	Benzene	0.0800	U	1.00	0.0800
74-97-5	Chlorobromomethane	0.180	U	1.00	0.180
75-25-2	Bromoform	0.190	U	1.00	0.190
74-83-9	Bromomethane	0.250	U	2.00	0.250
78-93-3	2-Butanone (MEK)	0.760	U	2.00	0.760
75-15-0	Carbon disulfide	0.240	U	2.00	0.240
56-23-5	Carbon tetrachloride	0.150	U	1.00	0.150
124-48-1	Dibromochloromethane	0.150	U	1.00	0.150
108-90-7	Chlorobenzene	0.120	U	1.00	0.120
75-00-3	Chloroethane	0.0800	U	2.00	0.0800
67-66-3	Chloroform	0.130	U	1.00	0.130
74-87-3	Chloromethane	0.180	U	2.00	0.180
75-34-3	1,1-Dichloroethane	0.110	U	1.00	0.110
107-06-2	1,2-Dichloroethane	0.140	U	1.00	0.140
75-35-4	1,1-Dichloroethene	0.190	U	1.00	0.190
156-60-5	trans-1,2-Dichloroethene	0.0900	U	1.00	0.0900
78-87-5	1,2-Dichloropropane	0.160	U	1.00	0.160
10061-01-5	cis-1,3-Dichloropropene	0.180	U	1.00	0.180
10061-02-6	trans-1,3-Dichloropropene	0.210	U	1.00	0.210
100-41-4	Ethylbenzene	0.110	U	1.00	0.110
591-78-6	2-Hexanone	0.350	U	2.00	0.350
75-09-2	Methylene Chloride	0.150	U	5.00	0.150
108-10-1	4-Methyl-2-pentanone (MIBK)	0.450	U	2.00	0.450
100-42-5	Styrene	0.0700	U	1.00	0.0700
79-34-5	1,1,2,2-Tetrachloroethane	0.220	U	1.00	0.220
127-18-4	Tetrachloroethene	0.130	U	1.00	0.130
108-88-3	Toluene	0.150	U	1.00	0.150
71-55-6	1,1,1-Trichloroethane	0.150	U	1.00	0.150
79-00-5	1,1,2-Trichloroethane	0.280	U	1.00	0.280
79-01-6	Trichloroethene	0.180	U	1.00	0.180
108-05-4	Vinyl acetate	0.210	U	2.00	0.210
75-01-4	Vinyl chloride	0.110	U	2.00	0.110
95-47-6	o-Xylene	0.120	U	1.00	0.120
179601-23-1	m-Xylene & p-Xylene	0.170	U	1.00	0.170
1330-20-7	Xylenes, Total	0.260	U	1.00	0.260

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston Job No.: 600-84503-1
SDG No.: _____
Client Sample ID: San Juan-MW02-12192013 Lab Sample ID: 600-84503-4
Matrix: Water Lab File ID: C36016.D
Analysis Method: 8260B Date Collected: 12/19/2013 14:00
Sample wt/vol: 20 (mL) Date Analyzed: 12/26/2013 17:39
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 123757 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-59-2	cis-1,2-Dichloroethene	0.0600	U	1.00	0.0600
75-27-4	Bromodichloromethane	0.160	U	1.00	0.160
540-59-0	1,2-Dichloroethene, Total	0.300	U	1.00	0.300

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	96		70-130
1868-53-7	Dibromofluoromethane	101		62-130
460-00-4	4-Bromofluorobenzene	105		67-139
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		50-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Client Sample ID: San

Lab Sample ID: 600-84503-5

Matrix: Water

Lab File ID: C35822.D

Analysis Method: 8260B

Date Collected: 12/19/2013 14:20

Sample wt/vol: 20 (mL)

Date Analyzed: 12/24/2013 20:33

Soil Aliquot Vol.:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: DB-624 ID: 0.18 (mm)

% Moisture:

Level: (low/med) Low

Analysis Batch No.: 123637

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	3.53	J	5.00	0.990
71-43-2	Benzene	0.0800	U	1.00	0.0800
74-97-5	Chlorobromomethane	0.180	U	1.00	0.180
75-25-2	Bromoform	0.190	U	1.00	0.190
74-83-9	Bromomethane	0.250	U	2.00	0.250
78-93-3	2-Butanone (MEK)	0.760	U	2.00	0.760
75-15-0	Carbon disulfide	0.240	U	2.00	0.240
56-23-5	Carbon tetrachloride	0.150	U	1.00	0.150
124-48-1	Dibromochloromethane	0.150	U	1.00	0.150
108-90-7	Chlorobenzene	0.120	U	1.00	0.120
75-00-3	Chloroethane	0.0800	U	2.00	0.0800
67-66-3	Chloroform	0.130	U	1.00	0.130
74-87-3	Chloromethane	0.180	U	2.00	0.180
75-34-3	1,1-Dichloroethane	0.110	U	1.00	0.110
107-06-2	1,2-Dichloroethane	0.140	U	1.00	0.140
75-35-4	1,1-Dichloroethene	0.190	U	1.00	0.190
156-60-5	trans-1,2-Dichloroethene	0.0900	U	1.00	0.0900
78-87-5	1,2-Dichloropropane	0.160	U	1.00	0.160
10061-01-5	cis-1,3-Dichloropropene	0.180	U	1.00	0.180
10061-02-6	trans-1,3-Dichloropropene	0.210	U	1.00	0.210
100-41-4	Ethylbenzene	0.110	U	1.00	0.110
591-78-6	2-Hexanone	0.350	U	2.00	0.350
75-09-2	Methylene Chloride	0.150	U	5.00	0.150
108-10-1	4-Methyl-2-pentanone (MIBK)	0.450	U	2.00	0.450
100-42-5	Styrene	0.0700	U	1.00	0.0700
79-34-5	1,1,2,2-Tetrachloroethane	0.220	U	1.00	0.220
127-18-4	Tetrachloroethene	0.130	U	1.00	0.130
108-88-3	Toluene	0.150	U	1.00	0.150
71-55-6	1,1,1-Trichloroethane	0.150	U	1.00	0.150
79-00-5	1,1,2-Trichloroethane	0.280	U	1.00	0.280
79-01-6	Trichloroethene	0.180	U	1.00	0.180
108-05-4	Vinyl acetate	0.210	U	2.00	0.210
75-01-4	Vinyl chloride	0.110	U	2.00	0.110
95-47-6	o-Xylene	0.120	U	1.00	0.120
179601-23-1	m-Xylene & p-Xylene	0.170	U	1.00	0.170
1330-20-7	Xylenes, Total	0.260	U	1.00	0.260

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston Job No.: 600-84503-1
SDG No.: _____
Client Sample ID: San Lab Sample ID: 600-84503-5
Matrix: Water Lab File ID: C35822.D
Analysis Method: 8260B Date Collected: 12/19/2013 14:20
Sample wt/vol: 20 (mL) Date Analyzed: 12/24/2013 20:33
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 123637 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-59-2	cis-1,2-Dichloroethene	0.0600	U	1.00	0.0600
75-27-4	Bromodichloromethane	0.160	U	1.00	0.160
540-59-0	1,2-Dichloroethene, Total	0.300	U	1.00	0.300

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	111		70-130
1868-53-7	Dibromofluoromethane	106		62-130
460-00-4	4-Bromofluorobenzene	116		67-139
17060-07-0	1,2-Dichloroethane-d4 (Surr)	110		50-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Client Sample ID: San Juan-MW06-12192013 Lab Sample ID: 600-84503-6Matrix: Water Lab File ID: C36014.DAnalysis Method: 8260B Date Collected: 12/19/2013 15:00Sample wt/vol: 20 (mL) Date Analyzed: 12/26/2013 16:47Soil Aliquot Vol: _____ Dilution Factor: 1Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)% Moisture: _____ Level: (low/med) LowAnalysis Batch No.: 123757 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	0.990	U	5.00	0.990
71-43-2	Benzene	0.0800	U	1.00	0.0800
74-97-5	Chlorobromomethane	0.180	U	1.00	0.180
75-25-2	Bromoform	0.190	U	1.00	0.190
74-83-9	Bromomethane	0.250	U	2.00	0.250
78-93-3	2-Butanone (MEK)	0.760	U	2.00	0.760
75-15-0	Carbon disulfide	0.240	U	2.00	0.240
56-23-5	Carbon tetrachloride	0.150	U	1.00	0.150
124-48-1	Dibromochloromethane	0.150	U	1.00	0.150
108-90-7	Chlorobenzene	0.120	U	1.00	0.120
75-00-3	Chloroethane	0.0800	U	2.00	0.0800
67-66-3	Chloroform	0.208	J	1.00	0.130
74-87-3	Chloromethane	0.180	U	2.00	0.180
75-34-3	1,1-Dichloroethane	0.110	U	1.00	0.110
107-06-2	1,2-Dichloroethane	0.140	U	1.00	0.140
75-35-4	1,1-Dichloroethene	0.190	U	1.00	0.190
156-60-5	trans-1,2-Dichloroethene	0.0900	U	1.00	0.0900
78-87-5	1,2-Dichloropropane	0.160	U	1.00	0.160
10061-01-5	cis-1,3-Dichloropropene	0.180	U	1.00	0.180
10061-02-6	trans-1,3-Dichloropropene	0.210	U	1.00	0.210
100-41-4	Ethylbenzene	0.110	U	1.00	0.110
591-78-6	2-Hexanone	0.350	U	2.00	0.350
75-09-2	Methylene Chloride	0.150	U	5.00	0.150
108-10-1	4-Methyl-2-pentanone (MIBK)	0.450	U	2.00	0.450
100-42-5	Styrene	0.0700	U	1.00	0.0700
79-34-5	1,1,2,2-Tetrachloroethane	0.220	U	1.00	0.220
127-18-4	Tetrachloroethene	0.130	U	1.00	0.130
108-88-3	Toluene	0.150	U	1.00	0.150
71-55-6	1,1,1-Trichloroethane	0.150	U	1.00	0.150
79-00-5	1,1,2-Trichloroethane	0.280	U	1.00	0.280
79-01-6	Trichloroethene	0.180	U	1.00	0.180
108-05-4	Vinyl acetate	0.210	U	2.00	0.210
75-01-4	Vinyl chloride	0.110	U	2.00	0.110
95-47-6	o-Xylene	0.120	U	1.00	0.120
179601-23-1	m-Xylene & p-Xylene	0.170	U	1.00	0.170
1330-20-7	Xylenes, Total	0.260	U	1.00	0.260

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston Job No.: 600-84503-1

SDG No.: _____

Client Sample ID: San Juan-MW06-12192013 Lab Sample ID: 600-84503-6

Matrix: Water Lab File ID: C36014.D

Analysis Method: 8260B Date Collected: 12/19/2013 15:00

Sample wt/vol: 20 (mL) Date Analyzed: 12/26/2013 16:47

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)

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

Analysis Batch No.: 123757 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-59-2	cis-1,2-Dichloroethene	0.0600	U	1.00	0.0600
75-27-4	Bromodichloromethane	0.160	U	1.00	0.160
540-59-0	1,2-Dichloroethene, Total	0.300	U	1.00	0.300

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	98		70-130
1868-53-7	Dibromofluoromethane	103		62-130
460-00-4	4-Bromofluorobenzene	105		67-139
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		50-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Client Sample ID: San Juan-MD03-12192013 Lab Sample ID: 600-84503-7Matrix: Water Lab File ID: C36015.DAnalysis Method: 8260B Date Collected: 12/19/2013 17:00Sample wt/vol: 20 (mL) Date Analyzed: 12/26/2013 17:13Soil Aliquot Vol: _____ Dilution Factor: 1Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)% Moisture: _____ Level: (low/med) LowAnalysis Batch No.: 123757 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	3.44	J	5.00	0.990
71-43-2	Benzene	0.0800	U	1.00	0.0800
74-97-5	Chlorobromomethane	0.180	U	1.00	0.180
75-25-2	Bromoform	0.190	U	1.00	0.190
74-83-9	Bromomethane	0.250	U	2.00	0.250
78-93-3	2-Butanone (MEK)	0.760	U	2.00	0.760
75-15-0	Carbon disulfide	0.240	U	2.00	0.240
56-23-5	Carbon tetrachloride	0.150	U	1.00	0.150
124-48-1	Dibromochloromethane	0.150	U	1.00	0.150
108-90-7	Chlorobenzene	0.120	U	1.00	0.120
75-00-3	Chloroethane	0.0800	U	2.00	0.0800
67-66-3	Chloroform	0.215	J	1.00	0.130
74-87-3	Chloromethane	0.180	U	2.00	0.180
75-34-3	1,1-Dichloroethane	0.110	U	1.00	0.110
107-06-2	1,2-Dichloroethane	0.140	U	1.00	0.140
75-35-4	1,1-Dichloroethene	0.190	U	1.00	0.190
156-60-5	trans-1,2-Dichloroethene	0.0900	U	1.00	0.0900
78-87-5	1,2-Dichloropropane	0.160	U	1.00	0.160
10061-01-5	cis-1,3-Dichloropropene	0.180	U	1.00	0.180
10061-02-6	trans-1,3-Dichloropropene	0.210	U	1.00	0.210
100-41-4	Ethylbenzene	0.110	U	1.00	0.110
591-78-6	2-Hexanone	0.350	U	2.00	0.350
75-09-2	Methylene Chloride	0.150	U	5.00	0.150
108-10-1	4-Methyl-2-pentanone (MIBK)	0.450	U	2.00	0.450
100-42-5	Styrene	0.0700	U	1.00	0.0700
79-34-5	1,1,2,2-Tetrachloroethane	0.220	U	1.00	0.220
127-18-4	Tetrachloroethene	0.130	U	1.00	0.130
108-88-3	Toluene	0.150	U	1.00	0.150
71-55-6	1,1,1-Trichloroethane	0.150	U	1.00	0.150
79-00-5	1,1,2-Trichloroethane	0.280	U	1.00	0.280
79-01-6	Trichloroethene	0.180	U	1.00	0.180
108-05-4	Vinyl acetate	0.210	U	2.00	0.210
75-01-4	Vinyl chloride	0.110	U	2.00	0.110
95-47-6	o-Xylene	0.120	U	1.00	0.120
179601-23-1	m-Xylene & p-Xylene	0.170	U	1.00	0.170
1330-20-7	Xylenes, Total	0.260	U	1.00	0.260

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston Job No.: 600-84503-1
SDG No.: _____
Client Sample ID: San Juan-MD03-12192013 Lab Sample ID: 600-84503-7
Matrix: Water Lab File ID: C36015.D
Analysis Method: 8260B Date Collected: 12/19/2013 17:00
Sample wt/vol: 20 (mL) Date Analyzed: 12/26/2013 17:13
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 123757 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-59-2	cis-1,2-Dichloroethene	0.0600	U	1.00	0.0600
75-27-4	Bromodichloromethane	0.160	U	1.00	0.160
540-59-0	1,2-Dichloroethene, Total	0.300	U	1.00	0.300

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	98		70-130
1868-53-7	Dibromofluoromethane	103		62-130
460-00-4	4-Bromofluorobenzene	105		67-139
17060-07-0	1,2-Dichloroethane-d4 (Surr)	110		50-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Client Sample ID: TB03-12192013Lab Sample ID: 600-84503-9Matrix: WaterLab File ID: C35817.DAnalysis Method: 8260BDate Collected: 12/19/2013 08:00Sample wt/vol: 20 (mL)Date Analyzed: 12/24/2013 18:24

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: _____

Level: (low/med) LowAnalysis Batch No.: 123637Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	0.990	U	5.00	0.990
71-43-2	Benzene	0.0800	U	1.00	0.0800
74-97-5	Chlorobromomethane	0.180	U	1.00	0.180
75-25-2	Bromoform	0.190	U	1.00	0.190
74-83-9	Bromomethane	0.250	U	2.00	0.250
78-93-3	2-Butanone (MEK)	0.760	U	2.00	0.760
75-15-0	Carbon disulfide	0.240	U	2.00	0.240
56-23-5	Carbon tetrachloride	0.150	U	1.00	0.150
124-48-1	Dibromochloromethane	0.150	U	1.00	0.150
108-90-7	Chlorobenzene	0.120	U	1.00	0.120
75-00-3	Chloroethane	0.0800	U	2.00	0.0800
67-66-3	Chloroform	0.130	U	1.00	0.130
74-87-3	Chloromethane	0.180	U	2.00	0.180
75-34-3	1,1-Dichloroethane	0.110	U	1.00	0.110
107-06-2	1,2-Dichloroethane	0.140	U	1.00	0.140
75-35-4	1,1-Dichloroethene	0.190	U	1.00	0.190
156-60-5	trans-1,2-Dichloroethene	0.0900	U	1.00	0.0900
78-87-5	1,2-Dichloropropane	0.160	U	1.00	0.160
10061-01-5	cis-1,3-Dichloropropene	0.180	U	1.00	0.180
10061-02-6	trans-1,3-Dichloropropene	0.210	U	1.00	0.210
100-41-4	Ethylbenzene	0.110	U	1.00	0.110
591-78-6	2-Hexanone	0.350	U	2.00	0.350
75-09-2	Methylene Chloride	0.150	U	5.00	0.150
108-10-1	4-Methyl-2-pentanone (MIBK)	0.450	U	2.00	0.450
100-42-5	Styrene	0.0700	U	1.00	0.0700
79-34-5	1,1,2,2-Tetrachloroethane	0.220	U	1.00	0.220
127-18-4	Tetrachloroethene	0.130	U	1.00	0.130
108-88-3	Toluene	0.150	U	1.00	0.150
71-55-6	1,1,1-Trichloroethane	0.150	U	1.00	0.150
79-00-5	1,1,2-Trichloroethane	0.280	U	1.00	0.280
79-01-6	Trichloroethene	0.180	U	1.00	0.180
108-05-4	Vinyl acetate	0.210	U	2.00	0.210
75-01-4	Vinyl chloride	0.110	U	2.00	0.110
95-47-6	o-Xylene	0.120	U	1.00	0.120
179601-23-1	m-Xylene & p-Xylene	0.170	U	1.00	0.170
1330-20-7	Xylenes, Total	0.260	U	1.00	0.260

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston Job No.: 600-84503-1
SDG No.: _____
Client Sample ID: TB03-12192013 Lab Sample ID: 600-84503-9
Matrix: Water Lab File ID: C35817.D
Analysis Method: 8260B Date Collected: 12/19/2013 08:00
Sample wt/vol: 20 (mL) Date Analyzed: 12/24/2013 18:24
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 123637 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-59-2	cis-1,2-Dichloroethene	0.0600	U	1.00	0.0600
75-27-4	Bromodichloromethane	0.160	U	1.00	0.160
540-59-0	1,2-Dichloroethene, Total	0.300	U	1.00	0.300

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	116		70-130
1868-53-7	Dibromofluoromethane	106		62-130
460-00-4	4-Bromofluorobenzene	117		67-139
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		50-134

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

APPENDIX B (103 of 240)

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

Analy Batch No.: 122189

SDG No.: _____

Instrument ID: VOAMS01 GC Column: DB-VRX 60 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/03/2013 12:01 Calibration End Date: 12/03/2013 14:05 Calibration ID: 2640

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 600-122189/2	C33702.D
Level 2	IC 600-122189/3	C33703.D
Level 3	IC 600-122189/4	C33704.D
Level 4	ICIS 600-122189/5	C33705.D
Level 5	IC 600-122189/6	C33706.D
Level 6	IC 600-122189/7	C33707.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
2-Methylnaphthalene	0 0	0	0	0	0	Ave								15.0			
Dichlorodifluoromethane	0.4113 0.3515	0.3419	0.4186	0.3708	0.3799	Ave		0.3790						8.2	15.0		
Chloromethane	0.3784 0.3002	0.3333	0.3621	0.3245	0.3223	Ave		0.3368					0.1000	8.5	15.0		
Vinyl chloride	0.3402 ++++	0.2923	0.3388	0.3066	0.3093	Ave		0.3174						6.7	30.0		
Butadiene	0.3475 0.2942	0.2746	0.3296	0.2934	0.3116	Ave		0.3085						8.6	15.0		
Ethylene oxide	0.0576 0.0437	0.0563	0.0478	0.0516	0.0504	Ave		0.0512						10.2	15.0		
Bromomethane	0.1431 0.1522	0.1286	0.1388	0.1396	0.1498	Ave		0.1420						6.0	15.0		
Ethanol	0.0012 0.0006	0.0010	0.0007	0.0007	0.0007	Lin1	-5.104	0.0006							0.9942		0.9900
Chloroethane	0.2197 0.1714	0.1888	0.2038	0.1870	0.1862	Ave		0.1928						8.7	15.0		
Dichlorofluoromethane	0.5519 0.4650	0.4542	0.5440	0.5012	0.5001	Ave		0.5027						7.9	15.0		
Acrolein	0.0146 0.0094	0.0125	0.0099	0.0112	0.0107	Lin1	-0.217	0.0097							0.9947		0.9900
Acetonitrile	0.0193 0.0111	0.0144	0.0154	0.0137	0.0130	Lin1	-0.605	0.0117							0.9923		0.9900
Trichlorofluoromethane	0.7035 0.6093	0.5820	0.7075	0.6403	0.6461	Ave		0.6481						7.7	15.0		
Isopropyl alcohol	0.0073 0.0039	0.0061	0.0049	0.0046	0.0048	Lin1	-0.716	0.0041							0.9921		0.9900
Acetone	0.0546 0.0224	0.0324	0.0285	0.0268	0.0261	Lin1	-0.203	0.0228							0.9947		0.9900

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

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

APPENDIX B (104 of 240)

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

Analy Batch No.: 122189

SDG No.: _____

Instrument ID: VOAMS01 GC Column: DB-VRX 60 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/03/2013 12:01 Calibration End Date: 12/03/2013 14:05 Calibration ID: 2640

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Ethyl ether	0.1814 0.1337	0.1753	0.1475	0.1607	0.1564	Ave		0.1592				11.1		15.0			
t-Butanol	0.0105 0.0078	0.0108	0.0086	0.0093	0.0091	Ave		0.0094				12.2		15.0			
1,1-Dichloroethene	0.4812 0.3695	0.4923	0.4086	0.4138	0.4123	Ave		0.4296				11.0		30.0			
Acrylonitrile	0.0365 0.0265	0.0367	0.0306	0.0328	0.0312	Ave		0.0324				11.9		15.0			
Iodomethane	0.5641 0.6257	0.6147	0.5725	0.6224	0.6758	Ave		0.6125				6.6		15.0			
Methylene Chloride	0.4928 0.3062	0.5396	0.3864	0.3711	0.3539	Lin1	-0.072	0.3188							0.9920		0.9900
Methyl acetate	0.0944 0.0732	0.0990	0.0829	0.0907	0.0862	Ave		0.0877				10.4		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.4199 0.3261	0.4244	0.3629	0.3683	0.3677	Ave		0.3782				9.9		15.0			
3-Chloro-1-propene	0.2452 0.2104	0.2621	0.2211	0.2294	0.2330	Ave		0.2336				7.8		15.0			
Carbon disulfide	1.1164 1.0181	1.1331	0.9928	1.0535	1.0942	Ave		1.0680				5.2		15.0			
trans-1,2-Dichloroethene	0.5126 0.3829	0.5121	0.4191	0.4224	0.4232	Ave		0.4454				12.1		15.0			
Methyl tert-butyl ether	0.5543 0.4480	0.5808	0.4817	0.5210	0.5108	Ave		0.5161				9.3		15.0			
Propionitrile	0.0157 0.0116	0.0153	0.0126	0.0139	0.0135	Ave		0.0138				11.5		15.0			
1,1-Dichloroethane	0.8118 0.6359	0.8232	0.6760	0.7035	0.7003	Ave		0.7251			0.1000	10.4		15.0			
Vinyl acetate	0.2868 0.2425	0.2893	0.2597	0.2765	0.2750	Ave		0.2716				6.5		15.0			
2-Chloro-1,3-butadiene	0.6232 0.5064	0.6407	0.5444	0.5648	0.5676	Ave		0.5745				8.7		15.0			
Hexane	0.6770 0.5094	0.7158	0.6030	0.5974	0.5858	Ave		0.6147				11.8		15.0			
Isopropyl ether	1.0337 0.7671	1.0494	0.8821	0.9341	0.9074	Ave		0.9290				11.2		15.0			
2-Butanone (MEK)	0.0159 0.0124	0.0167	0.0144	0.0151	0.0143	Ave		0.0148				10.1		15.0			
Methacrylonitrile	0.0188 0.0139	0.0185	0.0155	0.0168	0.0162	Ave		0.0166				11.1		15.0			

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

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

APPENDIX B (105 of 240)

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

Analy Batch No.: 122189

SDG No.:

Instrument ID: VOAMS01 GC Column: DB-VRX 60 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/03/2013 12:01 Calibration End Date: 12/03/2013 14:05 Calibration ID: 2640

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
cis-1,2-Dichloroethene	0.5192 0.3995	0.5230	0.4224	0.4440	0.4384	Ave		0.4578				11.2		15.0			
Ethyl acetate	0.0896 0.0755	0.0841	0.0749	0.0848	0.0836	Ave		0.0821				7.0		15.0			
Chlorobromomethane	0.1896 0.1452	0.1907	0.1594	0.1710	0.1660	Ave		0.1703				10.4		15.0			
Chloroform	0.7679 0.5675	0.7588	0.6360	0.6566	0.6476	Ave		0.6724				11.5		30.0			
Tert-butyl ethyl ether	0.7530 0.5895	0.7570	0.6380	0.6941	0.6790	Ave		0.6851				9.5		15.0			
Isobutyl alcohol	0.0079 0.0060	0.0076	0.0064	0.0070	0.0071	Ave		0.0070				10.4		15.0			
2,2-Dichloropropane	0.6997 0.5668	0.7182	0.6097	0.6300	0.6336	Ave		0.6430				8.8		15.0			
Tetrahydrofuran	0.0426 0.0257	0.0365	0.0310	0.0290	0.0287	Lin1	-0.118	0.0262							0.9978		0.9900
1,2-Dichloroethane	0.3732 0.2693	0.3552	0.3017	0.3153	0.3112	Ave		0.3210				11.7		15.0			
1,1,1-Trichloroethane	0.7279 0.6272	0.7683	0.6518	0.6787	0.6930	Ave		0.6912				7.4		15.0			
1,1-Dichloropropene	0.6311 0.4927	0.6448	0.5455	0.5538	0.5521	Ave		0.5700				10.1		15.0			
Cyclohexane	0.7520 0.5956	0.7754	0.6574	0.6658	0.6631	Ave		0.6849				9.7		15.0			
Carbon tetrachloride	0.6355 0.5680	0.6645	0.5769	0.6053	0.6181	Ave		0.6114				5.9		15.0			
Benzene	1.9613 1.4698	2.0204	1.6564	1.6995	1.6783	Ave		1.7476				11.8		15.0			
Tert-amyl methyl ether	0.6404 0.5065	0.6193	0.5300	0.5757	0.5739	Ave		0.5743				8.9		15.0			
Ethyl acrylate	0.2020 0.1611	0.1719	0.1542	0.1599	0.1750	Ave		0.1707				10.1		15.0			
Dibromomethane	0.1511 0.1157	0.1476	0.1272	0.1356	0.1329	Ave		0.1350				9.7		15.0			
1,2-Dichloropropane	0.4024 0.3007	0.4018	0.3434	0.3535	0.3459	Ave		0.3580				10.9		30.0			
Trichloroethene	0.6437 0.4962	0.6581	0.5443	0.5569	0.5588	Ave		0.5763				10.8		15.0			
Bromodichloromethane	0.4285 0.3832	0.4370	0.3850	0.4204	0.4233	Ave		0.4129				5.6		15.0			

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

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

APPENDIX B (106 of 240)

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

Analy Batch No.: 122189

SDG No.: _____

Instrument ID: VOAMS01 GC Column: DB-VRX 60 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/03/2013 12:01 Calibration End Date: 12/03/2013 14:05 Calibration ID: 2640

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methyl methacrylate	0.1170 0.1074	0.1230	0.1068	0.1206	0.1211	Ave		0.1160				6.2		15.0			
1,4-Dioxane	2.1463 0.9249	1.4041	1.2364	1.2665	1.0825	Lin1	-0.178	0.9051							0.9946		0.9900
2-Chloroethyl vinyl ether	0.2348 0.2221	0.2485	0.2133	0.2429	0.2448	Ave		0.2344				6.0		15.0			
2-Nitropropane	0.0515 0.0588	0.0641	0.0607	0.0645	0.0666	Ave		0.0610				9.0		15.0			
Methylcyclohexane	0.9044 0.7298	0.9480	0.8081	0.8155	0.8079	Ave		0.8356				9.3		15.0			
cis-1,3-Dichloropropene	1.2456 1.1082	1.2809	1.1107	1.2014	1.2269	Ave		1.1956				6.0		15.0			
4-Methyl-2-pentanone (MIBK)	0.1137 0.0907	0.1137	0.0905	0.1046	0.1032	Ave		0.1027				10.1		15.0			
trans-1,3-Dichloropropene	0.8395 0.7734	0.8460	0.7277	0.8132	0.8436	Ave		0.8072				5.9		15.0			
n-Heptane	0.0621 0.0366	0.0487	0.0382	0.0391	0.0398	Lin	-0.062	0.0363							0.9990		0.9900
1,1,2-Trichloroethane	0.6034 0.4452	0.5750	0.4840	0.5170	0.5036	Ave		0.5214				11.2		15.0			
Ethyl methacrylate	0.5137 0.4810	0.5145	0.4668	0.5352	0.5371	Ave		0.5080				5.6		15.0			
Toluene	3.6406 2.7566	3.7706	3.0916	3.1521	3.1031	Ave		3.2524				11.7		30.0			
1,3-Dichloropropane	1.0329 0.7714	1.0319	0.8581	0.8955	0.8787	Ave		0.9114				11.3		15.0			
2-Hexanone	0.2290 0.1543	0.1849	0.1575	0.1770	0.1736	Lin1	-0.066	0.1590							0.9960		0.9900
Dibromochloromethane	0.5785 0.6231	0.5953	0.5365	0.6163	0.6491	Ave		0.5998				6.6		15.0			
n-Butyl acetate	0.4857 0.3890	0.4138	0.3923	0.4367	0.4320	Ave		0.4249				8.4		15.0			
1,2-Dibromoethane	0.5434 0.4407	0.5430	0.4597	0.4971	0.4933	Ave		0.4962				8.5		15.0			
Tetrachloroethene	1.3833 1.0761	1.4352	1.1629	1.1899	1.2145	Ave		1.2437				11.1		15.0			
1-Chlorohexane	1.3147 1.0014	1.3554	1.1162	1.1438	1.1310	Ave		1.1771				11.3		15.0			
1,1,1,2-Tetrachloroethane	1.0705 0.9593	1.0994	0.9577	1.0234	1.0470	Ave		1.0262				5.7		15.0			

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

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

APPENDIX B (107 of 240)

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

Analy Batch No.: 122189

SDG No.:

Instrument ID: VOAMS01 GC Column: DB-VRX 60 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/03/2013 12:01 Calibration End Date: 12/03/2013 14:05 Calibration ID: 2640

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Chlorobenzene	3.9966 2.9616	4.0500	3.3206	3.4385	3.3812	Ave		3.5247			0.3000	11.9		15.0			
Ethylbenzene	2.3756 1.8941	2.4902	2.1002	2.1313	2.1137	Ave		2.1842				9.8		30.0			
m-Xylene & p-Xylene	3.0428 2.3555	3.1361	2.6053	2.6594	2.6419	Ave		2.7402				10.7		15.0			
Bromoform	0.2200 0.2516	0.2135	0.1903	0.2229	0.2476	Ave		0.2243			0.1000	10.1		15.0			
Styrene	3.3412 2.9968	3.5883	3.1362	3.3470	3.3598	Ave		3.2949				6.2		15.0			
Cyclohexanone	0.0093 0.0064	0.0085	0.0065	0.0074	0.0073	Lin1	-1.848	0.0066							0.9951		0.9900
1,1,2,2-Tetrachloroethane	0.5485 0.3890	0.4995	0.4231	0.4543	0.4480	Ave		0.4604			0.3000	12.3		15.0			
o-Xylene	2.8348 2.1375	2.9172	2.4439	2.4654	2.4205	Ave		2.5366				11.4		15.0			
trans-1,4-Dichloro-2-butene	0.1094 0.0925	0.0997	0.0846	0.0956	0.0968	Ave		0.0964				8.5		15.0			
1,2,3-Trichloropropane	0.1716 0.1237	0.1602	0.1352	0.1441	0.1412	Ave		0.1460				11.9		15.0			
Isopropylbenzene	7.1530 5.3225	7.2569	6.0197	6.0999	6.0346	Ave		6.3144				11.8		15.0			
Bromobenzene	1.4010 1.0223	1.3483	1.1395	1.1795	1.1597	Ave		1.2084				11.7		15.0			
N-Propylbenzene	2.1175 1.6115	2.1701	1.7824	1.8266	1.8246	Ave		1.8888				11.3		15.0			
2-Chlorotoluene	1.8840 1.3222	1.7815	1.4820	1.5231	1.4982	Ave		1.5818				13.2		15.0			
4-Chlorotoluene	4.6566 3.3536	4.5499	3.7593	3.8334	3.8036	Ave		3.9927				12.6		15.0			
1,3,5-Trimethylbenzene	6.0048 4.5009	6.0430	5.0498	5.1391	5.1372	Ave		5.3125				11.3		15.0			
Pentachloroethane	0.5827 0.5596	0.5771	0.4996	0.5733	0.5839	Ave		0.5627				5.7		15.0			
tert-Butylbenzene	5.5934 4.1684	5.5822	4.6786	4.7286	4.7220	Ave		4.9122				11.5		15.0			
1,2,4-Trimethylbenzene	5.9707 4.5005	6.0379	5.1007	5.1515	5.1254	Ave		5.3144				11.1		15.0			
sec-Butylbenzene	8.0091 6.0722	8.1863	6.8795	6.9469	6.9192	Ave		7.1689				11.1		15.0			

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

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

APPENDIX B (108 of 240)

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

Analy Batch No.: 122189

SDG No.:

Instrument ID: VOAMS01 GC Column: DB-VRX 60 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/03/2013 12:01 Calibration End Date: 12/03/2013 14:05 Calibration ID: 2640

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Benzyl chloride	0.6755 0.7929	0.6632	0.6356	0.7444	0.8126	Ave		0.7207				10.2		15.0			
1,3-Dichlorobenzene	3.1975 2.3195	3.0994	2.5831	2.6501	2.6301	Ave		2.7466				12.2		15.0			
1,4-Dichlorobenzene	3.0300 2.1285	2.9523	2.4519	2.5157	2.4737	Ave		2.5920				13.1		15.0			
4-Isopropyltoluene	7.2847 5.3809	7.3569	6.1964	6.2104	6.2212	Ave		6.4417				11.7		15.0			
1,2,3-Trimethylbenzene	5.3671 3.9780	5.3093	4.5103	4.5775	4.5539	Ave		4.7160				11.3		15.0			
1,2-Dichlorobenzene	2.4901 1.8204	2.3898	2.0307	2.0847	2.0679	Ave		2.1473				11.5		15.0			
n-Butylbenzene	5.7119 4.5778	5.7712	5.0296	5.1128	5.1592	Ave		5.2271				8.6		15.0			
1,2-Dibromo-3-Chloropropane	0.0875 0.0721	0.0724	0.0665	0.0717	0.0754	Lin1	-0.007	0.0723							0.9986		0.9900
1,3,5-Trichlorobenzene	2.0537 1.6285	2.0630	1.7477	1.7835	1.8229	Ave		1.8499				9.4		15.0			
1,2,4-Trichlorobenzene	1.4983 1.1417	1.4535	1.2145	1.2672	1.2786	Lin1	-0.029	1.1759							0.9971		0.9900
Naphthalene	1.8178 1.3742	1.6572	1.4023	1.5088	1.5319	Ave		1.5487				10.7		15.0			
Hexachlorobutadiene	0.4250 0.3564	0.4038	0.3377	0.3512	0.3621	Lin1	-0.014	0.3540							0.9993		0.9900
1,2,3-Trichlorobenzene	1.1565 0.8168	1.0571	0.8786	0.9180	0.9175	Ave		0.9574				13.1		15.0			
Dibromofluoromethane	0.3610 0.2902	0.3588	0.3118	0.3291	0.3228	Ave		0.3290				8.3		15.0			
1,2-Dichloroethane-d4 (Surr)	0.2714 0.2032	0.2793	0.2251	0.2399	0.2333	Ave		0.2420				11.9		15.0			
Toluene-d8 (Surr)	4.6568 3.5805	4.8504	4.0027	4.0859	4.0390	Ave		4.2026				11.1		15.0			
4-Bromofluorobenzene	1.4987 1.0476	1.4037	1.1647	1.2153	1.1878	Ave		1.2530				13.3		15.0			

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

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

APPENDIX B (109 of 240)

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

Analy Batch No.: 122189

SDG No.:

Instrument ID: VOAMS01 GC Column: DB-VRX 60 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/03/2013 12:01 Calibration End Date: 12/03/2013 14:05 Calibration ID: 2640

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 600-122189/2	C33702.D
Level 2	IC 600-122189/3	C33703.D
Level 3	IC 600-122189/4	C33704.D
Level 4	ICIS 600-122189/5	C33705.D
Level 5	IC 600-122189/6	C33706.D
Level 6	IC 600-122189/7	C33707.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
2-Methylnaphthalene	DCB	Ave	0 0	0	0	0	0	1.00 50.0	2.00	5.00	10.0	20.0
Dichlorodifluoromethane	FB	Ave	18257 938158	30091	96416	175028	363902	1.00 50.0	2.00	5.00	10.0	20.0
Chloromethane	FB	Ave	16795 801302	29338	83400	153172	308652	1.00 50.0	2.00	5.00	10.0	20.0
Vinyl chloride	FB	Ave	15101 +++++	25727	78040	144721	296234	1.00 +++++	2.00	5.00	10.0	20.0
Butadiene	FB	Ave	15423 785143	24170	75907	138515	298468	1.00 50.0	2.00	5.00	10.0	20.0
Ethylene oxide	FB	Ave	25569 1166107	49523	110137	243396	482469	10.0 500	20.0	50.0	100	200
Bromomethane	FB	Ave	6351 406318	11322	31970	65911	143519	1.00 50.0	2.00	5.00	10.0	20.0
Ethanol	FB	Lin1	2759 75174	4309	8234	16578	32005	50.0 2500	100	250	500	1000
Chloroethane	FB	Ave	9752 457430	16615	46946	88268	178331	1.00 50.0	2.00	5.00	10.0	20.0
Dichlorofluoromethane	FB	Ave	24497 1240946	39977	125285	236587	478933	1.00 50.0	2.00	5.00	10.0	20.0
Acrolein	FB	Lin1	3236 125321	5510	11375	26526	51377	5.00 250	10.0	25.0	50.0	100
Acetonitrile	FB	Lin1	8561 296167	12690	28406	64521	124250	10.0 500	20.0	40.0	100	200
Trichlorofluoromethane	FB	Ave	31228 1626220	51226	162951	302283	618841	1.00 50.0	2.00	5.00	10.0	20.0
Isopropyl alcohol	FB	Lin1	3250 104841	5345	11261	21766	46137	10.0 500	20.0	50.0	100	200
Acetone	FB	Lin1	4847 119419	5705	13127	25326	50042	2.00 100	4.00	10.0	20.0	40.0
Ethyl ether	FB	Ave	8054 356769	15426	33969	75877	149818	1.00 50.0	2.00	5.00	10.0	20.0

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

APPENDIX B (110 of 240)

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

Analy Batch No.: 122189

SDG No.:

Instrument ID: VOAMS01 GC Column: DB-VRX 60 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/03/2013 12:01 Calibration End Date: 12/03/2013 14:05 Calibration ID: 2640

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
t-Butanol	FB	Ave	4650 207829	9527	19839	43898	87283	10.0 500	20.0	50.0	100	200
1,1-Dichloroethene	FB	Ave	21359 986120	43330	94116	195331	394859	1.00 50.0	2.00	5.00	10.0	20.0
Acrylonitrile	FB	Ave	16204 708203	32274	70412	154745	298653	10.0 500	20.0	50.0	100	200
Iodomethane	FB	Ave	25040 1669891	54102	131858	293798	647289	1.00 50.0	2.00	5.00	10.0	20.0
Methylene Chloride	FB	Lin1	21874 817281	47494	88990	175188	338975	1.00 50.0	2.00	5.00	10.0	20.0
Methyl acetate	FB	Ave	20959 976590	43550	95434	213999	412725	5.00 250	10.0	25.0	50.0	100
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	18639 870387	37357	83584	173842	352146	1.00 50.0	2.00	5.00	10.0	20.0
3-Chloro-1-propene	FB	Ave	10886 561539	23072	50924	108291	223198	1.00 50.0	2.00	5.00	10.0	20.0
Carbon disulfide	FB	Ave	49556 2717404	99733	228654	497334	1048016	1.00 50.0	2.00	5.00	10.0	20.0
trans-1,2-Dichloroethene	FB	Ave	22754 1021890	45076	96533	199389	405322	1.00 50.0	2.00	5.00	10.0	20.0
Methyl tert-butyl ether	FB	Ave	24603 1195589	51118	110934	245941	489252	1.00 50.0	2.00	5.00	10.0	20.0
Propionitrile	FB	Ave	6975 308672	13509	29121	65657	129246	10.0 500	20.0	50.0	100	200
1,1-Dichloroethane	FB	Ave	36036 1697131	72455	155702	332089	670677	1.00 50.0	2.00	5.00	10.0	20.0
Vinyl acetate	FB	Ave	25463 1294589	50929	119618	261016	526687	2.00 100	4.00	10.0	20.0	40.0
2-Chloro-1,3-butadiene	FB	Ave	27665 1351610	56390	125379	266642	543633	1.00 50.0	2.00	5.00	10.0	20.0
Hexane	FB	Ave	30049 1359679	63007	138884	281988	561061	1.00 50.0	2.00	5.00	10.0	20.0
Isopropyl ether	FB	Ave	45884 2047404	92367	203157	440963	869109	1.00 50.0	2.00	5.00	10.0	20.0
2-Butanone (MEK)	FB	Ave	1414 66210	2943	6649	14294	27397	2.00 100	4.00	10.0	20.0	40.0
Methacrylonitrile	FB	Ave	8336 371035	16253	35715	79527	155603	10.0 500	20.0	50.0	100	200
cis-1,2-Dichloroethene	FB	Ave	23046 1066358	46035	97294	209574	419888	1.00 50.0	2.00	5.00	10.0	20.0
Ethyl acetate	FB	Ave	7955 402817	14809	34500	80085	160180	2.00 100	4.00	10.0	20.0	40.0

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

APPENDIX B (111 of 240)

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

Analy Batch No.: 122189

SDG No.:

Instrument ID: VOAMS01 GC Column: DB-VRX 60 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/03/2013 12:01 Calibration End Date: 12/03/2013 14:05 Calibration ID: 2640

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Chlorobromomethane	FB	Ave	8417 387486	16784	36710	80722	158987	1.00 50.0	2.00	5.00	10.0	20.0
Chloroform	FB	Ave	34087 1514741	66789	146472	309947	620224	1.00 50.0	2.00	5.00	10.0	20.0
Tert-butyl ethyl ether	FB	Ave	33424 1573409	66628	146940	327644	650332	1.00 50.0	2.00	5.00	10.0	20.0
Isobutyl alcohol	FB	Ave	8739 397601	16827	36800	82361	168950	25.0 1250	50.0	125	250	500
2,2-Dichloropropane	FB	Ave	31060 1512883	63215	140414	297385	606846	1.00 50.0	2.00	5.00	10.0	20.0
Tetrahydrofuran	FB	Lin1	3781 137352	6419	14299	27338	54885	2.00 100	4.00	10.0	20.0	40.0
1,2-Dichloroethane	FB	Ave	16565 718815	31264	69488	148829	298050	1.00 50.0	2.00	5.00	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	32311 1673908	67627	150125	320408	663700	1.00 50.0	2.00	5.00	10.0	20.0
1,1-Dichloropropene	FB	Ave	28012 1314884	56753	125644	261406	528814	1.00 50.0	2.00	5.00	10.0	20.0
Cyclohexane	FB	Ave	33381 1589573	68250	151400	314310	635046	1.00 50.0	2.00	5.00	10.0	20.0
Carbon tetrachloride	FB	Ave	28208 1516025	58487	132861	285742	591998	1.00 50.0	2.00	5.00	10.0	20.0
Benzene	FB	Ave	87059 3922857	177836	381492	802281	1607431	1.00 50.0	2.00	5.00	10.0	20.0
Tert-amyl methyl ether	FB	Ave	28427 1351917	54508	122062	271757	549660	1.00 50.0	2.00	5.00	10.0	20.0
Ethyl acrylate	FB	Ave	8967 429903	15131	35520	75473	167574	1.00 50.0	2.00	5.00	10.0	20.0
Dibromomethane	FB	Ave	6706 308828	12995	29294	64002	127323	1.00 50.0	2.00	5.00	10.0	20.0
1,2-Dichloropropane	FB	Ave	17863 802557	35368	79089	166893	331286	1.00 50.0	2.00	5.00	10.0	20.0
Trichloroethene	FB	Ave	28574 1324254	57924	125363	262884	535158	1.00 50.0	2.00	5.00	10.0	20.0
Bromodichloromethane	FB	Ave	19022 1022814	38461	88668	198450	405445	1.00 50.0	2.00	5.00	10.0	20.0
Methyl methacrylate	FB	Ave	10391 573116	21650	49195	113864	231961	2.00 100	4.00	10.0	20.0	40.0
1,4-Dioxane	DXE	Lin1	1272 34769	1724	3505	7297	14569	20.0 1000	40.0	100	200	400
2-Chloroethyl vinyl ether	CBZ	Ave	7984 461111	16742	38226	89320	183924	2.00 100	4.00	10.0	20.0	40.0

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

APPENDIX B (112 of 240)

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

Analy Batch No.: 122189

SDG No.:

Instrument ID: VOAMS01 GC Column: DB-VRX 60 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/03/2013 12:01 Calibration End Date: 12/03/2013 14:05 Calibration ID: 2640

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
2-Nitropropane	FB	Ave	4568 313661	11277	27972	60920	127617	2.00 100	4.00	10.0	20.0	40.0
Methylcyclohexane	FB	Ave	40144 1947806	83441	186113	384945	773736	1.00 50.0	2.00	5.00	10.0	20.0
cis-1,3-Dichloropropene	CBZ	Ave	21178 1150281	43152	99505	220938	460853	1.00 50.0	2.00	5.00	10.0	20.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	10092 484142	20024	41679	98781	197608	2.00 100	4.00	10.0	20.0	40.0
trans-1,3-Dichloropropene	CBZ	Ave	14273 802769	28501	65197	149540	316892	1.00 50.0	2.00	5.00	10.0	20.0
n-Heptane	FB	Lin	2755 97691	4290	8808	18466	38116	1.00 50.0	2.00	5.00	10.0	20.0
1,1,2-Trichloroethane	CBZ	Ave	10259 462065	19372	43363	95076	189163	1.00 50.0	2.00	5.00	10.0	20.0
Ethyl methacrylate	CBZ	Ave	8733 499279	17331	41820	98415	201742	1.00 50.0	2.00	5.00	10.0	20.0
Toluene	CBZ	Ave	61897 2861209	127024	276982	579648	1165631	1.00 50.0	2.00	5.00	10.0	20.0
1,3-Dichloropropane	CBZ	Ave	17562 800626	34761	76882	164681	330068	1.00 50.0	2.00	5.00	10.0	20.0
2-Hexanone	CBZ	Lin1	7786 320265	12459	28227	65112	130409	2.00 100	4.00	10.0	20.0	40.0
Dibromochloromethane	CBZ	Ave	9836 646708	20053	48066	113330	243824	1.00 50.0	2.00	5.00	10.0	20.0
n-Butyl acetate	CBZ	Ave	8258 403759	13940	35147	80307	162256	1.00 50.0	2.00	5.00	10.0	20.0
1,2-Dibromoethane	CBZ	Ave	9238 457419	18293	41183	91414	185308	1.00 50.0	2.00	5.00	10.0	20.0
Tetrachloroethylene	CBZ	Ave	23519 1116946	48349	104186	218818	456198	1.00 50.0	2.00	5.00	10.0	20.0
1-Chlorohexane	CBZ	Ave	22352 1039389	45662	100005	210344	424845	1.00 50.0	2.00	5.00	10.0	20.0
1,1,1,2-Tetrachloroethane	CBZ	Ave	18201 995728	37036	85803	188188	393277	1.00 50.0	2.00	5.00	10.0	20.0
Chlorobenzene	CBZ	Ave	67949 3073962	136435	297492	632320	1270097	1.00 50.0	2.00	5.00	10.0	20.0
Ethylbenzene	CBZ	Ave	40390 1965950	83890	188155	391925	793974	1.00 50.0	2.00	5.00	10.0	20.0
m-Xylene & p-Xylene	CBZ	Ave	51734 2444892	105650	233414	489048	992375	1.00 50.0	2.00	5.00	10.0	20.0
Bromoform	DCB	Ave	3965 287386	7848	18640	45256	102024	1.00 50.0	2.00	5.00	10.0	20.0

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

APPENDIX B (113 of 240)

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

Analy Batch No.: 122189

SDG No.:

Instrument ID: VOAMS01 GC Column: DB-VRX 60 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/03/2013 12:01 Calibration End Date: 12/03/2013 14:05 Calibration ID: 2640

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Styrene	CBZ	Ave	56806 3110502	120882	280972	615483	1262057	1.00 50.0	2.00	5.00	10.0	20.0
Cyclohexanone	CBZ	Lin1	7871 330195	14298	28955	67686	136246	50.0 2500	100	250	500	1000
1,1,2,2-Tetrachloroethane	DCB	Ave	9887 444333	18363	41435	92235	184550	1.00 50.0	2.00	5.00	10.0	20.0
o-Xylene	CBZ	Ave	48197 2218651	98274	218953	453378	909233	1.00 50.0	2.00	5.00	10.0	20.0
trans-1,4-Dichloro-2-butene	DCB	Ave	1972 105602	3666	8285	19407	39891	1.00 50.0	2.00	5.00	10.0	20.0
1,2,3-Trichloropropane	DCB	Ave	3094 141247	5890	13237	29245	58161	1.00 50.0	2.00	5.00	10.0	20.0
Isopropylbenzene	DCB	Ave	128944 6079677	266779	589577	1238394	2486147	1.00 50.0	2.00	5.00	10.0	20.0
Bromobenzene	DCB	Ave	25256 1167732	49565	111602	239459	477756	1.00 50.0	2.00	5.00	10.0	20.0
N-Propylbenzene	DCB	Ave	38172 1840774	79779	174569	370840	751708	1.00 50.0	2.00	5.00	10.0	20.0
2-Chlorotoluene	DCB	Ave	33963 1510261	65490	145149	309225	617242	1.00 50.0	2.00	5.00	10.0	20.0
4-Chlorotoluene	DCB	Ave	83942 3830696	167263	368195	778250	1567022	1.00 50.0	2.00	5.00	10.0	20.0
1,3,5-Trimethylbenzene	DCB	Ave	108246 5141130	222154	494579	1043333	2116435	1.00 50.0	2.00	5.00	10.0	20.0
Pentachloroethane	DCB	Ave	10504 639203	21214	48935	116394	240540	1.00 50.0	2.00	5.00	10.0	20.0
tert-Butylbenzene	DCB	Ave	100831 4761391	205215	458226	960004	1945357	1.00 50.0	2.00	5.00	10.0	20.0
1,2,4-Trimethylbenzene	DCB	Ave	107631 5140668	221965	499564	1045848	2111570	1.00 50.0	2.00	5.00	10.0	20.0
sec-Butylbenzene	DCB	Ave	144378 6936025	300945	673791	1410351	2850576	1.00 50.0	2.00	5.00	10.0	20.0
Benzyl chloride	DCB	Ave	12177 905658	24379	62255	151126	334794	1.00 50.0	2.00	5.00	10.0	20.0
1,3-Dichlorobenzene	DCB	Ave	57640 2649420	113940	252989	538029	1083542	1.00 50.0	2.00	5.00	10.0	20.0
1,4-Dichlorobenzene	DCB	Ave	54621 2431291	108531	240138	510735	1019122	1.00 50.0	2.00	5.00	10.0	20.0
4-Isopropyltoluene	DCB	Ave	131319 6146353	270455	606882	1260823	2562998	1.00 50.0	2.00	5.00	10.0	20.0
1,2,3-Trimethylbenzene	DCB	Ave	96751 4543845	195181	441748	929328	1876119	1.00 50.0	2.00	5.00	10.0	20.0

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

APPENDIX B (114 of 240)

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

Analy Batch No.: 122189

SDG No.: _____

Instrument ID: VOAMS01 GC Column: DB-VRX 60 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/03/2013 12:01 Calibration End Date: 12/03/2013 14:05 Calibration ID: 2640

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,2-Dichlorobenzene	DCB	Ave	44889 2079403	87855	198889	423232	851924	1.00 50.0	2.00	5.00	10.0	20.0
n-Butylbenzene	DCB	Ave	102966 5228994	212161	492607	1037993	2125485	1.00 50.0	2.00	5.00	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCB	Lin1	1577 82334	2663	6512	14563	31045	1.00 50.0	2.00	5.00	10.0	20.0
1,3,5-Trichlorobenzene	DCB	Ave	37021 1860166	75840	171167	362086	750999	1.00 50.0	2.00	5.00	10.0	20.0
1,2,4-Trichlorobenzene	DCB	Lin1	27010 1304057	53432	118945	257257	526771	1.00 50.0	2.00	5.00	10.0	20.0
Naphthalene	DCB	Ave	32768 1569731	60921	137343	306314	631093	1.00 50.0	2.00	5.00	10.0	20.0
Hexachlorobutadiene	DCB	Lin1	7662 407109	14846	33073	71310	149196	1.00 50.0	2.00	5.00	10.0	20.0
1,2,3-Trichlorobenzene	DCB	Ave	20848 933011	38861	86054	186363	377983	1.00 50.0	2.00	5.00	10.0	20.0
Dibromofluoromethane	FB	Ave	16024 774527	31585	71811	155349	309197	1.00 50.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	12045 542455	24580	51837	113233	223463	1.00 50.0	2.00	5.00	10.0	20.0
Toluene-d8 (Surr)	CBZ	Ave	79175 3716401	163401	358607	751375	1517175	1.00 50.0	2.00	5.00	10.0	20.0
4-Bromofluorobenzene	DCB	Ave	27016 1196647	51604	114068	246732	489337	1.00 50.0	2.00	5.00	10.0	20.0

Curve Type Legend:

Ave = Average ISTD

Lin = Linear ISTD

Lin1 = Linear 1/conc ISTD

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Lab Sample ID: CCVIS 600-123637/2

Calibration Date: 12/24/2013 11:25

Instrument ID: VOAMS01

Calib Start Date: 12/03/2013 12:01

GC Column: DB-624

ID: 0.18 (mm)

Calib End Date: 12/03/2013 14:05

Lab File ID: C35801.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
2-Methylnaphthalene	Ave		0.0000		1.00	10.0		35.0
Dichlorodifluoromethane	Ave	0.3790	0.2757		7.28	10.0	-27.2	35.0
Chloromethane	Ave	0.3368	0.1701	0.1000	5.05	10.0	-49.5*	35.0
Vinyl chloride	Ave	0.3174	0.2654		8.48	10.0	-15.2	20.0
Butadiene	Ave	0.3085	0.2249		7.29	10.0	-27.1	35.0
Bromomethane	Ave	0.1420	0.1050		7.39	10.0	-26.1	35.0
Chloroethane	Ave	0.1928	0.1989		10.3	10.0	3.2	35.0
Ethanol	Lin1	0.0008	0.0011		888	500	77.7*	35.0
Dichlorofluoromethane	Ave	0.5027	0.7660		15.2	10.0	52.4*	35.0
Acetonitrile	Lin1	0.0145	0.0162		132	100	31.5	50.0
Acrolein	Lin1	0.0114	0.0068		32.3	50.0	-35.5	50.0
Trichlorofluoromethane	Ave	0.6481	0.7931		12.2	10.0	22.4	35.0
Isopropyl alcohol	Lin1	0.0053	0.0064		145	100	45.0	50.0
Acetone	Lin1	0.0318	0.0334		26.8	20.0	33.8	50.0
Ethyl ether	Ave	0.1592	0.1339		8.41	10.0	-15.9	35.0
t-Butanol	Ave	0.0094	0.0120		128	100	28.1	35.0
1,1-Dichloroethene	Ave	0.4296	0.3631		8.45	10.0	-15.5	20.0
Acrylonitrile	Ave	0.0324	0.0369		114	100	13.9	50.0
Iodomethane	Ave	0.6125	0.4089		6.68	10.0	-33.2	35.0
Methylene Chloride	Lin1	0.4083	0.3130		8.92	10.0	-10.8	50.0
Methyl acetate	Ave	0.0877	0.0987		56.2	50.0	12.5	35.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3782	0.2231		5.90	10.0	-41.0*	35.0
3-Chloro-1-propene	Ave	0.2336	0.1353		5.79	10.0	-42.1*	35.0
Carbon disulfide	Ave	1.068	0.5941		5.56	10.0	-44.4*	35.0
trans-1,2-Dichloroethene	Ave	0.4454	0.2845		6.39	10.0	-36.1*	35.0
Methyl tert-butyl ether	Ave	0.5161	0.4929		9.55	10.0	-4.5	35.0
Propionitrile	Ave	0.0138	0.0166		120	100	20.3	35.0
1,1-Dichloroethane	Ave	0.7251	0.6191	0.1000	8.54	10.0	-14.6	35.0
Vinyl acetate	Ave	0.2716	0.2526		18.6	20.0	-7.0	50.0
2-Chloro-1,3-butadiene	Ave	0.5745	0.4046		7.04	10.0	-29.6	35.0
Hexane	Ave	0.6147	0.4609		7.50	10.0	-25.0	35.0
2-Butanone (MEK)	Ave	0.0148	0.0180		24.3	20.0	21.4	50.0
Isopropyl ether	Ave	0.9290	1.025		11.0	10.0	10.4	35.0
Methacrylonitrile	Ave	0.0166	0.0203		122	100	22.2	35.0
cis-1,2-Dichloroethene	Ave	0.4578	0.4392		9.60	10.0	-4.1	35.0
Ethyl acetate	Ave	0.0821	0.0982		23.9	20.0	19.6	35.0
Chlorobromomethane	Ave	0.1703	0.1738		10.2	10.0	2.0	35.0
Chloroform	Ave	0.6724	0.6965		10.4	10.0	3.6	20.0
Tert-butyl ethyl ether	Ave	0.6851	0.7487		10.9	10.0	9.3	35.0
Isobutyl alcohol	Ave	0.0070	0.0096		345	250	37.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Lab Sample ID: CCVIS 600-123637/2

Calibration Date: 12/24/2013 11:25

Instrument ID: VOAMS01

Calib Start Date: 12/03/2013 12:01

GC Column: DB-624

ID: 0.18 (mm)

Calib End Date: 12/03/2013 14:05

Lab File ID: C35801.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
2,2-Dichloropropane	Ave	0.6430	0.5327		8.29	10.0	-17.1	35.0
Tetrahydrofuran	Lin1	0.0322	0.0350		25.2	20.0	26.2	35.0
1,2-Dichloroethane	Ave	0.3210	0.3526		11.0	10.0	9.8	35.0
1,1,1-Trichloroethane	Ave	0.6912	0.6108		8.84	10.0	-11.6	35.0
1,1-Dichloropropene	Ave	0.5700	0.4611		8.09	10.0	-19.1	35.0
Cyclohexane	Ave	0.6849	0.3008		4.39	10.0	-56.1*	35.0
Carbon tetrachloride	Ave	0.6114	0.5397		8.83	10.0	-11.7	35.0
Benzene	Ave	1.748	1.616		9.25	10.0	-7.5	35.0
Tert-amyl methyl ether	Ave	0.5743	0.6137		10.7	10.0	6.9	35.0
Ethyl acrylate	Ave	0.1707	0.2594		15.2	10.0	52.0*	35.0
Dibromomethane	Ave	0.1350	0.1591		11.8	10.0	17.8	35.0
1,2-Dichloropropane	Ave	0.3580	0.3861		10.8	10.0	7.8	20.0
Trichloroethene	Ave	0.5763	0.5353		9.29	10.0	-7.1	35.0
Bromodichloromethane	Ave	0.4129	0.4972		12.0	10.0	20.4	35.0
Methyl methacrylate	Ave	0.1160	0.1410		24.3	20.0	21.6	50.0
1,4-Dioxane	Lin1	1.343	1.469		280	200	40.1	50.0
2-Chloroethyl vinyl ether	Ave	0.2344	0.2560		21.9	20.0	9.2	35.0
2-Nitropropane	Ave	0.0610	0.0729		23.9	20.0	19.4	35.0
Methylcyclohexane	Ave	0.8356	0.5418		6.48	10.0	-35.2*	35.0
cis-1,3-Dichloropropene	Ave	1.196	1.239		10.4	10.0	3.6	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1027	0.1311		25.5	20.0	27.6	50.0
trans-1,3-Dichloropropene	Ave	0.8072	0.8693		10.8	10.0	7.7	35.0
n-Heptane	Lin	0.0441	0.0385		9.81	10.0	-1.9	35.0
1,1,2-Trichloroethane	Ave	0.5214	0.6018		11.5	10.0	15.4	35.0
Ethyl methacrylate	Ave	0.5080	0.5884		11.6	10.0	15.8	50.0
Toluene	Ave	3.252	3.123		9.60	10.0	-4.0	20.0
1,3-Dichloropropane	Ave	0.9114	1.070		11.7	10.0	17.4	35.0
2-Hexanone	Lin1	0.1794	0.2039		24.8	20.0	24.1	50.0
Dibromochloromethane	Ave	0.5998	0.7153		11.9	10.0	19.3	35.0
n-Butyl acetate	Ave	0.4249	0.4509		10.6	10.0	6.1	35.0
1,2-Dibromoethane	Ave	0.4962	0.5522		11.1	10.0	11.3	35.0
Tetrachloroethene	Ave	1.244	1.158		9.31	10.0	-6.9	35.0
1,1,1,2-Tetrachloroethane	Ave	1.026	1.161		11.3	10.0	13.1	35.0
Chlorobenzene	Ave	3.525	3.673	0.3000	10.4	10.0	4.2	35.0
Ethylbenzene	Ave	2.184	2.142		9.81	10.0	-1.9	20.0
m-Xylene & p-Xylene	Ave	2.740	2.673		9.76	10.0	-2.5	35.0
Bromoform	Ave	0.2243	0.2931	0.1000	13.1	10.0	30.7	35.0
Styrene	Ave	3.295	3.503		10.6	10.0	6.3	35.0
Cyclohexanone	Lin1	0.0075	0.0106		779	500	55.7*	50.0
1,1,2,2-Tetrachloroethane	Ave	0.4604	0.6391	0.3000	13.9	10.0	38.8*	35.0
o-Xylene	Ave	2.537	2.689		10.6	10.0	6.0	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Lab Sample ID: CCVIS 600-123637/2

Calibration Date: 12/24/2013 11:25

Instrument ID: VOAMS01

Calib Start Date: 12/03/2013 12:01

GC Column: DB-624 ID: 0.18 (mm)

Calib End Date: 12/03/2013 14:05

Lab File ID: C35801.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
trans-1,4-Dichloro-2-butene	Ave	0.0964	0.1098		11.4	10.0	13.9	50.0
1,2,3-Trichloropropane	Ave	0.1460	0.1821		12.5	10.0	24.7	35.0
Isopropylbenzene	Ave	6.314	6.311		10.00	10.0	-0.0	35.0
Bromobenzene	Ave	1.208	1.340		11.1	10.0	10.9	35.0
N-Propylbenzene	Ave	1.889	1.894		10.0	10.0	0.3	35.0
2-Chlorotoluene	Ave	1.582	1.599		10.1	10.0	1.1	35.0
4-Chlorotoluene	Ave	3.993	4.365		10.9	10.0	9.3	35.0
1,3,5-Trimethylbenzene	Ave	5.312	5.483		10.3	10.0	3.2	35.0
Pentachloroethane	Ave	0.5627	0.7248		12.9	10.0	28.8	35.0
tert-Butylbenzene	Ave	4.912	4.979		10.1	10.0	1.4	35.0
1,2,4-Trimethylbenzene	Ave	5.314	5.615		10.6	10.0	5.7	35.0
sec-Butylbenzene	Ave	7.169	7.718		10.8	10.0	7.7	35.0
Benzyl chloride	Ave	0.7207	0.9258		12.9	10.0	28.5	35.0
1,3-Dichlorobenzene	Ave	2.747	2.995		10.9	10.0	9.0	35.0
1,4-Dichlorobenzene	Ave	2.592	2.961		11.4	10.0	14.2	35.0
4-Isopropyltoluene	Ave	6.442	6.906		10.7	10.0	7.2	35.0
1,2,3-Trimethylbenzene	Ave	4.716	5.186		11.0	10.0	10.0	35.0
1,2-Dichlorobenzene	Ave	2.147	2.456		11.4	10.0	14.4	35.0
n-Butylbenzene	Ave	5.227	6.160		11.8	10.0	17.8	35.0
1,2-Dibromo-3-Chloropropane	Lin1	0.0743	0.0898		12.3	10.0	23.4	35.0
1,3,5-Trichlorobenzene	Ave	1.850	2.264		12.2	10.0	22.4	35.0
1,2,4-Trichlorobenzene	Lin1	1.309	1.706		14.2	10.0	41.5*	35.0
Naphthalene	Ave	1.549	1.973		12.7	10.0	27.4	35.0
Hexachlorobutadiene	Lin1	0.3727	0.5018		14.0	10.0	40.0*	35.0
1,2,3-Trichlorobenzene	Ave	0.9574	1.322		13.8	10.0	38.1*	35.0
Dibromofluoromethane	Ave	0.3290	0.3464		10.5	10.0	5.3	35.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2420	0.2597		10.7	10.0	7.3	35.0
Toluene-d8 (Surr)	Ave	4.203	3.799		9.04	10.0	-9.6	35.0
4-Bromofluorobenzene	Ave	1.253	1.361		10.9	10.0	8.7	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Lab Sample ID: CCVIS 600-123757/2

Calibration Date: 12/26/2013 10:56

Instrument ID: VOAMS01

Calib Start Date: 12/03/2013 12:01

GC Column: DB-624

ID: 0.18 (mm)

Calib End Date: 12/03/2013 14:05

Lab File ID: C36001.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
2-Methylnaphthalene	Ave		0.0000		1.00	10.0		35.0
Dichlorodifluoromethane	Ave	0.3790	0.2839		7.49	10.0	-25.1	35.0
Chloromethane	Ave	0.3368	0.1829	0.1000	5.43	10.0	-45.7*	35.0
Vinyl chloride	Ave	0.3174	0.3470		11.1	10.0	10.9	20.0
Butadiene	Ave	0.3085	0.2175		7.05	10.0	-29.5	35.0
Bromomethane	Ave	0.1420	0.0990		6.97	10.0	-30.3	35.0
Ethanol	Lin1	0.0008	0.0009		664	500	32.9	35.0
Chloroethane	Ave	0.1928	0.1664		8.63	10.0	-13.7	35.0
Dichlorofluoromethane	Ave	0.5027	0.5728		11.4	10.0	13.9	35.0
Acetonitrile	Lin1	0.0145	0.0124		98.7	100	-1.3	50.0
Acrolein	Lin1	0.0114	0.0063		29.4	50.0	-41.2	50.0
Trichlorofluoromethane	Ave	0.6481	0.6462		9.97	10.0	-0.3	35.0
Isopropyl alcohol	Lin1	0.0053	0.0043		95.9	100	-4.1	50.0
Acetone	Lin1	0.0318	0.0248		19.2	20.0	-3.8	50.0
Ethyl ether	Ave	0.1592	0.1113		6.99	10.0	-30.1	35.0
t-Butanol	Ave	0.0094	0.0090		96.2	100	-3.8	35.0
1,1-Dichloroethene	Ave	0.4296	0.4047		9.42	10.0	-5.8	20.0
Acrylonitrile	Ave	0.0324	0.0280		86.6	100	-13.4	50.0
Iodomethane	Ave	0.6125	0.3886		6.34	10.0	-36.6*	35.0
Methylene Chloride	Lin1	0.4083	0.2765		7.77	10.0	-22.3	50.0
Methyl acetate	Ave	0.0877	0.0724		41.3	50.0	-17.4	35.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3782	0.2209		5.84	10.0	-41.6*	35.0
3-Chloro-1-propene	Ave	0.2336	0.1330		5.69	10.0	-43.1*	35.0
Carbon disulfide	Ave	1.068	0.6484		6.07	10.0	-39.3*	35.0
trans-1,2-Dichloroethene	Ave	0.4454	0.2981		6.69	10.0	-33.1	35.0
Methyl tert-butyl ether	Ave	0.5161	0.4105		7.95	10.0	-20.5	35.0
Propionitrile	Ave	0.0138	0.0129		93.8	100	-6.2	35.0
1,1-Dichloroethane	Ave	0.7251	0.6030	0.1000	8.32	10.0	-16.8	35.0
Vinyl acetate	Ave	0.2716	0.1992		14.7	20.0	-26.6	50.0
2-Chloro-1,3-butadiene	Ave	0.5745	0.4400		7.66	10.0	-23.4	35.0
2-Butanone (MEK)	Ave	0.0148	0.0138		18.7	20.0	-6.6	50.0
Hexane	Ave	0.6147	0.5074		8.25	10.0	-17.5	35.0
Isopropyl ether	Ave	0.9290	0.8790		9.46	10.0	-5.4	35.0
Methacrylonitrile	Ave	0.0166	0.0151		90.8	100	-9.2	35.0
cis-1,2-Dichloroethene	Ave	0.4578	0.4139		9.04	10.0	-9.6	35.0
Ethyl acetate	Ave	0.0821	0.0751		18.3	20.0	-8.5	35.0
Chlorobromomethane	Ave	0.1703	0.1489		8.74	10.0	-12.6	35.0
Chloroform	Ave	0.6724	0.6713		9.98	10.0	-0.2	20.0
Tert-butyl ethyl ether	Ave	0.6851	0.6065		8.85	10.0	-11.5	35.0
Isobutyl alcohol	Ave	0.0070	0.0070		251	250	0.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Lab Sample ID: CCVIS 600-123757/2

Calibration Date: 12/26/2013 10:56

Instrument ID: VOAMS01

Calib Start Date: 12/03/2013 12:01

GC Column: DB-624

ID: 0.18 (mm)

Calib End Date: 12/03/2013 14:05

Lab File ID: C36001.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
2,2-Dichloropropane	Ave	0.6430	0.5459		8.49	10.0	-15.1	35.0
Tetrahydrofuran	Lin1	0.0322	0.0249		17.5	20.0	-12.4	35.0
1,2-Dichloroethane	Ave	0.3210	0.2994		9.33	10.0	-6.7	35.0
1,1,1-Trichloroethane	Ave	0.6912	0.6309		9.13	10.0	-8.7	35.0
1,1-Dichloropropene	Ave	0.5700	0.4931		8.65	10.0	-13.5	35.0
Cyclohexane	Ave	0.6849	0.2917		4.26	10.0	-57.4*	35.0
Carbon tetrachloride	Ave	0.6114	0.5642		9.23	10.0	-7.7	35.0
Benzene	Ave	1.748	1.608		9.20	10.0	-8.0	35.0
Tert-amyl methyl ether	Ave	0.5743	0.5017		8.74	10.0	-12.6	35.0
Ethyl acrylate	Ave	0.1707	0.2013		11.8	10.0	17.9	35.0
Dibromomethane	Ave	0.1350	0.1326		9.82	10.0	-1.8	35.0
1,2-Dichloropropane	Ave	0.3580	0.3572		9.98	10.0	-0.2	20.0
Trichloroethene	Ave	0.5763	0.5694		9.88	10.0	-1.2	35.0
Bromodichloromethane	Ave	0.4129	0.4396		10.7	10.0	6.5	35.0
Methyl methacrylate	Ave	0.1160	0.1118		19.3	20.0	-3.6	50.0
1,4-Dioxane	Lin1	1.343	1.211		223	200	11.6	50.0
2-Chloroethyl vinyl ether	Ave	0.2344	0.2286		19.5	20.0	-2.5	35.0
2-Nitropropane	Ave	0.0610	0.0613		20.1	20.0	0.5	35.0
Methylcyclohexane	Ave	0.8356	0.5435		6.50	10.0	-35.0	35.0
cis-1,3-Dichloropropene	Ave	1.196	1.214		10.2	10.0	1.5	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1027	0.0977		19.0	20.0	-4.9	50.0
trans-1,3-Dichloropropene	Ave	0.8072	0.8201		10.2	10.0	1.6	35.0
n-Heptane	Lin	0.0441	0.0333		8.38	10.0	-16.3	35.0
1,1,2-Trichloroethane	Ave	0.5214	0.5369		10.3	10.0	3.0	35.0
Ethyl methacrylate	Ave	0.5080	0.4917		9.68	10.0	-3.2	50.0
Toluene	Ave	3.252	3.441		10.6	10.0	5.8	20.0
1,3-Dichloropropane	Ave	0.9114	0.9426		10.3	10.0	3.4	35.0
2-Hexanone	Lin1	0.1794	0.1612		19.5	20.0	-2.7	50.0
Dibromochloromethane	Ave	0.5998	0.6685		11.2	10.0	11.5	35.0
n-Butyl acetate	Ave	0.4249	0.3880		9.13	10.0	-8.7	35.0
1,2-Dibromoethane	Ave	0.4962	0.4947		9.97	10.0	-0.3	35.0
Tetrachloroethene	Ave	1.244	1.347		10.8	10.0	8.3	35.0
1,1,1,2-Tetrachloroethane	Ave	1.026	1.150		11.2	10.0	12.0	35.0
Chlorobenzene	Ave	3.525	3.821	0.3000	10.8	10.0	8.4	35.0
Ethylbenzene	Ave	2.184	2.412		11.0	10.0	10.4	20.0
m-Xylene & p-Xylene	Ave	2.740	3.004		11.0	10.0	9.6	35.0
Bromoform	Ave	0.2243	0.2812	0.1000	12.5	10.0	25.3	35.0
Styrene	Ave	3.295	3.596		10.9	10.0	9.2	35.0
Cyclohexanone	Lin1	0.0075	0.0075		543	500	8.6	50.0
1,1,2,2-Tetrachloroethane	Ave	0.4604	0.5359	0.3000	11.6	10.0	16.4	35.0
o-Xylene	Ave	2.537	2.784		11.0	10.0	9.8	35.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Lab Sample ID: CCVIS 600-123757/2

Calibration Date: 12/26/2013 10:56

Instrument ID: VOAMS01

Calib Start Date: 12/03/2013 12:01

GC Column: DB-624 ID: 0.18 (mm)

Calib End Date: 12/03/2013 14:05

Lab File ID: C36001.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
trans-1,4-Dichloro-2-butene	Ave	0.0964	0.0903		9.36	10.0	-6.4	50.0
1,2,3-Trichloropropane	Ave	0.1460	0.1585		10.9	10.0	8.6	35.0
Isopropylbenzene	Ave	6.314	7.603		12.0	10.0	20.4	35.0
Bromobenzene	Ave	1.208	1.399		11.6	10.0	15.7	35.0
N-Propylbenzene	Ave	1.889	2.268		12.0	10.0	20.1	35.0
2-Chlorotoluene	Ave	1.582	1.830		11.6	10.0	15.7	35.0
4-Chlorotoluene	Ave	3.993	4.772		12.0	10.0	19.5	35.0
1,3,5-Trimethylbenzene	Ave	5.312	6.400		12.1	10.0	20.5	35.0
Pentachloroethane	Ave	0.5627	0.7522		13.4	10.0	33.7	35.0
tert-Butylbenzene	Ave	4.912	5.983		12.2	10.0	21.8	35.0
1,2,4-Trimethylbenzene	Ave	5.314	6.327		11.9	10.0	19.0	35.0
sec-Butylbenzene	Ave	7.169	9.003		12.6	10.0	25.6	35.0
Benzyl chloride	Ave	0.7207	0.8107		11.3	10.0	12.5	35.0
1,3-Dichlorobenzene	Ave	2.747	3.130		11.4	10.0	14.0	35.0
1,4-Dichlorobenzene	Ave	2.592	2.996		11.6	10.0	15.6	35.0
4-Isopropyltoluene	Ave	6.442	7.982		12.4	10.0	23.9	35.0
1,2,3-Trimethylbenzene	Ave	4.716	5.467		11.6	10.0	15.9	35.0
1,2-Dichlorobenzene	Ave	2.147	2.425		11.3	10.0	12.9	35.0
n-Butylbenzene	Ave	5.227	6.858		13.1	10.0	31.2	35.0
1,2-Dibromo-3-Chloropropane	Lin1	0.0743	0.0813		11.2	10.0	11.5	35.0
1,3,5-Trichlorobenzene	Ave	1.850	2.364		12.8	10.0	27.8	35.0
1,2,4-Trichlorobenzene	Lin1	1.309	1.630		13.5	10.0	35.0	35.0
Naphthalene	Ave	1.549	1.897		12.3	10.0	22.5	35.0
Hexachlorobutadiene	Lin1	0.3727	0.5421		15.1	10.0	51.4*	35.0
1,2,3-Trichlorobenzene	Ave	0.9574	1.200		12.5	10.0	25.3	35.0
Dibromofluoromethane	Ave	0.3290	0.3243		9.86	10.0	-1.4	35.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2420	0.2197		9.08	10.0	-9.2	35.0
Toluene-d8 (Surr)	Ave	4.203	4.267		10.2	10.0	1.5	35.0
4-Bromofluorobenzene	Ave	1.253	1.417		11.3	10.0	13.1	35.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Client Sample ID: _____

Lab Sample ID: MB 600-123637/4Matrix: WaterLab File ID: C35805.DAnalysis Method: 8260B

Date Collected: _____

Sample wt/vol: 20 (mL)Date Analyzed: 12/24/2013 13:18

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: _____

Level: (low/med) LowAnalysis Batch No.: 123637Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	0.990	U	5.00	0.990
71-43-2	Benzene	0.0800	U	1.00	0.0800
74-97-5	Chlorobromomethane	0.180	U	1.00	0.180
75-25-2	Bromoform	0.190	U	1.00	0.190
74-83-9	Bromomethane	0.250	U	2.00	0.250
78-93-3	2-Butanone (MEK)	0.760	U	2.00	0.760
75-15-0	Carbon disulfide	0.240	U	2.00	0.240
56-23-5	Carbon tetrachloride	0.150	U	1.00	0.150
124-48-1	Dibromochloromethane	0.150	U	1.00	0.150
108-90-7	Chlorobenzene	0.120	U	1.00	0.120
75-00-3	Chloroethane	0.0800	U	2.00	0.0800
67-66-3	Chloroform	0.130	U	1.00	0.130
74-87-3	Chloromethane	0.180	U	2.00	0.180
75-34-3	1,1-Dichloroethane	0.110	U	1.00	0.110
107-06-2	1,2-Dichloroethane	0.140	U	1.00	0.140
75-35-4	1,1-Dichloroethene	0.190	U	1.00	0.190
156-60-5	trans-1,2-Dichloroethene	0.0900	U	1.00	0.0900
78-87-5	1,2-Dichloropropane	0.160	U	1.00	0.160
10061-01-5	cis-1,3-Dichloropropene	0.180	U	1.00	0.180
10061-02-6	trans-1,3-Dichloropropene	0.210	U	1.00	0.210
100-41-4	Ethylbenzene	0.110	U	1.00	0.110
591-78-6	2-Hexanone	0.350	U	2.00	0.350
75-09-2	Methylene Chloride	0.150	U	5.00	0.150
108-10-1	4-Methyl-2-pentanone (MIBK)	0.450	U	2.00	0.450
100-42-5	Styrene	0.0700	U	1.00	0.0700
79-34-5	1,1,2,2-Tetrachloroethane	0.220	U	1.00	0.220
127-18-4	Tetrachloroethene	0.130	U	1.00	0.130
108-88-3	Toluene	0.150	U	1.00	0.150
71-55-6	1,1,1-Trichloroethane	0.150	U	1.00	0.150
79-00-5	1,1,2-Trichloroethane	0.280	U	1.00	0.280
79-01-6	Trichloroethene	0.180	U	1.00	0.180
108-05-4	Vinyl acetate	0.210	U	2.00	0.210
75-01-4	Vinyl chloride	0.110	U	2.00	0.110
95-47-6	o-Xylene	0.120	U	1.00	0.120
179601-23-1	m-Xylene & p-Xylene	0.170	U	1.00	0.170
1330-20-7	Xylenes, Total	0.260	U	1.00	0.260

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston Job No.: 600-84503-1
SDG No.: _____
Client Sample ID: _____ Lab Sample ID: MB 600-123637/4
Matrix: Water Lab File ID: C35805.D
Analysis Method: 8260B Date Collected: _____
Sample wt/vol: 20 (mL) Date Analyzed: 12/24/2013 13:18
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 123637 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-59-2	cis-1,2-Dichloroethene	0.0600	U	1.00	0.0600
75-27-4	Bromodichloromethane	0.160	U	1.00	0.160
540-59-0	1,2-Dichloroethene, Total	0.300	U	1.00	0.300

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	97		70-130
1868-53-7	Dibromofluoromethane	109		62-130
460-00-4	4-Bromofluorobenzene	105		67-139
17060-07-0	1,2-Dichloroethane-d4 (Surr)	123		50-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Client Sample ID: _____

Lab Sample ID: MB 600-123757/3Matrix: WaterLab File ID: C36004.DAnalysis Method: 8260B

Date Collected: _____

Sample wt/vol: 20 (mL)Date Analyzed: 12/26/2013 12:24

Soil Aliquot Vol: _____

Dilution Factor: 1

Soil Extract Vol.: _____

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: _____

Level: (low/med) LowAnalysis Batch No.: 123757Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	0.990	U	5.00	0.990
71-43-2	Benzene	0.0800	U	1.00	0.0800
74-97-5	Chlorobromomethane	0.180	U	1.00	0.180
75-25-2	Bromoform	0.190	U	1.00	0.190
74-83-9	Bromomethane	0.250	U	2.00	0.250
78-93-3	2-Butanone (MEK)	0.760	U	2.00	0.760
75-15-0	Carbon disulfide	0.240	U	2.00	0.240
56-23-5	Carbon tetrachloride	0.150	U	1.00	0.150
124-48-1	Dibromochloromethane	0.150	U	1.00	0.150
108-90-7	Chlorobenzene	0.120	U	1.00	0.120
75-00-3	Chloroethane	0.0800	U	2.00	0.0800
67-66-3	Chloroform	0.130	U	1.00	0.130
74-87-3	Chloromethane	0.180	U	2.00	0.180
75-34-3	1,1-Dichloroethane	0.110	U	1.00	0.110
107-06-2	1,2-Dichloroethane	0.140	U	1.00	0.140
75-35-4	1,1-Dichloroethene	0.190	U	1.00	0.190
156-60-5	trans-1,2-Dichloroethene	0.0900	U	1.00	0.0900
78-87-5	1,2-Dichloropropane	0.160	U	1.00	0.160
10061-01-5	cis-1,3-Dichloropropene	0.180	U	1.00	0.180
10061-02-6	trans-1,3-Dichloropropene	0.210	U	1.00	0.210
100-41-4	Ethylbenzene	0.110	U	1.00	0.110
591-78-6	2-Hexanone	0.350	U	2.00	0.350
75-09-2	Methylene Chloride	0.150	U	5.00	0.150
108-10-1	4-Methyl-2-pentanone (MIBK)	0.450	U	2.00	0.450
100-42-5	Styrene	0.0700	U	1.00	0.0700
79-34-5	1,1,2,2-Tetrachloroethane	0.220	U	1.00	0.220
127-18-4	Tetrachloroethene	0.130	U	1.00	0.130
108-88-3	Toluene	0.150	U	1.00	0.150
71-55-6	1,1,1-Trichloroethane	0.150	U	1.00	0.150
79-00-5	1,1,2-Trichloroethane	0.280	U	1.00	0.280
79-01-6	Trichloroethene	0.180	U	1.00	0.180
108-05-4	Vinyl acetate	0.210	U	2.00	0.210
75-01-4	Vinyl chloride	0.110	U	2.00	0.110
95-47-6	o-Xylene	0.120	U	1.00	0.120
179601-23-1	m-Xylene & p-Xylene	0.170	U	1.00	0.170
1330-20-7	Xylenes, Total	0.260	U	1.00	0.260

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston Job No.: 600-84503-1
SDG No.: _____
Client Sample ID: _____ Lab Sample ID: MB 600-123757/3
Matrix: Water Lab File ID: C36004.D
Analysis Method: 8260B Date Collected: _____
Sample wt/vol: 20 (mL) Date Analyzed: 12/26/2013 12:24
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 123757 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-59-2	cis-1,2-Dichloroethene	0.0600	U	1.00	0.0600
75-27-4	Bromodichloromethane	0.160	U	1.00	0.160
540-59-0	1,2-Dichloroethene, Total	0.300	U	1.00	0.300

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	108		70-130
1868-53-7	Dibromofluoromethane	103		62-130
460-00-4	4-Bromofluorobenzene	114		67-139
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		50-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Client Sample ID:

Lab Sample ID: LCS 600-123637/3

Matrix: Water

Lab File ID: C35802.D

Analysis Method: 8260B

Date Collected:

Sample wt/vol: 20 (mL)

Date Analyzed: 12/24/2013 12:01

Soil Aliquot Vol.:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: DB-624 ID: 0.18 (mm)

% Moisture:

Level: (low/med) Low

Analysis Batch No.: 123637

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	23.83		5.00	0.990
71-43-2	Benzene	9.962		1.00	0.0800
74-97-5	Chlorobromomethane	10.37		1.00	0.180
75-25-2	Bromoform	11.41		1.00	0.190
74-83-9	Bromomethane	7.508		2.00	0.250
78-93-3	2-Butanone (MEK)	22.54		2.00	0.760
75-15-0	Carbon disulfide	10.02		2.00	0.240
56-23-5	Carbon tetrachloride	9.981		1.00	0.150
124-48-1	Dibromochloromethane	10.65		1.00	0.150
108-90-7	Chlorobenzene	9.377		1.00	0.120
75-00-3	Chloroethane	9.030		2.00	0.0800
67-66-3	Chloroform	10.36		1.00	0.130
74-87-3	Chloromethane	4.759		2.00	0.180
75-34-3	1,1-Dichloroethane	9.982		1.00	0.110
107-06-2	1,2-Dichloroethane	10.84		1.00	0.140
75-35-4	1,1-Dichloroethene	9.271		1.00	0.190
156-60-5	trans-1,2-Dichloroethene	9.027		1.00	0.0900
78-87-5	1,2-Dichloropropane	10.47		1.00	0.160
10061-01-5	cis-1,3-Dichloropropene	9.983		1.00	0.180
10061-02-6	trans-1,3-Dichloropropene	10.03		1.00	0.210
100-41-4	Ethylbenzene	8.975		1.00	0.110
591-78-6	2-Hexanone	21.69		2.00	0.350
75-09-2	Methylene Chloride	11.06		5.00	0.150
108-10-1	4-Methyl-2-pentanone (MIBK)	21.87		2.00	0.450
100-42-5	Styrene	9.298		1.00	0.0700
79-34-5	1,1,2,2-Tetrachloroethane	11.68		1.00	0.220
127-18-4	Tetrachloroethene	9.005		1.00	0.130
108-88-3	Toluene	9.259		1.00	0.150
71-55-6	1,1,1-Trichloroethane	9.877		1.00	0.150
79-00-5	1,1,2-Trichloroethane	10.57		1.00	0.280
79-01-6	Trichloroethene	9.362		1.00	0.180
108-05-4	Vinyl acetate	18.52		2.00	0.210
75-01-4	Vinyl chloride	6.599		2.00	0.110
95-47-6	o-Xylene	9.380		1.00	0.120
179601-23-1	m-Xylene & p-Xylene	8.764		1.00	0.170
1330-20-7	Xylenes, Total	18.14		1.00	0.260

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston Job No.: 600-84503-1
SDG No.: _____
Client Sample ID: _____ Lab Sample ID: LCS 600-123637/3
Matrix: Water Lab File ID: C35802.D
Analysis Method: 8260B Date Collected: _____
Sample wt/vol: 20 (mL) Date Analyzed: 12/24/2013 12:01
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 123637 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-59-2	cis-1,2-Dichloroethene	10.10		1.00	0.0600
75-27-4	Bromodichloromethane	11.12		1.00	0.160
540-59-0	1,2-Dichloroethene, Total	19.13		1.00	0.300

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	97		70-130
1868-53-7	Dibromofluoromethane	112		62-130
460-00-4	4-Bromofluorobenzene	110		67-139
17060-07-0	1,2-Dichloroethane-d4 (Surr)	117		50-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Client Sample ID:

Lab Sample ID: LCS 600-123757/4

Matrix: Water

Lab File ID: C36006.D

Analysis Method: 8260B

Date Collected:

Sample wt/vol: 20 (mL)

Date Analyzed: 12/26/2013 13:30

Soil Aliquot Vol.:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: DB-624 ID: 0.18 (mm)

% Moisture:

Level: (low/med) Low

Analysis Batch No.: 123757

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	14.84		5.00	0.990
71-43-2	Benzene	9.785		1.00	0.0800
74-97-5	Chlorobromomethane	8.811		1.00	0.180
75-25-2	Bromoform	9.204		1.00	0.190
74-83-9	Bromomethane	9.261		2.00	0.250
78-93-3	2-Butanone (MEK)	16.94		2.00	0.760
75-15-0	Carbon disulfide	10.20		2.00	0.240
56-23-5	Carbon tetrachloride	10.40		1.00	0.150
124-48-1	Dibromochloromethane	8.745		1.00	0.150
108-90-7	Chlorobenzene	9.337		1.00	0.120
75-00-3	Chloroethane	11.38		2.00	0.0800
67-66-3	Chloroform	9.577		1.00	0.130
74-87-3	Chloromethane	10.05		2.00	0.180
75-34-3	1,1-Dichloroethane	9.890		1.00	0.110
107-06-2	1,2-Dichloroethane	8.853		1.00	0.140
75-35-4	1,1-Dichloroethene	9.511		1.00	0.190
156-60-5	trans-1,2-Dichloroethene	9.548		1.00	0.0900
78-87-5	1,2-Dichloropropane	9.152		1.00	0.160
10061-01-5	cis-1,3-Dichloropropene	8.828		1.00	0.180
10061-02-6	trans-1,3-Dichloropropene	8.456		1.00	0.210
100-41-4	Ethylbenzene	9.803		1.00	0.110
591-78-6	2-Hexanone	13.54		2.00	0.350
75-09-2	Methylene Chloride	11.81		5.00	0.150
108-10-1	4-Methyl-2-pentanone (MIBK)	14.08		2.00	0.450
100-42-5	Styrene	8.910		1.00	0.0700
79-34-5	1,1,2,2-Tetrachloroethane	7.912		1.00	0.220
127-18-4	Tetrachloroethene	10.07		1.00	0.130
108-88-3	Toluene	9.860		1.00	0.150
71-55-6	1,1,1-Trichloroethane	9.970		1.00	0.150
79-00-5	1,1,2-Trichloroethane	8.456		1.00	0.280
79-01-6	Trichloroethene	9.568		1.00	0.180
108-05-4	Vinyl acetate	12.97		2.00	0.210
75-01-4	Vinyl chloride	10.88		2.00	0.110
95-47-6	o-Xylene	9.484		1.00	0.120
179601-23-1	m-Xylene & p-Xylene	9.517		1.00	0.170
1330-20-7	Xylenes, Total	19.00		1.00	0.260

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Houston Job No.: 600-84503-1
SDG No.: _____
Client Sample ID: _____ Lab Sample ID: LCS 600-123757/4
Matrix: Water Lab File ID: C36006.D
Analysis Method: 8260B Date Collected: _____
Sample wt/vol: 20 (mL) Date Analyzed: 12/26/2013 13:30
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 123757 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-59-2	cis-1,2-Dichloroethene	9.576		1.00	0.0600
75-27-4	Bromodichloromethane	9.232		1.00	0.160
540-59-0	1,2-Dichloroethene, Total	19.12		1.00	0.300

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	113		70-130
1868-53-7	Dibromofluoromethane	113		62-130
460-00-4	4-Bromofluorobenzene	123		67-139
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		50-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Client Sample ID: San Juan-MW09-12192013 MSLab Sample ID: 600-84503-2 MS DLMatrix: WaterLab File ID: C36009.DAnalysis Method: 8260BDate Collected: 12/19/2013 12:35Sample wt/vol: 20 (mL)Date Analyzed: 12/26/2013 14:41

Soil Aliquot Vol: _____

Dilution Factor: 10

Soil Extract Vol.: _____

GC Column: DB-624 ID: 0.18 (mm)

% Moisture: _____

Level: (low/med) LowAnalysis Batch No.: 123757Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	182.4		50.0	9.90
71-43-2	Benzene	272.4		10.0	0.800
74-97-5	Chlorobromomethane	97.54		10.0	1.80
75-25-2	Bromoform	105.8		10.0	1.90
74-83-9	Bromomethane	89.87		20.0	2.50
78-93-3	2-Butanone (MEK)	202.8		20.0	7.60
75-15-0	Carbon disulfide	106.2		20.0	2.40
56-23-5	Carbon tetrachloride	105.9		10.0	1.50
124-48-1	Dibromochloromethane	97.83		10.0	1.50
108-90-7	Chlorobenzene	96.87		10.0	1.20
75-00-3	Chloroethane	99.12		20.0	0.800
67-66-3	Chloroform	103.6		10.0	1.30
74-87-3	Chloromethane	92.92		20.0	1.80
75-34-3	1,1-Dichloroethane	105.4		10.0	1.10
107-06-2	1,2-Dichloroethane	98.12		10.0	1.40
75-35-4	1,1-Dichloroethene	101.1		10.0	1.90
156-60-5	trans-1,2-Dichloroethene	99.40		10.0	0.900
78-87-5	1,2-Dichloropropane	101.4		10.0	1.60
10061-01-5	cis-1,3-Dichloropropene	96.51		10.0	1.80
10061-02-6	trans-1,3-Dichloropropene	93.36		10.0	2.10
100-41-4	Ethylbenzene	148.8		10.0	1.10
591-78-6	2-Hexanone	174.0		20.0	3.50
75-09-2	Methylene Chloride	119.5		50.0	1.50
108-10-1	4-Methyl-2-pentanone (MIBK)	183.8		20.0	4.50
100-42-5	Styrene	94.93		10.0	0.700
79-34-5	1,1,2,2-Tetrachloroethane	95.61		10.0	2.20
127-18-4	Tetrachloroethene	100.8		10.0	1.30
108-88-3	Toluene	100.1		10.0	1.50
71-55-6	1,1,1-Trichloroethane	104.8		10.0	1.50
79-00-5	1,1,2-Trichloroethane	95.45		10.0	2.80
79-01-6	Trichloroethene	100.5		10.0	1.80
108-05-4	Vinyl acetate	158.3		20.0	2.10
75-01-4	Vinyl chloride	98.04		20.0	1.10
95-47-6	o-Xylene	98.31		10.0	1.20
179601-23-1	m-Xylene & p-Xylene	111.3		10.0	1.70
1330-20-7	Xylenes, Total	209.6		10.0	2.60

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Houston</u>	Job No.: <u>600-84503-1</u>
SDG No.:	
Client Sample ID: <u>San Juan-MW09-12192013 MS</u>	Lab Sample ID: <u>600-84503-2 MS DL</u>
Matrix: <u>Water</u>	Lab File ID: <u>C36009.D</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>12/19/2013 12:35</u>
Sample wt/vol: <u>20 (mL)</u>	Date Analyzed: <u>12/26/2013 14:41</u>
Soil Aliquot Vol:	Dilution Factor: <u>10</u>
Soil Extract Vol.:	GC Column: <u>DB-624</u> ID: <u>0.18 (mm)</u>
% Moisture:	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>123757</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-59-2	cis-1,2-Dichloroethene	102.8		10.0	0.600
75-27-4	Bromodichloromethane	104.4		10.0	1.60
540-59-0	1,2-Dichloroethene, Total	202.2		10.0	3.00

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	99		70-130
1868-53-7	Dibromofluoromethane	106		62-130
460-00-4	4-Bromofluorobenzene	111		67-139
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		50-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Client Sample ID: San Juan-MW09-12192013 Lab Sample ID: 600-84503-2 MSD DLMatrix: Water Lab File ID: C36010.DAnalysis Method: 8260B Date Collected: 12/19/2013 12:35Sample wt/vol: 20 (mL) Date Analyzed: 12/26/2013 15:05Soil Aliquot Vol: _____ Dilution Factor: 10Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)% Moisture: _____ Level: (low/med) LowAnalysis Batch No.: 123757 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	173.1		50.0	9.90
71-43-2	Benzene	256.3		10.0	0.800
74-97-5	Chlorobromomethane	92.35		10.0	1.80
75-25-2	Bromoform	96.85		10.0	1.90
74-83-9	Bromomethane	102.5		20.0	2.50
78-93-3	2-Butanone (MEK)	183.3		20.0	7.60
75-15-0	Carbon disulfide	101.3		20.0	2.40
56-23-5	Carbon tetrachloride	100.9		10.0	1.50
124-48-1	Dibromochloromethane	92.72		10.0	1.50
108-90-7	Chlorobenzene	92.25		10.0	1.20
75-00-3	Chloroethane	109.3		20.0	0.800
67-66-3	Chloroform	97.36		10.0	1.30
74-87-3	Chloromethane	102.5		20.0	1.80
75-34-3	1,1-Dichloroethane	98.81		10.0	1.10
107-06-2	1,2-Dichloroethane	94.90		10.0	1.40
75-35-4	1,1-Dichloroethene	95.41		10.0	1.90
156-60-5	trans-1,2-Dichloroethene	95.29		10.0	0.900
78-87-5	1,2-Dichloropropane	94.47		10.0	1.60
10061-01-5	cis-1,3-Dichloropropene	90.80		10.0	1.80
10061-02-6	trans-1,3-Dichloropropene	88.04		10.0	2.10
100-41-4	Ethylbenzene	140.9		10.0	1.10
591-78-6	2-Hexanone	158.6		20.0	3.50
75-09-2	Methylene Chloride	115.0		50.0	1.50
108-10-1	4-Methyl-2-pentanone (MIBK)	165.8		20.0	4.50
100-42-5	Styrene	90.99		10.0	0.700
79-34-5	1,1,2,2-Tetrachloroethane	94.26		10.0	2.20
127-18-4	Tetrachloroethene	96.93		10.0	1.30
108-88-3	Toluene	95.91		10.0	1.50
71-55-6	1,1,1-Trichloroethane	99.96		10.0	1.50
79-00-5	1,1,2-Trichloroethane	88.33		10.0	2.80
79-01-6	Trichloroethene	94.42		10.0	1.80
108-05-4	Vinyl acetate	145.8		20.0	2.10
75-01-4	Vinyl chloride	107.8		20.0	1.10
95-47-6	o-Xylene	94.47		10.0	1.20
179601-23-1	m-Xylene & p-Xylene	106.1		10.0	1.70
1330-20-7	Xylenes, Total	200.6		10.0	2.60

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Houston</u>	Job No.: <u>600-84503-1</u>
SDG No.:	
Client Sample ID: <u>San Juan-MW09-12192013</u>	Lab Sample ID: <u>600-84503-2 MSD DL</u>
Matrix: <u>Water</u>	Lab File ID: <u>C36010.D</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>12/19/2013 12:35</u>
Sample wt/vol: <u>20 (mL)</u>	Date Analyzed: <u>12/26/2013 15:05</u>
Soil Aliquot Vol:	Dilution Factor: <u>10</u>
Soil Extract Vol.:	GC Column: <u>DB-624</u> ID: <u>0.18 (mm)</u>
% Moisture:	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>123757</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-59-2	cis-1,2-Dichloroethene	97.34		10.0	0.600
75-27-4	Bromodichloromethane	96.66		10.0	1.60
540-59-0	1,2-Dichloroethene, Total	192.6		10.0	3.00

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	102		70-130
1868-53-7	Dibromofluoromethane	105		62-130
460-00-4	4-Bromofluorobenzene	113		67-139
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		50-134

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.:

Instrument ID: VOAMS01Start Date: 12/03/2013 11:03Analysis Batch Number: 122189End Date: 12/03/2013 20:09

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 600-122189/1		12/03/2013 11:03	1	C33700.D	DB-624 0.18 (mm)
IC 600-122189/2		12/03/2013 12:01	1	C33702.D	DB-VRX 60 0.25 (mm)
IC 600-122189/3		12/03/2013 12:26	1	C33703.D	DB-VRX 60 0.25 (mm)
IC 600-122189/4		12/03/2013 12:52	1	C33704.D	DB-VRX 60 0.25 (mm)
ICIS 600-122189/5		12/03/2013 13:16	1	C33705.D	DB-VRX 60 0.25 (mm)
IC 600-122189/6		12/03/2013 13:40	1	C33706.D	DB-VRX 60 0.25 (mm)
IC 600-122189/7		12/03/2013 14:05	1	C33707.D	DB-VRX 60 0.25 (mm)
ZZZZZ		12/03/2013 15:52	1		DB-624 0.18 (mm)
ZZZZZ		12/03/2013 17:09	1		DB-624 0.18 (mm)
ZZZZZ		12/03/2013 17:35	1		DB-624 0.18 (mm)
ZZZZZ		12/03/2013 18:00	1		DB-624 0.18 (mm)
ZZZZZ		12/03/2013 18:26	1		DB-624 0.18 (mm)
ZZZZZ		12/03/2013 18:52	1		DB-624 0.18 (mm)
ZZZZZ		12/03/2013 19:17	1		DB-624 0.18 (mm)
ZZZZZ		12/03/2013 19:43	1		DB-624 0.18 (mm)
600-83793-A-9 MDLV		12/03/2013 20:09	1		DB-624 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.:

Instrument ID: VOAMS01Start Date: 12/24/2013 10:10Analysis Batch Number: 123637End Date: 12/24/2013 21:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 600-123637/1		12/24/2013 10:10	1	C35800.D	DB-624 0.18 (mm)
CCVIS 600-123637/2		12/24/2013 11:25	1	C35801.D	DB-624 0.18 (mm)
LCS 600-123637/3		12/24/2013 12:01	1	C35802.D	DB-624 0.18 (mm)
MB 600-123637/4		12/24/2013 13:18	1	C35805.D	DB-624 0.18 (mm)
ZZZZZ		12/24/2013 13:44	1		DB-624 0.18 (mm)
ZZZZZ		12/24/2013 14:10	1		DB-624 0.18 (mm)
ZZZZZ		12/24/2013 14:36	1		DB-624 0.18 (mm)
ZZZZZ		12/24/2013 15:02	1		DB-624 0.18 (mm)
ZZZZZ		12/24/2013 15:28	1		DB-624 0.18 (mm)
ZZZZZ		12/24/2013 16:20	200		DB-624 0.18 (mm)
ZZZZZ		12/24/2013 16:44	1		DB-624 0.18 (mm)
ZZZZZ		12/24/2013 17:08	5		DB-624 0.18 (mm)
ZZZZZ		12/24/2013 17:33	50		DB-624 0.18 (mm)
ZZZZZ		12/24/2013 17:58	1		DB-624 0.18 (mm)
600-84503-9	TB03-12192013	12/24/2013 18:24	1	C35817.D	DB-624 0.18 (mm)
ZZZZZ		12/24/2013 18:50	1		DB-624 0.18 (mm)
ZZZZZ		12/24/2013 19:16	1		DB-624 0.18 (mm)
ZZZZZ		12/24/2013 19:41	1		DB-624 0.18 (mm)
ZZZZZ		12/24/2013 20:07	1		DB-624 0.18 (mm)
600-84503-5	San Juan-EquBlank04-12192013	12/24/2013 20:33	1	C35822.D	DB-624 0.18 (mm)
600-84503-1	San Juan-MW08-12192013	12/24/2013 20:58	1	C35823.D	DB-624 0.18 (mm)
600-84503-3	San Juan-MW04-12192013	12/24/2013 21:24	1	C35824.D	DB-624 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.:

Instrument ID: VOAMS01Start Date: 12/26/2013 09:43Analysis Batch Number: 123757End Date: 12/26/2013 21:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 600-123757/1		12/26/2013 09:43	1	C36000.D	DB-624 0.18 (mm)
CCVIS 600-123757/2		12/26/2013 10:56	1	C36001.D	DB-624 0.18 (mm)
MB 600-123757/3		12/26/2013 12:24	1	C36004.D	DB-624 0.18 (mm)
LCS 600-123757/4		12/26/2013 13:30	1	C36006.D	DB-624 0.18 (mm)
600-84503-2	San Juan-MW09-12192013	12/26/2013 13:54	1	C36007.D	DB-624 0.18 (mm)
ZZZZZ		12/26/2013 14:17	1		DB-624 0.18 (mm)
600-84503-2 MS DL	San Juan-MW09-12192013 MS DL	12/26/2013 14:41	10	C36009.D	DB-624 0.18 (mm)
600-84503-2 MSD DL	San Juan-MW09-12192013 MSD MSD DL	12/26/2013 15:05	10	C36010.D	DB-624 0.18 (mm)
600-84503-2 DL	San Juan-MW09-12192013 DL	12/26/2013 15:30	10	C36011.D	DB-624 0.18 (mm)
ZZZZZ		12/26/2013 15:56	1		DB-624 0.18 (mm)
ZZZZZ		12/26/2013 16:22	1		DB-624 0.18 (mm)
600-84503-6	San Juan-MW06-12192013	12/26/2013 16:47	1	C36014.D	DB-624 0.18 (mm)
600-84503-7	San Juan-MD03-12192013	12/26/2013 17:13	1	C36015.D	DB-624 0.18 (mm)
600-84503-4	San Juan-MW02-12192013	12/26/2013 17:39	1	C36016.D	DB-624 0.18 (mm)
ZZZZZ		12/26/2013 18:04	1		DB-624 0.18 (mm)
ZZZZZ		12/26/2013 18:30	5		DB-624 0.18 (mm)
ZZZZZ		12/26/2013 18:56	1		DB-624 0.18 (mm)
ZZZZZ		12/26/2013 19:22	1		DB-624 0.18 (mm)
ZZZZZ		12/26/2013 19:47	5		DB-624 0.18 (mm)
ZZZZZ		12/26/2013 20:13	5		DB-624 0.18 (mm)
ZZZZZ		12/26/2013 20:39	5		DB-624 0.18 (mm)
ZZZZZ		12/26/2013 21:04	1		DB-624 0.18 (mm)
ZZZZZ		12/26/2013 21:30	1		DB-624 0.18 (mm)

METALS

COVER PAGE
METALSLab Name: TestAmerica HoustonJob Number: 600-84503-1

SDG No.: _____

Project: San Juan

Client Sample ID	
San Juan-MW08-12192013	
San Juan-MW08-12192013	
San Juan-MW09-12192013	
San Juan-MW09-12192013	
San Juan-MW04-12192013	
San Juan-MW04-12192013	
San Juan-MW02-12192013	
San Juan-MW02-12192013	
San Juan-EquBlank04-12192013	
San Juan-EquBlank04-12192013	
San Juan-MW06-12192013	
San Juan-MW06-12192013	
San Juan-MD03-12192013	
San Juan-MD03-12192013	

Lab Sample ID	
600-84503-1	
600-84503-1 DL	
600-84503-2	
600-84503-2 DL	
600-84503-3	
600-84503-3 DL	
600-84503-4	
600-84503-4 DL	
600-84503-5	
600-84503-5 DL	
600-84503-6	
600-84503-6 DL	
600-84503-7	
600-84503-7 DL	

Comments:

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Client Sample ID: San Juan-MW08-12192013

Lab Sample ID: 600-84503-1

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG ID.:

Date Sampled: 12/19/2013 11:20

Matrix: Water

Date Received: 12/21/2013 10:45

Reporting Basis: WET

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.00125	0.0100	0.00125	mg/L	U		1	6010B
7440-38-2	Arsenic	0.00328	0.0100	0.00328	mg/L	U		1	6010B
7429-90-5	Aluminum	0.651	0.500	0.0216	mg/L			1	6010B
7440-39-3	Barium	0.0414	0.0200	0.00220	mg/L			1	6010B
7440-70-2	Calcium	57.3	1.00	0.0219	mg/L			1	6010B
7440-43-9	Cadmium	0.000350	0.00500	0.000350	mg/L	U		1	6010B
7440-48-4	Cobalt	0.00170	0.0100	0.000630	mg/L	J		1	6010B
7440-47-3	Chromium	0.00155	0.0100	0.00155	mg/L	U		1	6010B
7440-50-8	Copper	0.0102	0.0100	0.00145	mg/L			1	6010B
7439-89-6	Iron	0.650	0.400	0.0866	mg/L			1	6010B
7440-09-7	Potassium	35.4	1.00	0.129	mg/L			1	6010B
7439-95-4	Magnesium	166	1.00	0.0191	mg/L			1	6010B
7439-96-5	Manganese	0.351	0.0100	0.000840	mg/L			1	6010B
7439-98-7	Molybdenum	0.00870	0.0100	0.00273	mg/L	J		1	6010B
7440-23-5	Sodium	2280	20.0	0.400	mg/L			20	6010B
7440-02-0	Nickel	0.00330	0.0100	0.00179	mg/L	J		1	6010B
7439-92-1	Lead	0.00290	0.0100	0.00290	mg/L	U		1	6010B
7782-49-2	Selenium	0.00417	0.0400	0.00417	mg/L	U		1	6010B
7440-66-6	Zinc	0.399	0.0300	0.00217	mg/L			1	6010B
7439-97-6	Mercury	0.0820	0.200	0.0820	ug/L	U		1	7470A

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Client Sample ID: San Juan-MW09-12192013

Lab Sample ID: 600-84503-2

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG ID.:

Matrix: Water

Date Sampled: 12/19/2013 12:35

Reporting Basis: WET

Date Received: 12/21/2013 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.00160	0.0100	0.00125	mg/L	J		1	6010B
7440-38-2	Arsenic	0.00328	0.0100	0.00328	mg/L	U		1	6010B
7429-90-5	Aluminum	11.6	0.500	0.0216	mg/L			1	6010B
7440-39-3	Barium	0.00980	0.0200	0.00220	mg/L	J		1	6010B
7440-70-2	Calcium	375	1.00	0.0219	mg/L			1	6010B
7440-43-9	Cadmium	0.00900	0.00500	0.000350	mg/L			1	6010B
7440-48-4	Cobalt	0.216	0.0100	0.000630	mg/L			1	6010B
7440-47-3	Chromium	0.00170	0.0100	0.00155	mg/L	J		1	6010B
7440-50-8	Copper	0.0895	0.0100	0.00145	mg/L			1	6010B
7439-89-6	Iron	7.75	0.400	0.0866	mg/L			1	6010B
7440-09-7	Potassium	12.3	1.00	0.129	mg/L			1	6010B
7439-95-4	Magnesium	225	1.00	0.0191	mg/L			1	6010B
7439-96-5	Manganese	6.59	0.0100	0.000840	mg/L			1	6010B
7439-98-7	Molybdenum	0.00273	0.0100	0.00273	mg/L	U		1	6010B
7440-23-5	Sodium	4390	50.0	1.00	mg/L			50	6010B
7440-02-0	Nickel	0.339	0.0100	0.00179	mg/L			1	6010B
7439-92-1	Lead	0.00290	0.0100	0.00290	mg/L	U		1	6010B
7782-49-2	Selenium	0.00417	0.0400	0.00417	mg/L	U		1	6010B
7440-66-6	Zinc	1.02	0.0300	0.00217	mg/L			1	6010B
7439-97-6	Mercury	0.0820	0.200	0.0820	ug/L	U		1	7470A

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Client Sample ID: San Juan-MW04-12192013

Lab Sample ID: 600-84503-3

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG ID.:

Matrix: Water

Date Sampled: 12/19/2013 13:35

Reporting Basis: WET

Date Received: 12/21/2013 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.00125	0.0100	0.00125	mg/L	U		1	6010B
7440-38-2	Arsenic	0.101	0.0100	0.00328	mg/L			1	6010B
7429-90-5	Aluminum	0.702	0.500	0.0216	mg/L			1	6010B
7440-39-3	Barium	0.0327	0.0200	0.00220	mg/L			1	6010B
7440-70-2	Calcium	323	1.00	0.0219	mg/L			1	6010B
7440-43-9	Cadmium	0.00150	0.00500	0.000350	mg/L	J		1	6010B
7440-48-4	Cobalt	0.201	0.0100	0.000630	mg/L			1	6010B
7440-47-3	Chromium	0.00310	0.0100	0.00155	mg/L	J		1	6010B
7440-50-8	Copper	0.0913	0.0100	0.00145	mg/L			1	6010B
7439-89-6	Iron	24.9	0.400	0.0866	mg/L			1	6010B
7440-09-7	Potassium	8.09	1.00	0.129	mg/L			1	6010B
7439-95-4	Magnesium	123	1.00	0.0191	mg/L			1	6010B
7439-96-5	Manganese	8.77	0.0100	0.000840	mg/L			1	6010B
7439-98-7	Molybdenum	0.179	0.0100	0.00273	mg/L			1	6010B
7440-23-5	Sodium	1310	20.0	0.400	mg/L			20	6010B
7440-02-0	Nickel	0.358	0.0100	0.00179	mg/L			1	6010B
7439-92-1	Lead	0.0160	0.0100	0.00290	mg/L			1	6010B
7782-49-2	Selenium	0.00860	0.0400	0.00417	mg/L	J		1	6010B
7440-66-6	Zinc	0.157	0.0300	0.00217	mg/L			1	6010B
7439-97-6	Mercury	0.0820	0.200	0.0820	ug/L	U		1	7470A

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Client Sample ID: San Juan-MW02-12192013

Lab Sample ID: 600-84503-4

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG ID.:

Matrix: Water

Date Sampled: 12/19/2013 14:00

Reporting Basis: WET

Date Received: 12/21/2013 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.00130	0.0100	0.00125	mg/L	J		1	6010B
7440-38-2	Arsenic	0.00480	0.0100	0.00328	mg/L	J		1	6010B
7429-90-5	Aluminum	5.82	0.500	0.0216	mg/L			1	6010B
7440-39-3	Barium	0.0346	0.0200	0.00220	mg/L			1	6010B
7440-70-2	Calcium	384	1.00	0.0219	mg/L			1	6010B
7440-43-9	Cadmium	0.000900	0.00500	0.000350	mg/L	J		1	6010B
7440-48-4	Cobalt	0.00790	0.0100	0.000630	mg/L	J		1	6010B
7440-47-3	Chromium	0.00810	0.0100	0.00155	mg/L	J		1	6010B
7440-50-8	Copper	0.0309	0.0100	0.00145	mg/L			1	6010B
7439-89-6	Iron	8.29	0.400	0.0866	mg/L			1	6010B
7440-09-7	Potassium	4.02	1.00	0.129	mg/L			1	6010B
7439-95-4	Magnesium	103	1.00	0.0191	mg/L			1	6010B
7439-96-5	Manganese	0.487	0.0100	0.000840	mg/L			1	6010B
7439-98-7	Molybdenum	0.00273	0.0100	0.00273	mg/L	U		1	6010B
7440-23-5	Sodium	1260	20.0	0.400	mg/L			20	6010B
7440-02-0	Nickel	0.00900	0.0100	0.00179	mg/L	J		1	6010B
7439-92-1	Lead	0.0106	0.0100	0.00290	mg/L			1	6010B
7782-49-2	Selenium	0.0978	0.0400	0.00417	mg/L			1	6010B
7440-66-6	Zinc	0.156	0.0300	0.00217	mg/L			1	6010B
7439-97-6	Mercury	0.0820	0.200	0.0820	ug/L	U		1	7470A

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Client Sample ID: San Juan-EquBlank04-12192013

Lab Sample ID: 600-84503-5

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG ID.:

Date Sampled: 12/19/2013 14:20

Matrix: Water

Date Received: 12/21/2013 10:45

Reporting Basis: WET

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.00200	0.0100	0.00125	mg/L	J		1	6010B
7440-38-2	Arsenic	0.00328	0.0100	0.00328	mg/L	U		1	6010B
7429-90-5	Aluminum	0.0216	0.500	0.0216	mg/L	U		1	6010B
7440-39-3	Barium	0.00220	0.0200	0.00220	mg/L	U		1	6010B
7440-70-2	Calcium	0.344	1.00	0.0219	mg/L	J		1	6010B
7440-43-9	Cadmium	0.000350	0.00500	0.000350	mg/L	U		1	6010B
7440-48-4	Cobalt	0.000630	0.0100	0.000630	mg/L	U		1	6010B
7440-47-3	Chromium	0.00155	0.0100	0.00155	mg/L	U		1	6010B
7440-50-8	Copper	0.00145	0.0100	0.00145	mg/L	U		1	6010B
7439-89-6	Iron	0.0866	0.400	0.0866	mg/L	U		1	6010B
7440-09-7	Potassium	0.129	1.00	0.129	mg/L	U		1	6010B
7439-95-4	Magnesium	0.0458	1.00	0.0191	mg/L	J		1	6010B
7439-96-5	Manganese	0.000840	0.0100	0.000840	mg/L	U		1	6010B
7439-98-7	Molybdenum	0.00273	0.0100	0.00273	mg/L	U		1	6010B
7440-23-5	Sodium	0.127	1.00	0.0200	mg/L	J		1	6010B
7440-02-0	Nickel	0.00179	0.0100	0.00179	mg/L	U		1	6010B
7439-92-1	Lead	0.00290	0.0100	0.00290	mg/L	U		1	6010B
7782-49-2	Selenium	0.00417	0.0400	0.00417	mg/L	U		1	6010B
7440-66-6	Zinc	0.0679	0.0300	0.00217	mg/L			1	6010B
7439-97-6	Mercury	0.0820	0.200	0.0820	ug/L	U		1	7470A

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Client Sample ID: San Juan-MW06-12192013

Lab Sample ID: 600-84503-6

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG ID.:

Matrix: Water

Date Sampled: 12/19/2013 15:00

Reporting Basis: WET

Date Received: 12/21/2013 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.00230	0.0100	0.00125	mg/L	J		1	6010B
7440-38-2	Arsenic	0.00328	0.0100	0.00328	mg/L	U		1	6010B
7429-90-5	Aluminum	14.8	0.500	0.0216	mg/L			1	6010B
7440-39-3	Barium	0.0108	0.0200	0.00220	mg/L	J		1	6010B
7440-70-2	Calcium	389	1.00	0.0219	mg/L			1	6010B
7440-43-9	Cadmium	0.0116	0.00500	0.000350	mg/L			1	6010B
7440-48-4	Cobalt	0.238	0.0100	0.000630	mg/L			1	6010B
7440-47-3	Chromium	0.00155	0.0100	0.00155	mg/L	U		1	6010B
7440-50-8	Copper	0.0450	0.0100	0.00145	mg/L			1	6010B
7439-89-6	Iron	0.418	0.400	0.0866	mg/L			1	6010B
7440-09-7	Potassium	19.7	1.00	0.129	mg/L			1	6010B
7439-95-4	Magnesium	318	1.00	0.0191	mg/L			1	6010B
7439-96-5	Manganese	6.92	0.0100	0.000840	mg/L			1	6010B
7439-98-7	Molybdenum	0.00273	0.0100	0.00273	mg/L	U		1	6010B
7440-23-5	Sodium	3950	50.0	1.00	mg/L			50	6010B
7440-02-0	Nickel	0.299	0.0100	0.00179	mg/L			1	6010B
7439-92-1	Lead	0.00290	0.0100	0.00290	mg/L	U		1	6010B
7782-49-2	Selenium	0.332	0.0400	0.00417	mg/L			1	6010B
7440-66-6	Zinc	0.836	0.0300	0.00217	mg/L			1	6010B
7439-97-6	Mercury	0.0820	0.200	0.0820	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

APPENDIX B (144 of 240)

Client Sample ID: San Juan-MD03-12192013

Lab Sample ID: 600-84503-7

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG ID.:

Matrix: Water

Date Sampled: 12/19/2013 17:00

Reporting Basis: WET

Date Received: 12/21/2013 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.00230	0.0100	0.00125	mg/L	J		1	6010B
7440-38-2	Arsenic	0.00328	0.0100	0.00328	mg/L	U		1	6010B
7429-90-5	Aluminum	16.3	0.500	0.0216	mg/L			1	6010B
7440-39-3	Barium	0.0108	0.0200	0.00220	mg/L	J		1	6010B
7440-70-2	Calcium	400	1.00	0.0219	mg/L			1	6010B
7440-43-9	Cadmium	0.0125	0.00500	0.000350	mg/L			1	6010B
7440-48-4	Cobalt	0.256	0.0100	0.000630	mg/L			1	6010B
7440-47-3	Chromium	0.00200	0.0100	0.00155	mg/L	J		1	6010B
7440-50-8	Copper	0.0488	0.0100	0.00145	mg/L			1	6010B
7439-89-6	Iron	0.467	0.400	0.0866	mg/L			1	6010B
7440-09-7	Potassium	20.4	1.00	0.129	mg/L			1	6010B
7439-95-4	Magnesium	327	1.00	0.0191	mg/L			1	6010B
7439-96-5	Manganese	7.42	0.0100	0.000840	mg/L			1	6010B
7439-98-7	Molybdenum	0.00273	0.0100	0.00273	mg/L	U		1	6010B
7440-23-5	Sodium	4030	50.0	1.00	mg/L			50	6010B
7440-02-0	Nickel	0.321	0.0100	0.00179	mg/L			1	6010B
7439-92-1	Lead	0.00290	0.0100	0.00290	mg/L	U		1	6010B
7782-49-2	Selenium	0.334	0.0400	0.00417	mg/L			1	6010B
7440-66-6	Zinc	0.881	0.0300	0.00217	mg/L			1	6010B
7439-97-6	Mercury	0.0820	0.200	0.0820	ug/L	U		1	7470A

2A-IN
CALIBRATION VERIFICATIONS
METALS

APPENDIX B (145 of 240)

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

ICV Source: MET1213CCV_00005

Concentration Units: mg/L

CCV Source: MET1213CCV_00005

Analyte	ICV 600-124038/10 12/31/2013 10:49				CCV 600-124038/15 12/31/2013 11:01				CCV 600-124038/28 12/31/2013 11:31			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	2.505		2.50	100	2.692		2.50	108	2.479		2.50	99
Arsenic	0.5027		0.500	101	0.5036		0.500	101	0.5039		0.500	101
Barium	0.5062		0.500	101	0.4948		0.500	99	0.4992		0.500	100
Cadmium	0.4992		0.500	100	0.4997		0.500	100	0.4982		0.500	100
Calcium	12.67		12.5	101	12.68		12.5	101	12.59		12.5	101
Chromium	0.5068		0.500	101	0.5026		0.500	101	0.4954		0.500	99
Cobalt	0.4944		0.500	99	0.4941		0.500	99	0.4895		0.500	98
Copper	0.4926		0.500	99	0.4913		0.500	98	0.4930		0.500	99
Iron	2.482		2.50	99	2.539		2.50	102	2.420		2.50	97
Lead	0.4955		0.500	99	0.4935		0.500	99	0.4908		0.500	98
Magnesium	5.049		5.00	101	5.153		5.00	103	4.977		5.00	100
Manganese	0.4974		0.500	99	0.4962		0.500	99	0.4953		0.500	99
Molybdenum	0.5183		0.500	104	0.5064		0.500	101	0.5059		0.500	101
Nickel	0.4931		0.500	99	0.4924		0.500	98	0.4888		0.500	98
Potassium	12.63		12.5	101	12.31		12.5	98	12.40		12.5	99
Selenium	0.5038		0.500	101	0.5030		0.500	101	0.5047		0.500	101
Silver	0.2479		0.250	99	0.2503		0.250	100	0.2491		0.250	100
Sodium	12.55		12.5	100	12.33		12.5	99	13.75		12.5	110
Zinc	0.4886		0.500	98	0.4868		0.500	97	0.4780		0.500	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

APPENDIX B (146 of 240)

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

ICV Source: MET1213CCV_00005

Concentration Units: mg/L

CCV Source: MET1213CCV_00005

Analyte	CCV 600-124038/41 12/31/2013 12:03				CCV 600-124038/52 12/31/2013 12:28				CCV 600-124038/65 12/31/2013 13:06			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	2.555		2.50	102	2.513		2.50	101				
Arsenic	0.4999		0.500	100	0.4956		0.500	99				
Barium	0.5121		0.500	102	0.5089		0.500	102				
Cadmium	0.4951		0.500	99	0.4888		0.500	98				
Calcium	13.06		12.5	104	12.90		12.5	103				
Chromium	0.5113		0.500	102	0.5045		0.500	101				
Cobalt	0.4875		0.500	98	0.4822		0.500	96				
Copper	0.5061		0.500	101	0.5058		0.500	101				
Iron	2.469		2.50	99	2.443		2.50	98				
Lead	0.4882		0.500	98	0.4873		0.500	97				
Magnesium	5.140		5.00	103	4.953		5.00	99				
Manganese	0.5139		0.500	103	0.5162		0.500	103				
Molybdenum	0.5119		0.500	102	0.5172		0.500	103				
Nickel	0.4880		0.500	98	0.4847		0.500	97				
Potassium	12.76		12.5	102	12.65		12.5	101				
Selenium	0.5046		0.500	101	0.5025		0.500	101				
Silver	0.2529		0.250	101	0.2546		0.250	102				
Sodium					12.72		12.5	102	12.85		12.5	103
Zinc	0.4769		0.500	95	0.4719		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

APPENDIX B (147 of 240)

Lab Name: TestAmerica Houston Job No.: 600-84503-1

SDG No.: _____

ICV Source: MER1213S2_00011 Concentration Units: ug/L

CCV Source: MER1213S2_00011

Analyte	ICV 600-123495/8 12/23/2013 08:03				CCV 600-123495/11 12/23/2013 08:09				CCV 600-123495/23 12/23/2013 08:32			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	3.008		3.00	100	2.998		3.00	100	3.190		3.00	106

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

APPENDIX B (148 of 240)

Lab Name: TestAmerica Houston Job No.: 600-84503-1

SDG No.: _____

ICV Source: MER1213S2_00011 Concentration Units: ug/L

CCV Source: MER1213S2_00011

Analyte	CCV 600-123495/35 12/23/2013 08:54											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	3.045		3.00	102								

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
METALSLab Name: TestAmerica Houston Job No.: 600-84503-1

SDG No.: _____

Method: 7470A Instrument ID: FIMS01Lab Sample ID: CRA 600-123495/10 Concentration Units: ug/LCRQL Check Standard Source: MER1213S1_00011

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.1778	J	89	50-150

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

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

APPENDIX B (150 of 240)

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.: _____

Concentration Units: mg/L

Analyte	RL	ICBIS 600-124038/12 12/31/2013 10:54		CCB 600-124038/17 12/31/2013 11:05		CCB 600-124038/30 12/31/2013 11:35		CCB 600-124038/43 12/31/2013 12:07	
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.500	0.0216	U	0.0216	U	0.0216	U	0.0216	U
Arsenic	0.0100	0.00328	U	0.00328	U	0.00328	U	0.00328	U
Barium	0.0200	0.00220	U	0.00220	U	0.00220	U	0.00220	U
Cadmium	0.00500	0.000350	U	0.000350	U	0.000350	U	0.000350	U
Calcium	1.00	0.0219	U	0.03260	J	0.0219	U	0.03520	J
Chromium	0.0100	0.00155	U	0.00155	U	0.00155	U	0.00155	U
Cobalt	0.0100	0.000630	U	0.000630	U	0.000630	U	0.000630	U
Copper	0.0100	0.00145	U	0.00145	U	0.00145	U	0.00145	U
Iron	0.400	0.0866	U	0.0866	U	0.0866	U	0.0866	U
Lead	0.0100	0.00290	U	0.00290	U	0.00290	U	0.00290	U
Magnesium	1.00	0.0191	U	0.0191	U	0.0191	U	0.0191	U
Manganese	0.0100	0.000840	U	0.000840	U	0.000840	U	0.000840	U
Molybdenum	0.0100	0.00273	U	0.00273	U	0.00273	U	0.00273	U
Nickel	0.0100	0.00179	U	0.00179	U	0.00179	U	0.00179	U
Potassium	1.00	0.129	U	0.129	U	0.129	U	0.129	U
Selenium	0.0400	0.00417	U	0.00417	U	0.00417	U	0.00417	U
Silver	0.0100	0.00125	U	0.00125	U	0.00125	U	0.00125	U
Sodium	1.00	0.0200	U	0.0200	U	0.09890	J	0.4003	J
Zinc	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

APPENDIX B (151 of 240)

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.: _____

Concentration Units: mg/L

Analyte	RL	CCB 600-124038/54 12/31/2013 12:33		CCB 600-124038/67 12/31/2013 13:11					
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.500	0.0216	U						
Arsenic	0.0100	0.00328	U						
Barium	0.0200	0.00220	U						
Cadmium	0.00500	0.000350	U						
Calcium	1.00	0.0219	U						
Chromium	0.0100	0.00155	U						
Cobalt	0.0100	0.000630	U						
Copper	0.0100	0.003100	J						
Iron	0.400	0.0866	U						
Lead	0.0100	0.00290	U						
Magnesium	1.00	0.0191	U						
Manganese	0.0100	0.000840	U						
Molybdenum	0.0100	0.00273	U						
Nickel	0.0100	0.00179	U						
Potassium	1.00	0.129	U						
Selenium	0.0400	0.00417	U						
Silver	0.0100	0.001400	J						
Sodium	1.00	0.06600	J	0.05570	J				
Zinc	0.0100	0.00217	U						

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

APPENDIX B (152 of 240)

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	ICB 600-123495/9 12/23/2013 08:06		CCB 600-123495/12 12/23/2013 08:11		CCB 600-123495/24 12/23/2013 08:34		CCB 600-123495/36 12/23/2013 08:57	
		Found	C	Found	C	Found	C	Found	C
Mercury	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 HoustonJob No.: 600-84503-1

SDG No.: _____

Concentration Units: mg/L Lab Sample ID: MB 600-123931/1-AInstrument Code: Thermo6500 Batch No.: 124038

CAS No.	Analyte	Concentration	C	Q	Method
7440-22-4	Silver	0.00125	U		6010B
7440-38-2	Arsenic	0.00328	U		6010B
7429-90-5	Aluminum	0.0216	U		6010B
7440-39-3	Barium	0.00220	U		6010B
7440-70-2	Calcium	0.0219	U		6010B
7440-43-9	Cadmium	0.000350	U		6010B
7440-48-4	Cobalt	0.000630	U		6010B
7440-47-3	Chromium	0.00155	U		6010B
7440-50-8	Copper	0.00145	U		6010B
7439-89-6	Iron	0.0866	U		6010B
7440-09-7	Potassium	0.129	U		6010B
7439-95-4	Magnesium	0.0191	U		6010B
7439-96-5	Manganese	0.000840	U		6010B
7439-98-7	Molybdenum	0.00273	U		6010B
7440-23-5	Sodium	0.0200	U		6010B
7440-02-0	Nickel	0.00179	U		6010B
7439-92-1	Lead	0.00290	U		6010B
7782-49-2	Selenium	0.00417	U		6010B
7440-66-6	Zinc	0.00217	U		6010B

3-IN
METHOD BLANK
METALSLab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Concentration Units: ug/L Lab Sample ID: MB 600-123454/7-AInstrument Code: FIMS01 Batch No.: 123495

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.0820	U		7470A

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Lab Sample ID: ICSA 600-124038/13Instrument ID: Thermo6500Lab File ID: 123113.ascICS Source: METISA_00101Concentration Units: mg/L

Analyte	True	Found	Percent Recovery
	Solution A	Solution A	
Aluminum	500	528	106
Arsenic		0.0159	
Barium		0.0003	
Cadmium		0.0007	
Calcium	500	503	101
Calcium	500	496	99
Chromium		0.0019	
Cobalt		0.0000	
Copper		0.0029	
Iron	200	192	96
Lead		-0.0108	
Magnesium	500	479	96
Manganese		0.0012	
Manganese		0.0011	
Molybdenum		-0.0008	
Nickel		-0.0087	
Potassium		-0.0122	
Selenium		-0.0111	
Silver		-0.0014	
Sodium		0.0261	
Zinc		0.0018	
Antimony		-0.0106	
Beryllium		0.0001	
Boron		-0.0006	
Lithium		0.0083	
Silicon		0.0094	
Strontium		0.0000	
Thallium		0.0066	
Tin		0.0025	
Titanium		0.0036	
Vanadium		-0.0048	

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

4A-IN

INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica HoustonJob No.: 600-84503-1SDG No.: Lab Sample ID: ICSAB 600-124038/14Instrument ID: Thermo6500Lab File ID: 123113.ascICS Source: METISB_00100Concentration Units: mg/L

Analyte	True	Found	Percent Recovery
	Solution AB	Solution AB	
Aluminum	510	545	107
Arsenic	1.00	1.01	101
Barium	1.00	0.975	97
Cadmium	0.500	0.509	102
Calcium	510	511	100
Calcium	510	509	100
Chromium	1.00	0.927	93
Cobalt	1.00	1.02	102
Copper	1.00	1.11	111
Iron	210	202	96
Lead	1.00	0.974	97
Magnesium	510	484	95
Manganese	1.00	0.924	92
Manganese	1.00	0.922	92
Molybdenum	1.00	0.928	93
Nickel	1.00	0.995	99
Potassium	10.0	10.3	103
Selenium	1.00	0.975	98
Silver	0.500	0.529	106
Sodium	10.0	10.2	102
Zinc	1.00	1.04	104
Antimony	1.00	0.959	96
Beryllium	0.500	0.478	96
Boron	1.00	0.977	98
Lithium	1.00	1.03	103
Silicon	1.00	0.935	93
Strontium	0.500	0.487	97
Thallium	1.00	0.921	92
Tin	1.00	1.02	102
Titanium	1.00	0.964	96
Vanadium	1.00	0.950	95

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

FORM IVA-IN

5A-IN

MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: San Juan-MW09-12192013 MS MS

Lab ID: 600-84503-2 MS

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

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
Silver	0.6048	0.00160 J	0.500	121	75-125		6010B
Arsenic	1.133	0.00328 U	1.00	113	75-125		6010B
Aluminum	22.81	11.6	10.0	112	75-125		6010B
Barium	0.9892	0.00980 J	1.00	98	75-125		6010B
Calcium	384.0	375	10.0	88	75-125	4	6010B
Cadmium	0.5590	0.00900	0.500	110	75-125		6010B
Cobalt	1.338	0.216	1.00	112	75-125		6010B
Chromium	0.9009	0.00170 J	1.00	90	75-125		6010B
Copper	1.220	0.0895	1.00	113	75-125		6010B
Iron	17.88	7.75	10.0	101	75-125		6010B
Potassium	23.04	12.3	10.0	107	75-125		6010B
Magnesium	231.0	225	10.0	64	75-125	4	6010B
Manganese	7.168	6.59	1.00	58	75-125	4	6010B
Molybdenum	0.9878	0.00273 U	1.00	99	75-125		6010B
Sodium	4420	4390	10.0	310	75-125	4	6010B
Nickel	1.463	0.339	1.00	112	75-125		6010B
Lead	1.057	0.00290 U	1.00	106	75-125		6010B
Selenium	1.285	0.00417 U	1.00	129	75-125	F	6010B
Zinc	2.239	1.02	1.00	122	75-125		6010B

SSR = Spiked Sample Result

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

5A-IN

MATRIX SPIKE SAMPLE RECOVERY
METALSClient ID: San Juan-MW09-12192013 MS MSLab ID: 600-84503-2 MSLab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Matrix: WaterConcentration Units: ug/L

% Solids: _____

Analyte	SSR C	Sample Result (SR) C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	2.755	0.0820 U	3.00	92	75-125		7470A

SSR = Spiked Sample Result

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

5A-IN

MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: San Juan-MW09-12192013 MSD MSD

Lab ID: 600-84503-2 MSD

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Matrix: Water

Concentration Units: mg/L

% Solids:

Analyte	(SDR) C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Silver	0.6186	0.500	123	75-125	2	20		6010B
Arsenic	1.134	1.00	113	75-125	0	20		6010B
Aluminum	23.06	10.0	115	75-125	1	20		6010B
Barium	1.017	1.00	101	75-125	3	20		6010B
Calcium	385.0	10.0	98	75-125	0	20	4	6010B
Cadmium	0.5612	0.500	110	75-125	0	20		6010B
Cobalt	1.339	1.00	112	75-125	0	20		6010B
Chromium	0.9130	1.00	91	75-125	1	20		6010B
Copper	1.227	1.00	114	75-125	1	20		6010B
Iron	18.20	10.0	105	75-125	2	20		6010B
Potassium	23.21	10.0	109	75-125	1	20		6010B
Magnesium	230.6	10.0	60	75-125	0	20	4	6010B
Manganese	7.070	1.00	48	75-125	1	20	4	6010B
Molybdenum	1.011	1.00	101	75-125	2	20		6010B
Sodium	4279	10.0	-1100	75-125	3	20	4	6010B
Nickel	1.453	1.00	111	75-125	1	20		6010B
Lead	1.054	1.00	105	75-125	0	20		6010B
Selenium	1.284	1.00	128	75-125	0	20	F	6010B
Zinc	2.269	1.00	125	75-125	1	20		6010B

SDR = Sample Duplicate Result

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

5A-IN

MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALSClient ID: San Juan-MW09-12192013 MSD MSDLab ID: 600-84503-2 MSDLab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Matrix: WaterConcentration Units: ug/L

% Solids: _____

Analyte	(SDR) C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	2.848	3.00	95	75-125	3	20		7470A

SDR = Sample Duplicate Result

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

FORM VD - IN

6-IN
DUPLICATES
METALS

Client ID: San Juan-MW09-12192013 DU

Lab ID: 600-84503-2 DU

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

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
Silver	0.0100	0.00160	J	0.001600	J	0
Arsenic	0.0100	0.00328	U	0.00328	U	NC
Aluminum	0.500	11.6		11.61		0.2
Barium	0.0200	0.00980	J	0.01040	J	6
Calcium	1.00	375		372.9		0.6
Cadmium	0.00500	0.00900		0.009000		0
Cobalt	0.0100	0.216		0.2168		0.3
Chromium	0.0100	0.00170	J	0.00155	U	NC
Copper	0.0100	0.0895		0.08760		2
Iron	0.400	7.75		7.682		0.9
Potassium	1.00	12.3		12.40		0.6
Magnesium	1.00	225		225.2		0.3
Manganese	0.0100	6.59		6.405		3
Molybdenum	0.0100	0.00273	U	0.00273	U	NC
Sodium	50.0	4390		4298		2
Nickel	0.0100	0.339		0.3430		1
Lead	0.0100	0.00290	U	0.00290	U	NC
Selenium	0.0400	0.00417	U	0.00417	U	NC
Zinc	0.0300	1.02		1.009		0.7

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

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 600-123931/2-A

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

Sample Matrix: Water

LCS Source: METCALB 00013

Analyte	Water (mg/L)						
	True	Found	C	%R	Limits	Q	Method
Silver	0.500	0.5140		103	80 120		6010B
Arsenic	1.00	1.006		101	80 120		6010B
Aluminum	10.0	10.33		103	80 120		6010B
Barium	1.00	1.020		102	80 120		6010B
Calcium	10.0	10.30		103	80 120		6010B
Cadmium	0.500	0.5058		101	80 120		6010B
Cobalt	1.00	0.9984		100	80 120		6010B
Chromium	1.00	1.011		101	80 120		6010B
Copper	1.00	1.008		101	80 120		6010B
Iron	10.0	10.28		103	80 120		6010B
Potassium	10.0	10.19		102	80 120		6010B
Magnesium	10.0	10.13		101	80 120		6010B
Manganese	1.00	1.007		101	80 120		6010B
Molybdenum	1.00	1.034		103	80 120		6010B
Sodium	10.0	10.22		102	80 120		6010B
Nickel	1.00	0.9980		100	80 120		6010B
Lead	1.00	1.005		101	80 120		6010B
Selenium	1.00	1.015		102	80 120		6010B
Zinc	1.00	0.9908		99	80 120		6010B

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 600-123454/8-A

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

Sample Matrix: Water

LCS Source: MER1213S2_00011

Analyte	Water (ug/L)						
	True	Found	C	%R	Limits	Q	Method
Mercury	3.00	3.013		100	70	130	7470A

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

FORM VIIA - IN

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica HoustonJob Number: 600-84503-1

SDG Number: _____

Matrix: WaterInstrument ID: Thermo6500Method: 6010BMDL Date: 03/28/2011 11:53Prep Method: 3010A

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Aluminum		0.5	0.02155
Arsenic		0.01	0.00328
Barium		0.02	0.0022
Cadmium		0.005	0.00035
Calcium		1	0.02185
Chromium		0.01	0.00155
Cobalt		0.01	0.00063
Copper		0.01	0.00145
Iron		0.4	0.08656
Lead		0.01	0.0029
Magnesium		1	0.01909
Manganese		0.01	0.00084
Molybdenum		0.01	0.00273
Nickel		0.01	0.00179
Potassium		1	0.12929
Selenium		0.04	0.00417
Silver		0.01	0.00125
Sodium		1	0.02
Zinc		0.03	0.00217

9-IN

CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica HoustonJob Number: 600-84503-1

SDG Number: _____

Matrix: WaterInstrument ID: Thermo6500Method: 6010BXMDL Date: 05/16/2008 15:08

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Aluminum		0.5	0.02155
Arsenic		0.01	0.00328
Barium		0.02	0.0022
Cadmium		0.005	0.00035
Calcium		1	0.02185
Chromium		0.01	0.00155
Cobalt		0.01	0.00063
Copper		0.01	0.00145
Iron		0.4	0.08656
Lead		0.01	0.0029
Magnesium		1	0.01909
Manganese		0.01	0.00084
Molybdenum		0.01	0.00273
Nickel		0.01	0.00179
Potassium		1	0.12929
Selenium		0.04	0.00417
Silver		0.01	0.00125
Sodium		1	0.02
Zinc		0.01	0.00217

9-IN
DETECTION LIMITS
METALSLab Name: TestAmerica HoustonJob Number: 600-84503-1

SDG Number: _____

Matrix: WaterInstrument ID: FIMS01Method: 7470AMDL Date: 01/30/2013 13:08Prep Method: 7470A

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

9-IN

CALIBRATION BLANK DETECTION LIMITS
METALSLab Name: TestAmerica HoustonJob Number: 600-84503-1

SDG Number: _____

Matrix: Water Instrument ID: FIMS01Method: 7470A XMDL Date: 05/16/2008 15:13

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

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Houston

Job Number: 600-84503-1

SDG No.: _____

ICP-AES Instrument ID: Thermo6500 Date: 03/07/2013

Analyte	Wave Length	Ag	Al	As	B	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Li
Aluminum															
Antimony											0.016762				
Arsenic											0.000730				
Barium															
Beryllium															
Boron															
Cadmium				0.006606											
Calcium															
Chromium															
Cobalt															
Copper															
Iron															
Lead			0.000130					-0.000003		-0.000716		0.00005	-0.000008		
Lithium															
Magnesium															
Manganese															
Molybdenum															
Nickel															
Potassium															
Selenium															
Silicon															
Silver															
Sodium															
Strontium															
Thallium									0.001769	0.00014					
Tin															
Titanium											0.000212				
Vanadium															
Zinc											-0.000077				

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Houston

Job Number: 600-84503-1

SDG No.: _____

ICP-AES Instrument ID: Thermo6500 Date: 03/07/2013

Analyte	Wave Length	Mg	Mn	Mo	Na	Ni	Pb	Sb	Se	Si	Sn	Sr	Ti	Tl	V
Aluminum				0.031802											0.087966
Antimony															
Arsenic				0.000336											
Barium															
Beryllium															0.000109
Boron															
Cadmium															0.000051
Calcium															
Chromium															
Cobalt					0.000428							0.001761			
Copper				0.000349											-0.000072
Iron															
Lead				-0.001741		0.000053			0.000127						
Lithium															
Magnesium															
Manganese		0.000013													
Molybdenum															
Nickel				0.000181											0.000158
Potassium															
Selenium															
Silicon				0.005820											
Silver															0.000067
Sodium															
Strontium															
Thallium				0.00095											0.000309
Tin															
Titanium					0.000352										
Vanadium					-0.001293										
Zinc					0.000669										

X-IN

10-IN

ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica HoustonJob Number: 600-84503-1

SDG No.: _____

ICP-AES Instrument ID: Thermo6500 Date: 03/07/2013

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															

X-IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Prep Method: 3010A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 600-123931/1-A	12/30/2013 11:18	123931		50	50
LCS 600-123931/2-A	12/30/2013 11:18	123931		50	50
600-84503-1	12/30/2013 11:18	123931		50	50
600-84503-1 DL	12/30/2013 11:18	123931		50	50
600-84503-2	12/30/2013 11:18	123931		50	50
600-84503-2 DL	12/30/2013 11:18	123931		50	50
600-84503-2 DU	12/30/2013 11:18	123931		50	50
600-84503-2 DU DL	12/30/2013 11:18	123931		50	50
600-84503-2 MS	12/30/2013 11:18	123931		50	50
600-84503-2 MS DL	12/30/2013 11:18	123931		50	50
600-84503-2 MSD	12/30/2013 11:18	123931		50	50
600-84503-2 MSD DL	12/30/2013 11:18	123931		50	50
600-84503-3	12/30/2013 11:18	123931		50	50
600-84503-3 DL	12/30/2013 11:18	123931		50	50
600-84503-4	12/30/2013 11:18	123931		50	50
600-84503-4 DL	12/30/2013 11:18	123931		50	50
600-84503-5	12/30/2013 11:18	123931		50	50
600-84503-5 DL	12/30/2013 11:18	123931		50	50
600-84503-6	12/30/2013 11:18	123931		50	50
600-84503-6 DL	12/30/2013 11:18	123931		50	50
600-84503-7	12/30/2013 11:18	123931		50	50
600-84503-7 DL	12/30/2013 11:18	123931		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 600-123454/7-A	12/23/2013 04:58	123454		40	40
LCS 600-123454/8-A	12/23/2013 04:58	123454		50	50
600-84503-1	12/23/2013 04:58	123454		40	40
600-84503-2	12/23/2013 04:58	123454		40	40
600-84503-2 MS	12/23/2013 04:58	123454		40	40
600-84503-2 MSD	12/23/2013 04:58	123454		40	40
600-84503-3	12/23/2013 04:58	123454		40	40
600-84503-4	12/23/2013 04:58	123454		40	40
600-84503-5	12/23/2013 04:58	123454		40	40
600-84503-6	12/23/2013 04:58	123454		40	40
600-84503-7	12/23/2013 04:58	123454		40	40

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Instrument ID: Thermo6500Analysis Method: 6010BStart Date: 12/31/2013 10:29End Date: 12/31/2013 19:40

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
RINSE 600-124038/1			10:29																			
RINSE 600-124038/2			10:31																			
ZZZZZZ			10:34																			
ZZZZZZ			10:36																			
CALIBSTD 600-124038/5 IC			10:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CALIBSTD 600-124038/6 IC			10:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CALIBSTD 600-124038/7 IC			10:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CALIBSTD 600-124038/8 IC			10:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ZZZZZZ			10:47																			
ICV 600-124038/10	1		10:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CRI 600-124038/11			10:52																			
ICBIS 600-124038/12	1		10:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ICSA 600-124038/13	1		10:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ICSAB 600-124038/14	1		10:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCV 600-124038/15	1		11:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ZZZZZZ			11:03																			
CCB 600-124038/17	1		11:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ZZZZZZ			11:08																			
MB 600-123931/1-A	1	T	11:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
LCS 600-123931/2-A	1	T	11:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ZZZZZZ			11:15																			
ZZZZZZ			11:17																			
ZZZZZZ			11:19																			
ZZZZZZ			11:22																			
ZZZZZZ			11:24																			
ZZZZZZ			11:26																			
600-84503-1	1	T	11:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCV 600-124038/28	1		11:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ZZZZZZ			11:33																			
CCB 600-124038/30	1		11:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
600-84503-2	1	T	11:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
600-84503-2 DU	1	T	11:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
600-84503-2 MS	1	T	11:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
600-84503-2 MSD	1	T	11:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
600-84503-3	1	T	11:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
600-84503-4	1	T	11:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
600-84503-5	1	T	11:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
600-84503-6	1	T	11:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
600-84503-7	1	T	11:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ZZZZZZ			12:00																			
CCV 600-124038/41	1		12:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ZZZZZZ			12:05																			

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Instrument ID: Thermo6500 Analysis Method: 6010B

Start Date: 12/31/2013 10:29 End Date: 12/31/2013 19:40

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Instrument ID: Thermo6500Analysis Method: 6010BStart Date: 12/31/2013 10:29End Date: 12/31/2013 19:40

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	Z	
CCB 600-124038/85			13:54																	
ZZZZZZ			13:56																	
ZZZZZZ			13:59																	
ZZZZZZ			14:01																	
ZZZZZZ			14:04																	
ZZZZZZ			14:06																	
ZZZZZZ			14:08																	
ZZZZZZ			14:11																	
ZZZZZZ			14:13																	
ZZZZZZ			14:16																	
ZZZZZZ			14:18																	
CCV 600-124038/96			14:20																	
ZZZZZZ			14:23																	
CCB 600-124038/98			14:25																	
ZZZZZZ			14:27																	
ZZZZZZ			14:30																	
ZZZZZZ			14:32																	
ZZZZZZ			14:34																	
ZZZZZZ			14:36																	
ZZZZZZ			14:39																	
ZZZZZZ			14:41																	
ZZZZZZ			14:43																	
ZZZZZZ			14:46																	
ZZZZZZ			14:48																	
CCV 600-124038/109			14:51																	
ZZZZZZ			14:53																	
CCB 600-124038/111			14:55																	
ZZZZZZ			14:58																	
ZZZZZZ			15:00																	
ZZZZZZ			15:02																	
ZZZZZZ			15:05																	
ZZZZZZ			15:07																	
ZZZZZZ			15:10																	
ZZZZZZ			15:12																	
ZZZZZZ			15:15																	
ZZZZZZ			15:17																	
ZZZZZZ			15:20																	
CCV 600-124038/122			15:22																	
ZZZZZZ			15:25																	
CCB 600-124038/124			15:27																	
ZZZZZZ			15:29																	
ZZZZZZ			15:32																	

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Instrument ID: Thermo6500Analysis Method: 6010BStart Date: 12/31/2013 10:29End Date: 12/31/2013 19:40

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	Z	
ZZZZZZ			15:34																	
ZZZZZZ			15:37																	
ZZZZZZ			15:40																	
ZZZZZZ			15:42																	
ZZZZZZ			15:44																	
ZZZZZZ			15:47																	
ZZZZZZ			15:49																	
ZZZZZZ			15:52																	
CCV 600-124038/135			15:54																	
ZZZZZZ			15:56																	
CCB 600-124038/137			15:59																	
ZZZZZZ			16:01																	
ZZZZZZ			16:03																	
ZZZZZZ			16:06																	
ZZZZZZ			16:08																	
ZZZZZZ			16:10																	
ZZZZZZ			16:13																	
ZZZZZZ			16:15																	
ZZZZZZ			16:17																	
ZZZZZZ			16:19																	
ZZZZZZ			16:22																	
CCV 600-124038/148			16:24																	
ZZZZZZ			16:27																	
CCB 600-124038/150			16:29																	
ZZZZZZ			16:31																	
ZZZZZZ			16:34																	
ZZZZZZ			16:36																	
ZZZZZZ			16:38																	
ZZZZZZ			16:41																	
ZZZZZZ			16:43																	
ZZZZZZ			16:46																	
ZZZZZZ			16:48																	
ZZZZZZ			16:51																	
ZZZZZZ			16:53																	
CCV 600-124038/161			16:56																	
ZZZZZZ			16:58																	
CCB 600-124038/163			17:00																	
ZZZZZZ			17:03																	
ZZZZZZ			17:05																	
ZZZZZZ			17:07																	
ZZZZZZ			17:10																	
ZZZZZZ			17:12																	

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Instrument ID: Thermo6500 Analysis Method: 6010BStart Date: 12/31/2013 10:29 End Date: 12/31/2013 19:40

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
ZZZZZZ			17:14																			
ZZZZZZ			17:17																			
ZZZZZZ			17:19																			
ZZZZZZ			17:22																			
ZZZZZZ			17:24																			
CCV 600-124038/174			17:26																			
ZZZZZZ			17:28																			
CCB 600-124038/176			17:31																			
ZZZZZZ			17:33																			
ZZZZZZ			17:35																			
ZZZZZZ			17:38																			
ZZZZZZ			17:40																			
ZZZZZZ			17:42																			
ZZZZZZ			17:45																			
ZZZZZZ			17:47																			
ZZZZZZ			17:49																			
ZZZZZZ			17:52																			
ZZZZZZ			17:54																			
CCV 600-124038/187			17:56																			
ZZZZZZ			17:58																			
CCB 600-124038/189			18:01																			
ZZZZZZ			18:03																			
ZZZZZZ			18:05																			
ZZZZZZ			18:08																			
ZZZZZZ			18:11																			
ZZZZZZ			18:13																			
ZZZZZZ			18:15																			
ZZZZZZ			18:18																			
ZZZZZZ			18:20																			
ZZZZZZ			18:23																			
ZZZZZZ			18:25																			
CCV 600-124038/200			18:28																			
ZZZZZZ			18:30																			
CCB 600-124038/202			18:32																			
ZZZZZZ			18:35																			
ZZZZZZ			18:37																			
ZZZZZZ			18:40																			
ZZZZZZ			18:42																			
ZZZZZZ			18:45																			
ZZZZZZ			18:47																			
ZZZZZZ			18:50																			
ZZZZZZ			18:52																			

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Instrument ID: Thermo6500Analysis Method: 6010BStart Date: 12/31/2013 10:29End Date: 12/31/2013 19:40

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	Z	
ZZZZZZ			18:55																	
ZZZZZZ			18:57																	
CCV 600-124038/213			19:00																	
ZZZZZZ			19:02																	
CCB 600-124038/215			19:04																	
ZZZZZZ			19:07																	
ZZZZZZ			19:09																	
ZZZZZZ			19:12																	
ZZZZZZ			19:14																	
ZZZZZZ			19:16																	
ZZZZZZ			19:19																	
ZZZZZZ			19:21																	
ZZZZZZ			19:24																	
CCV 600-124038/224			19:26																	
ZZZZZZ			19:28																	
CCB 600-124038/226			19:30																	
ZZZZZZ			19:33																	
ZZZZZZ			19:35																	
ZZZZZZ			19:37																	
ZZZZZZ			19:40																	

Prep Types: _____

T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Instrument ID: FIMS01Analysis Method: 7470AStart Date: 12/23/2013 07:49End Date: 12/23/2013 09:44

Lab Sample Id	D/F	T Y P E	Time	Analytes															
				H	G														
ZZZZZZ			07:49																
ZZZZZZ			07:51																
ZZZZZZ			07:53																
ZZZZZZ			07:54																
ZZZZZZ			07:56																
ZZZZZZ			07:58																
ZZZZZZ			08:01																
ICV 600-123495/8	1		08:03	X															
ICB 600-123495/9	1		08:06	X															
CRA 600-123495/10	1		08:08	X															
CCV 600-123495/11	1		08:09	X															
CCB 600-123495/12	1		08:11	X															
MB 600-123454/7-A	1	T	08:13	X															
LCS 600-123454/8-A	1	T	08:15	X															
ZZZZZZ			08:17																
ZZZZZZ			08:19																
ZZZZZZ			08:21																
ZZZZZZ			08:23																
ZZZZZZ			08:25																
ZZZZZZ			08:26																
ZZZZZZ			08:28																
ZZZZZZ			08:30																
CCV 600-123495/23	1		08:32	X															
CCB 600-123495/24	1		08:34	X															
ZZZZZZ			08:36																
600-84503-1	1	T	08:38	X															
600-84503-2	1	T	08:40	X															
600-84503-2 MS	1	T	08:42	X															
600-84503-2 MSD	1	T	08:43	X															
600-84503-3	1	T	08:45	X															
600-84503-4	1	T	08:47	X															
600-84503-5	1	T	08:49	X															
600-84503-6	1	T	08:51	X															
600-84503-7	1	T	08:52	X															
CCV 600-123495/35	1		08:54	X															
CCB 600-123495/36	1		08:57	X															
ZZZZZZ			08:59																
ZZZZZZ			09:00																
ZZZZZZ			09:02																
ZZZZZZ			09:04																
ZZZZZZ			09:06																
ZZZZZZ			09:08																

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Instrument ID: FIMS01 Analysis Method: 7470AStart Date: 12/23/2013 07:49 End Date: 12/23/2013 09:44

Lab Sample Id	D/F	T Y P E	Time	Analytes													
				H	G												
ZZZZZZ			09:10														
ZZZZZZ			09:12														
ZZZZZZ			09:16														
CCV 600-123495/46			09:18														
CCB 600-123495/47			09:20														
ZZZZZZ			09:22														
ZZZZZZ			09:24														
ZZZZZZ			09:26														
ZZZZZZ			09:29														
ZZZZZZ			09:31														
ZZZZZZ			09:33														
ZZZZZZ			09:35														
ZZZZZZ			09:36														
ZZZZZZ			09:39														
CCV 600-123495/57			09:41														
CCB 600-123495/58			09:44														

Prep Types:
T = Total/NA

METALS BATCH WORKSHEET

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Batch Number: 123931

Batch Start Date: 12/30/13 11:18

Batch Analyst: Racelis, Froilan Noel E

Batch Method: 3010A

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	METCALA 00015	METCALB 00013	METHCL 00057
MB 600-123931/1		3010A, 6010B			50 mL	50 mL			2.5 mL
LCS 600-123931/2		3010A, 6010B			50 mL	50 mL	250 uL	250 uL	2.5 mL
600-84503-C-1	San Juan-MW08-121920 13	3010A, 6010B	T	<2	50 mL	50 mL			2.5 mL
600-84503-C-2	San Juan-MW09-121920 13	3010A, 6010B	T	<2	50 mL	50 mL			2.5 mL
600-84503-C-2 DU	San Juan-MW09-121920 13	3010A, 6010B	T	<2	50 mL	50 mL			2.5 mL
600-84503-C-2 MS	San Juan-MW09-121920 13 MS	3010A, 6010B	T	<2	50 mL	50 mL	250 uL	250 uL	2.5 mL
600-84503-C-2 MSD	San Juan-MW09-121920 13 MSD	3010A, 6010B	T	<2	50 mL	50 mL	250 uL	250 uL	2.5 mL
600-84503-C-3	San Juan-MW04-121920 13	3010A, 6010B	T	<2	50 mL	50 mL			2.5 mL
600-84503-C-4	San Juan-MW02-121920 13	3010A, 6010B	T	<2	50 mL	50 mL			2.5 mL
600-84503-C-5	San Juan-EquBlank04-12192013	3010A, 6010B	T	<2	50 mL	50 mL			2.5 mL
600-84503-C-6	San Juan-MW06-121920 13	3010A, 6010B	T	<2	50 mL	50 mL			2.5 mL
600-84503-C-7	San Juan-MD03-121920 13	3010A, 6010B	T	<2	50 mL	50 mL			2.5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	METHNO3 00043					
MB 600-123931/1		3010A, 6010B		2.5 mL					
LCS 600-123931/2		3010A, 6010B		2.5 mL					
600-84503-C-1	San Juan-MW08-121920 13	3010A, 6010B	T	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.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Batch Number: 123931

Batch Start Date: 12/30/13 11:18

Batch Analyst: Racelis, Froilan Noel E

Batch Method: 3010A

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	METHNO3 00043					
600-84503-C-2	San Juan-MW09-121920 13	3010A, 6010B	T	2.5 mL					
600-84503-C-2 DU	San Juan-MW09-121920 13	3010A, 6010B	T	2.5 mL					
600-84503-C-2 MS	San Juan-MW09-121920 13 MS	3010A, 6010B	T	2.5 mL					
600-84503-C-2 MSD	San Juan-MW09-121920 13 MSD	3010A, 6010B	T	2.5 mL					
600-84503-C-3	San Juan-MW04-121920 13	3010A, 6010B	T	2.5 mL					
600-84503-C-4	San Juan-MW02-121920 13	3010A, 6010B	T	2.5 mL					
600-84503-C-5	San Juan-EquBlank04-12192013	3010A, 6010B	T	2.5 mL					
600-84503-C-6	San Juan-MW06-121920 13	3010A, 6010B	T	2.5 mL					
600-84503-C-7	San Juan-MD03-121920 13	3010A, 6010B	T	2.5 mL					

Batch Notes

Hood ID or number	M4
Hot Block ID number	HB 03
Pipette ID	M11
Temperature	93+1.0=94
ID number of the thermometer	517
Digestion Tube/Cup Lot #	1306159

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.

6010B

Page 2 of 2

METALS BATCH WORKSHEET

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Batch Number: 123454

Batch Start Date: 12/23/13 04:58

Batch Analyst: Trenery, Michael J

Batch Method: 7470A

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MER01213HS 00001	MER1113PP 00001	MER1213KM 00001	MER1213S2 00011
MB 600-123454/7		7470A, 7470A		40 mL	40 mL	3 mL	3.2 mL	6 mL	
LCS 600-123454/8		7470A, 7470A		50 mL	50 mL	3 mL	3.2 mL	6 mL	1.5 mL
600-84503-C-1	San Juan-MW08-121920 13	7470A, 7470A	T	40 mL	40 mL	3 mL	3.2 mL	6 mL	
600-84503-C-2	San Juan-MW09-121920 13	7470A, 7470A	T	40 mL	40 mL	3 mL	3.2 mL	6 mL	
600-84503-C-2 MS	San Juan-MW09-121920 13 MS	7470A, 7470A	T	40 mL	40 mL	3 mL	3.2 mL	6 mL	1.2 mL
600-84503-C-2 MSD	San Juan-MW09-121920 13 MSD	7470A, 7470A	T	40 mL	40 mL	3 mL	3.2 mL	6 mL	1.2 mL
600-84503-C-3	San Juan-MW04-121920 13	7470A, 7470A	T	40 mL	40 mL	3 mL	3.2 mL	6 mL	
600-84503-C-4	San Juan-MW02-121920 13	7470A, 7470A	T	40 mL	40 mL	3 mL	3.2 mL	6 mL	
600-84503-C-5	San Juan-EquBlank04-12192013	7470A, 7470A	T	40 mL	40 mL	3 mL	3.2 mL	6 mL	
600-84503-C-6	San Juan-MW06-121920 13	7470A, 7470A	T	40 mL	40 mL	3 mL	3.2 mL	6 mL	
600-84503-C-7	San Juan-MD03-121920 13	7470A, 7470A	T	40 mL	40 mL	3 mL	3.2 mL	6 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MERSUL 00034	METHNO3 00042				
MB 600-123454/7		7470A, 7470A		2 mL	1 mL				
LCS 600-123454/8		7470A, 7470A		2 mL	1 mL				
600-84503-C-1	San Juan-MW08-121920 13	7470A, 7470A	T	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.: 600-84503-1

SDG No.:

Batch Number: 123454 Batch Start Date: 12/23/13 04:58 Batch Analyst: Trenery, Michael J

Batch Method: 7470A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MERSUL 00034	METHNO3 00042				
600-84503-C-2	San Juan-MW09-121920 13	7470A, 7470A	T	2 mL	1 mL				
600-84503-C-2 MS	San Juan-MW09-121920 13 MS	7470A, 7470A	T	2 mL	1 mL				
600-84503-C-2 MSD	San Juan-MW09-121920 13 MSD	7470A, 7470A	T	2 mL	1 mL				
600-84503-C-3	San Juan-MW04-121920 13	7470A, 7470A	T	2 mL	1 mL				
600-84503-C-4	San Juan-MW02-121920 13	7470A, 7470A	T	2 mL	1 mL				
600-84503-C-5	San Juan-EquBlank04-12192013	7470A, 7470A	T	2 mL	1 mL				
600-84503-C-6	San Juan-MW06-121920 13	7470A, 7470A	T	2 mL	1 mL				
600-84503-C-7	San Juan-MD03-121920 13	7470A, 7470A	T	2 mL	1 mL				

Batch Notes	
Hood ID or number	m4
Hot Block ID number	hb03
Temperature	95+1.0=96 Degrees C
ID number of the thermometer	517
Digestion Tube/Cup Lot #	1306159

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

COVER PAGE
GENERAL CHEMISTRYLab Name: TestAmerica HoustonJob Number: 600-84503-1

SDG No.: _____

Project: San Juan

Client Sample ID	Lab Sample ID
San Juan-MW08-12192013	600-84503-1
San Juan-MW09-12192013	600-84503-2
San Juan-MW04-12192013	600-84503-3
San Juan-MW02-12192013	600-84503-4
San Juan-EquBlank04-12192013	600-84503-5
San Juan-MW06-12192013	600-84503-6
San Juan-MD03-12192013	600-84503-7

Client Sample ID	Lab Sample ID
San Juan-MW08-12192013	600-84503-1
San Juan-MW09-12192013	600-84503-2
San Juan-MW04-12192013	600-84503-3
San Juan-MW02-12192013	600-84503-4
San Juan-EquBlank04-12192013	600-84503-5
San Juan-MW06-12192013	600-84503-6
San Juan-MD03-12192013	600-84503-7

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

APPENDIX B (187 of 240)

Client Sample ID: San Juan-MW08-12192013

Lab Sample ID: 600-84503-1

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG ID.:

Matrix: Water

Date Sampled: 12/19/2013 11:20

Reporting Basis: WET

Date Received: 12/21/2013 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Nitrate Nitrite as N	0.366	0.0500	0.0170	mg/L			1	353.2
16887-00-6	Chloride	271	80.0	5.40	mg/L			200	300.0
14808-79-8	Sulfate	2310	100	16.6	mg/L			200	300.0

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

APPENDIX B (188 of 240)

Client Sample ID: San Juan-MW08-12192013

Lab Sample ID: 600-84503-1

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG ID.:

Matrix: Water

Date Sampled: 12/19/2013 11:20

Reporting Basis: WET

Date Received: 12/21/2013 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Alkalinity	3150	10.0		mg/L			1	SM 2320B
	Bicarbonate Alkalinity as CaCO ₃	3150	10.0		mg/L			1	SM 2320B
	Carbonate Alkalinity as CaCO ₃	10.0	10.0		mg/L	U		1	SM 2320B
	Hydroxide Alkalinity	10.0	10.0		mg/L	U		1	SM 2320B
	Phenolphthalein Alkalinity	10.0	10.0		mg/L	U		1	SM 2320B
	Total Dissolved Solids	6540	40.0		mg/L			1	SM 2540C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

APPENDIX B (189 of 240)

Client Sample ID: San Juan-MW09-12192013

Lab Sample ID: 600-84503-2

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG ID.:

Matrix: Water

Date Sampled: 12/19/2013 12:35

Reporting Basis: WET

Date Received: 12/21/2013 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Nitrate Nitrite as N	0.147	0.0500	0.0170	mg/L			1	353.2
16887-00-6	Chloride	398	40.0	2.70	mg/L			100	300.0
14808-79-8	Sulfate	11200	250	41.5	mg/L			500	300.0

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

APPENDIX B (190 of 240)

Client Sample ID: San Juan-MW09-12192013

Lab Sample ID: 600-84503-2

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG ID.:

Matrix: Water

Date Sampled: 12/19/2013 12:35

Reporting Basis: WET

Date Received: 12/21/2013 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Alkalinity	46.5	10.0		mg/L			1	SM 2320B
	Bicarbonate Alkalinity as CaCO ₃	46.5	10.0		mg/L			1	SM 2320B
	Carbonate Alkalinity as CaCO ₃	10.0	10.0		mg/L	U		1	SM 2320B
	Hydroxide Alkalinity	10.0	10.0		mg/L	U		1	SM 2320B
	Phenolphthalein Alkalinity	10.0	10.0		mg/L	U		1	SM 2320B
	Total Dissolved Solids	15300	10.0		mg/L			1	SM 2540C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

APPENDIX B (191 of 240)

Client Sample ID: San Juan-MW04-12192013

Lab Sample ID: 600-84503-3

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG ID.:

Matrix: Water

Date Sampled: 12/19/2013 13:35

Reporting Basis: WET

Date Received: 12/21/2013 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Nitrate Nitrite as N	0.695	0.0500	0.0170	mg/L			1	353.2
16887-00-6	Chloride	377	40.0	2.70	mg/L			100	300.0
14808-79-8	Sulfate	2640	50.0	8.30	mg/L			100	300.0

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

APPENDIX B (192 of 240)

Client Sample ID: San Juan-MW04-12192013

Lab Sample ID: 600-84503-3

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG ID.:

Matrix: Water

Date Sampled: 12/19/2013 13:35

Reporting Basis: WET

Date Received: 12/21/2013 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Alkalinity	765	10.0		mg/L			1	SM 2320B
	Bicarbonate Alkalinity as CaCO ₃	765	10.0		mg/L			1	SM 2320B
	Carbonate Alkalinity as CaCO ₃	10.0	10.0		mg/L	U		1	SM 2320B
	Hydroxide Alkalinity	10.0	10.0		mg/L	U		1	SM 2320B
	Phenolphthalein Alkalinity	10.0	10.0		mg/L	U		1	SM 2320B
	Total Dissolved Solids	5330	20.0		mg/L			1	SM 2540C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

APPENDIX B (193 of 240)

Client Sample ID: San Juan-MW02-12192013

Lab Sample ID: 600-84503-4

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG ID.:

Matrix: Water

Date Sampled: 12/19/2013 14:00

Reporting Basis: WET

Date Received: 12/21/2013 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Nitrate Nitrite as N	19.7	12.5	4.25	mg/L			250	353.2
16887-00-6	Chloride	275	40.0	2.70	mg/L			100	300.0
14808-79-8	Sulfate	3330	50.0	8.30	mg/L			100	300.0

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

APPENDIX B (194 of 240)

Client Sample ID: San Juan-MW02-12192013

Lab Sample ID: 600-84503-4

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG ID.:

Matrix: Water

Date Sampled: 12/19/2013 14:00

Reporting Basis: WET

Date Received: 12/21/2013 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Alkalinity	203	10.0		mg/L			1	SM 2320B
	Bicarbonate Alkalinity as CaCO ₃	203	10.0		mg/L			1	SM 2320B
	Carbonate Alkalinity as CaCO ₃	10.0	10.0		mg/L	U		1	SM 2320B
	Hydroxide Alkalinity	10.0	10.0		mg/L	U		1	SM 2320B
	Phenolphthalein Alkalinity	10.0	10.0		mg/L	U		1	SM 2320B
	Total Dissolved Solids	5460	20.0		mg/L			1	SM 2540C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

APPENDIX B (195 of 240)

Client Sample ID: San Juan-EquBlank04-12192013

Lab Sample ID: 600-84503-5

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG ID.:

Matrix: Water

Date Sampled: 12/19/2013 14:20

Reporting Basis: WET

Date Received: 12/21/2013 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Nitrate Nitrite as N	0.110	0.0500	0.0170	mg/L			1	353.2
16887-00-6	Chloride	1.01	0.400	0.0270	mg/L			1	300.0
14808-79-8	Sulfate	0.715	0.500	0.0830	mg/L			1	300.0

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

APPENDIX B (196 of 240)

Client Sample ID: San Juan-EquBlank04-12192013

Lab Sample ID: 600-84503-5

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG ID.:

Matrix: Water

Date Sampled: 12/19/2013 14:20

Reporting Basis: WET

Date Received: 12/21/2013 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Alkalinity	27.9	10.0		mg/L			1	SM 2320B
	Bicarbonate Alkalinity as CaCO ₃	27.9	10.0		mg/L			1	SM 2320B
	Carbonate Alkalinity as CaCO ₃	10.0	10.0		mg/L	U		1	SM 2320B
	Hydroxide Alkalinity	10.0	10.0		mg/L	U		1	SM 2320B
	Phenolphthalein Alkalinity	10.0	10.0		mg/L	U		1	SM 2320B
	Total Dissolved Solids	45.0	10.0		mg/L			1	SM 2540C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

APPENDIX B (197 of 240)

Client Sample ID: San Juan-MW06-12192013

Lab Sample ID: 600-84503-6

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG ID.:

Matrix: Water

Date Sampled: 12/19/2013 15:00

Reporting Basis: WET

Date Received: 12/21/2013 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Nitrate Nitrite as N	137	12.5	4.25	mg/L			250	353.2
16887-00-6	Chloride	1310	400	27.0	mg/L			1000	300.0
14808-79-8	Sulfate	9600	500	83.0	mg/L			1000	300.0

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

APPENDIX B (198 of 240)

Client Sample ID: San Juan-MW06-12192013

Lab Sample ID: 600-84503-6

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG ID.:

Matrix: Water

Date Sampled: 12/19/2013 15:00

Reporting Basis: WET

Date Received: 12/21/2013 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Alkalinity	10.0	10.0		mg/L	U		1	SM 2320B
	Bicarbonate Alkalinity as CaCO ₃	10.0	10.0		mg/L	U		1	SM 2320B
	Carbonate Alkalinity as CaCO ₃	10.0	10.0		mg/L	U		1	SM 2320B
	Hydroxide Alkalinity	10.0	10.0		mg/L	U		1	SM 2320B
	Phenolphthalein Alkalinity	10.0	10.0		mg/L	U		1	SM 2320B
	Total Dissolved Solids	16300	100		mg/L			1	SM 2540C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

APPENDIX B (199 of 240)

Client Sample ID: San Juan-MD03-12192013

Lab Sample ID: 600-84503-7

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG ID.:

Matrix: Water

Date Sampled: 12/19/2013 17:00

Reporting Basis: WET

Date Received: 12/21/2013 10:45

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Nitrate Nitrite as N	226	12.5	4.25	mg/L			250	353.2
16887-00-6	Chloride	1300	400	27.0	mg/L			1000	300.0
14808-79-8	Sulfate	9570	500	83.0	mg/L			1000	300.0

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

APPENDIX B (200 of 240)

Client Sample ID: San Juan-MD03-12192013

Lab Sample ID: 600-84503-7

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG ID.:

Matrix: Water

Date Sampled: 12/19/2013 17:00

Reporting Basis: WET

Date Received: 12/21/2013 10:45

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Alkalinity	10.0	10.0		mg/L	U		1	SM 2320B
	Bicarbonate Alkalinity as CaCO ₃	10.0	10.0		mg/L	U		1	SM 2320B
	Carbonate Alkalinity as CaCO ₃	10.0	10.0		mg/L	U		1	SM 2320B
	Hydroxide Alkalinity	10.0	10.0		mg/L	U		1	SM 2320B
	Phenolphthalein Alkalinity	10.0	10.0		mg/L	U		1	SM 2320B
	Total Dissolved Solids	16800	100		mg/L			1	SM 2540C

2-IN

CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Analyst: KRD Batch Start Date: 01/03/2014Reporting Units: mg/L Analytical Batch No.: 124343

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
7	ICV	11:27	Nitrate Nitrite as N	0.9953	1.00	100	90-110		WETSICINO3_00009
8	ICB	11:27	Nitrate Nitrite as N	0.00310				U	
19	CCV	11:40	Nitrate Nitrite as N	1.058	1.00	106	90-110		WETSICCNO3_00010
20	CCB	11:41	Nitrate Nitrite as N	0.00310				U	
31	CCV	11:56	Nitrate Nitrite as N	1.077	1.00	108	90-110		WETSICCNO3_00010
32	CCB	11:57	Nitrate Nitrite as N	0.00310				U	
43	CCV	12:04	Nitrate Nitrite as N	1.055	1.00	105	90-110		WETSICCNO3_00010
44	CCB	12:04	Nitrate Nitrite as N	0.00310				U	
55	CCV	12:11	Nitrate Nitrite as N	1.072	1.00	107	90-110		WETSICCNO3_00010
56	CCB	12:12	Nitrate Nitrite as N	0.003481				J	
96	CCV	14:40	Nitrate Nitrite as N	1.012	1.00	101	90-110		WETSICCNO3_00010
97	CCB	14:41	Nitrate Nitrite as N	0.005250				J	
108	CCV	14:48	Nitrate Nitrite as N	1.026	1.00	103	90-110		WETSICCNO3_00010
109	CCB	14:48	Nitrate Nitrite as N	0.00310				U	
120	CCV	15:01	Nitrate Nitrite as N	1.022	1.00	102	90-110		WETSICCNO3_00010
121	CCB	15:02	Nitrate Nitrite as N	0.00310				U	

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

FORM II-IN

2-IN

CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Analyst: DAW Batch Start Date: 12/23/2013Reporting Units: mg/L Analytical Batch No.: 123582

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	16:12	Chloride	20.17	20.0	101	90-110		ICV/LCS_00026
			Sulfate	20.28	20.0	101	90-110		ICV/LCS_00026
2	ICB	16:27	Chloride	0.0270				U	
			Sulfate	0.0830				U	
13	CCV	19:55	Chloride	19.93	20.0	100	90-110		CCV_00023
			Sulfate	20.53	20.0	103	90-110		CCV_00023
14	CCB	20:10	Chloride	0.0270				U	
			Sulfate	0.0830				U	
25	CCV	23:01	Chloride	20.52	20.0	103	90-110		CCV_00023
			Sulfate	20.87	20.0	104	90-110		CCV_00023
26	CCB	23:16	Chloride	0.0270				U	
			Sulfate	0.0830				U	

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

FORM II-IN

2-IN

CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Analyst: BDG Batch Start Date: 12/24/2013Reporting Units: mg/L Analytical Batch No.: 124058

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	10:15	Chloride	20.29	20.0	101	90-110	U	ICV/LCS_00026
			Sulfate	20.94	20.0	105	90-110		ICV/LCS_00026
2	ICB	10:31	Chloride	0.0270				U	
			Sulfate	0.0830					
13	CCV	13:21	Chloride	20.49	20.0	102	90-110	U	CCV_00023
			Sulfate	20.56	20.0	103	90-110		CCV_00023
14	CCB	13:37	Chloride	0.0270				U	
			Sulfate	0.0830					

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

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
<hr/>							
Batch ID: 123582	Date: 12/23/2013 17:20						
300.0	MB 600-123582/3	Chloride	0.0270	U	mg/L	0.400	1
300.0	MB 600-123582/3	Sulfate	0.0830	U	mg/L	0.500	1
<hr/>							
Batch ID: 124058	Date: 12/24/2013 10:46						
300.0	MB 600-124058/3	Chloride	0.0270	U	mg/L	0.400	1
300.0	MB 600-124058/3	Sulfate	0.0830	U	mg/L	0.500	1
<hr/>							
Batch ID: 124343	Date: 01/03/2014 11:28						
353.2	MB 600-124343/10	Nitrate Nitrite as N	0.0170	U	mg/L	0.0500	1
<hr/>							
Batch ID: 124080	Date: 01/02/2014 06:48						
SM 2320B	MB 600-124080/1	Alkalinity	5.00	U	mg/L	5.00	1
SM 2320B	MB 600-124080/1	Bicarbonate Alkalinity as CaCO ₃	5.00	U	mg/L	5.00	1
SM 2320B	MB 600-124080/1	Carbonate Alkalinity as CaCO ₃	5.00	U	mg/L	5.00	1
SM 2320B	MB 600-124080/1	Hydroxide Alkalinity	5.00	U	mg/L	5.00	1
SM 2320B	MB 600-124080/1	Phenolphthalein Alkalinity	5.00	U	mg/L	5.00	1
<hr/>							
Batch ID: 123544	Date: 12/23/2013 14:41						
SM 2540C	MB 600-123544/49	Total Dissolved Solids	10.0	U	mg/L	10.0	1

5-IN

MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 123582 Date: 12/23/2013 20:57											
300.0	600-84503-2	Chloride	398		mg/L						
300.0	600-84503-2	Chloride	1227		mg/L	1000	83	80-120			
300.0	600-84503-2	MS									
300.0	600-84503-2	Sulfate	12100		mg/L						
300.0	600-84503-2	Sulfate	12000		mg/L	1000	-14	80-120			4
		MS									
Batch ID: 124343 Date: 01/03/2014 12:05											
353.2	600-84503-2	Nitrate Nitrite as N	0.147		mg/L						
353.2	600-84503-2	Nitrate Nitrite as N	0.7810		mg/L	1.00	63	80-120			F1
		MS									
Batch ID: 124343 Date: 01/03/2014 14:49											
353.2	600-84503-6	Nitrate Nitrite as N	137		mg/L						
353.2	600-84503-6	Nitrate Nitrite as N	850.5		mg/L	250	285	80-120			F1
		MS									
Batch ID: 124080 Date: 01/02/2014 06:48											
SM	600-84503-2	Alkalinity	46.5		mg/L						
2320B											
SM	600-84503-2	Alkalinity	273.7		mg/L	250	91	75-125			
2320B	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 HoustonJob No.: 600-84503-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
<hr/>											
Batch ID: 123582	Date: 12/23/2013 21:12										
300.0	600-84503-2	Chloride	1224		mg/L	1000	83	80-120	0	20	
MSD											
300.0	600-84503-2	Sulfate	11770		mg/L	1000	-36	80-120	2	20	4
MSD											
<hr/>											
Batch ID: 124343	Date: 01/03/2014 12:06										
353.2	600-84503-2	Nitrate Nitrite as N	0.7187		mg/L	1.00	57	80-120	8	20	F1
MSD											
Batch ID: 124343	Date: 01/03/2014 14:50										
353.2	600-84503-6	Nitrate Nitrite as N	671.4		mg/L	250	214	80-120	24	20	F1 F2
MSD											
<hr/>											
Batch ID: 124080	Date: 01/02/2014 06:48										
SM	600-84503-2	Alkalinity	275.6		mg/L	250	92	75-125	1	20	
2320B	MSD										

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

7A-IN

LAB CONTROL SAMPLE
GENERAL CHEMISTRYLab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
<hr/>											
Batch ID: 123582 Date: 12/23/2013 17:35											
LCS Source: ICV/LCS_00026											
300.0	LCS 600-123582/4	Chloride	20.28		mg/L	20.0	101	90-110			
300.0	LCS 600-123582/4	Sulfate	20.34		mg/L	20.0	102	90-110			
<hr/>											
Batch ID: 124058 Date: 12/24/2013 11:02											
LCS Source: ICV/LCS_00026											
300.0	LCS 600-124058/4	Chloride	20.47		mg/L	20.0	102	90-110			
300.0	LCS 600-124058/4	Sulfate	20.58		mg/L	20.0	103	90-110			
<hr/>											
Batch ID: 124343 Date: 01/03/2014 11:29											
LCS Source: WETSICCNO3_00010											
353.2	LCS 600-124343/11	Nitrate Nitrite as N	1.050		mg/L	1.00	105	90-110			
<hr/>											
Batch ID: 124080 Date: 01/02/2014 06:48											
LCS Source: WETSNACO3L_00020											
SM 2320B	LCS 600-124080/2	Alkalinity	968.2		mg/L	1000	97	90-110			
<hr/>											
Batch ID: 123544 Date: 12/23/2013 14:41											
LCS Source: TDSILCS_00069											
SM 2540C	LCS 600-123544/50	Total Dissolved Solids	1878		mg/L	1800	104	90-110			

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 HoustonJob Number: 600-84503-1

SDG Number: _____

Matrix: Water Instrument ID: WC05Method: 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 CHEMISTRYLab Name: TestAmerica HoustonJob Number: 600-84503-1

SDG Number: _____

Matrix: Water Instrument ID: WC05Method: 353.2 XMDL Date: 08/20/2008 11:57

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Nitrate Nitrite as N		0.05	0.003095

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica HoustonJob Number: 600-84503-1

SDG Number: _____

Matrix: Water Instrument ID: WC11Method: 300.0 MDL Date: 10/08/2013 11:01

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Sulfate		0.5	0.083

9-IN

CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRYLab Name: TestAmerica HoustonJob Number: 600-84503-1

SDG Number: _____

Matrix: Water Instrument ID: WC11Method: 300.0 XMDL Date: 10/08/2013 11:02

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Sulfate		0.5	0.083

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica HoustonJob Number: 600-84503-1

SDG Number: _____

Matrix: Water Instrument ID: WC16Method: 300.0 MDL Date: 10/08/2013 11:01

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Chloride		0.4	0.027
Sulfate		0.5	0.083

9-IN

CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRYLab Name: TestAmerica HoustonJob Number: 600-84503-1

SDG Number: _____

Matrix: Water Instrument ID: WC16Method: 300.0 XMDL Date: 10/08/2013 11:02

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Chloride		0.4	0.027
Sulfate		0.5	0.083

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica HoustonJob Number: 600-84503-1

SDG Number: _____

Matrix: Water Instrument ID: NOEQUIPMethod: 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
Hydroxide Alkalinity		5
Phenolphthalein Alkalinity		5

9-IN

CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRYLab Name: TestAmerica HoustonJob Number: 600-84503-1

SDG Number: _____

Matrix: Water Instrument ID: NOEQUIPMethod: SM 2320B XMDL Date: 01/09/2008 12:30

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Alkalinity		5	1.528804
Bicarbonate Alkalinity as CaCO ₃		5	1.528804
Carbonate Alkalinity as CaCO ₃		5	1.528804
Hydroxide Alkalinity		5	1.528804
Phenolphthalein Alkalinity		5	1.528804

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica HoustonJob Number: 600-84503-1

SDG Number: _____

Matrix: WaterInstrument ID: NOEQUIPMethod: SM 2540CRL Date: 07/10/2012 13:37

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

9-IN

CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRYLab Name: TestAmerica HoustonJob Number: 600-84503-1

SDG Number: _____

Matrix: Water Instrument ID: NOEQUIPMethod: 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.: 600-84503-1

SDG No.:

Instrument ID: WC05

Analysis Method: 353.2

Start Date: 01/03/2014 11:21

End Date: 01/03/2014 15:09

Lab Sample Id	D/F	T Y p e	Time	Analytes				
				N	N	O	3	2
ZZZZZZ			11:21					
ZZZZZZ			11:22					
ZZZZZZ			11:23					
ZZZZZZ			11:23					
ZZZZZZ			11:24					
ZZZZZZ			11:25					
ICV 600-124343/7	1		11:27	X				
ICB 600-124343/8	1		11:27	X				
ZZZZZZ			11:28					
MB 600-124343/10	1	T	11:28	X				
LCS 600-124343/11	1	T	11:29	X				
ZZZZZZ			11:30					
ZZZZZZ			11:30					
ZZZZZZ			11:31					
ZZZZZZ			11:32					
ZZZZZZ			11:32					
ZZZZZZ			11:33					
ZZZZZZ			11:33					
CCV 600-124343/19	1		11:40	X				
CCB 600-124343/20	1		11:41	X				
ZZZZZZ			11:41					
ZZZZZZ			11:42					
ZZZZZZ			11:43					
ZZZZZZ			11:43					
ZZZZZZ			11:44					
ZZZZZZ			11:45					
ZZZZZZ			11:45					
ZZZZZZ			11:54					
ZZZZZZ			11:55					
ZZZZZZ			11:55					
CCV 600-124343/31	1		11:56	X				
CCB 600-124343/32	1		11:57	X				
ZZZZZZ			11:57					
ZZZZZZ			11:58					
ZZZZZZ			11:59					
ZZZZZZ			11:59					
600-84503-1	1	T	12:00	X				
600-84503-3	1	T	12:00	X				
ZZZZZZ			12:01					

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Instrument ID: WC05

Analysis Method: 353.2

Start Date: 01/03/2014 11:21

End Date: 01/03/2014 15:09

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Instrument ID: WC05

Analysis Method: 353.2

Start Date: 01/03/2014 11:21

End Date: 01/03/2014 15:09

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Instrument ID: WC05

Analysis Method: 353.2

Start Date: 01/03/2014 11:21

End Date: 01/03/2014 15:09

Prep Types:

T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Instrument ID: WC11 Analysis Method: 300.0Start Date: 12/24/2013 10:15 End Date: 12/24/2013 13:37

Lab Sample Id	D/F	T Y p e	Time	Analytes								
				C	S							
ICV 600-124058/1		1	10:15	X	X							
ICB 600-124058/2		1	10:31	X	X							
MB 600-124058/3		1 T	10:46	X	X							
LCS 600-124058/4		1 T	11:02	X	X							
ZZZZZZ			11:17									
ZZZZZZ			11:33									
ZZZZZZ			11:48									
ZZZZZZ			12:04									
ZZZZZZ			12:19									
ZZZZZZ			12:35									
ZZZZZZ			12:50									
600-84503-2	500	T	13:06		X							
CCV 600-124058/13		1	13:21	X	X							
CCB 600-124058/14		1	13:37	X	X							

Prep Types:
 T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Instrument ID: WC16 Analysis Method: 300.0Start Date: 12/23/2013 16:12 End Date: 12/24/2013 00:03

Lab Sample Id	D/F	T Y P E	Time	Analytes								
				C	S							
ICV 600-123582/1	1		16:12	X	X							
ICB 600-123582/2	1		16:27	X	X							
MB 600-123582/3	1	T	17:20	X	X							
LCS 600-123582/4	1	T	17:35	X	X							
ZZZZZZ			17:51									
ZZZZZZ			18:06									
ZZZZZZ			18:22									
ZZZZZZ			18:37									
ZZZZZZ			18:53									
ZZZZZZ			19:08									
ZZZZZZ			19:24									
ZZZZZZ			19:39									
CCV 600-123582/13	1		19:55	X	X							
CCB 600-123582/14	1		20:10	X	X							
600-84503-1	200	T	20:26	X	X							
600-84503-2	100	T	20:41	X								
600-84503-2 MS	100	T	20:57	X	X							
600-84503-2 MSD	100	T	21:12	X	X							
600-84503-3	100	T	21:28	X	X							
600-84503-4	100	T	21:43	X	X							
600-84503-5	1	T	21:59	X	X							
600-84503-6	1000	T	22:14	X	X							
600-84503-7	1000	T	22:30	X	X							
ZZZZZZ			22:45									
CCV 600-123582/25	1		23:01	X	X							
CCB 600-123582/26	1		23:16	X	X							
ZZZZZZ			23:32									
CCV 600-123582/28			23:47									
CCB 600-123582/29			00:03									

Prep Types: _____

T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: SM 2320B

Start Date: 01/02/2014 06:48 End Date: 01/02/2014 06:48

Prep Types:

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: SM 2540C

Start Date: 12/23/2013 14:41 End Date: 12/23/2013 15:01

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica HoustonJob No.: 600-84503-1

SDG No.: _____

Instrument ID: NOEQUIPAnalysis Method: SM 2540CStart Date: 12/23/2013 14:41End Date: 12/23/2013 15:01

Lab Sample Id	D/F	T Y p e	Time	Analytes													
				T	D	S											
ZZZZZZ			14:41														
ZZZZZZ			14:41														
ZZZZZZ			14:41														
ZZZZZZ			14:41														
ZZZZZZ			14:41														
ZZZZZZ			14:41														
ZZZZZZ			14:41														
MB 600-123544/49	1	T	14:41	X													
LCS 600-123544/50	1	T	14:41	X													
ZZZZZZ			14:41														
ZZZZZZ			14:41														
ZZZZZZ			14:41														
ZZZZZZ			14:41														
ZZZZZZ			14:41														
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ZZZZZZ			14:41														
ZZZZZZ			14:41														
600-84503-1	1	T	14:41	X													
600-84503-2	1	T	14:41	X													
600-84503-3	1	T	14:41	X													
600-84503-4	1	T	14:41	X													
600-84503-5	1	T	14:41	X													
600-84503-6	1	T	14:41	X													
600-84503-7	1	T	14:41	X													
ZZZZZZ			15:01														
ZZZZZZ			15:01														

Prep Types:

T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Batch Number: 124343

Batch Start Date: 01/03/14 11:21

Batch Analyst: Daniel, Kevin R

Batch Method: 353.2

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	WETSICCNO3 00010	WETSICINO3 00009		
ICV 600-124343/7		353.2		5 mL	5 mL		0.005 mL		
ICB 600-124343/8		353.2		5 mL	5 mL				
MB 600-124343/10		353.2		5 mL	5 mL				
LCS 600-124343/11		353.2		5 mL	5 mL	0.005 mL			
CCV 600-124343/19		353.2		5 mL	5 mL	0.005 mL			
CCB 600-124343/20		353.2		5 mL	5 mL				
CCV 600-124343/31		353.2		5 mL	5 mL	0.005 mL			
CCB 600-124343/32		353.2		5 mL	5 mL				
600-84503-B-1	San Juan-MW08-121920 13	353.2	T	5 mL	5 mL				
600-84503-B-3	San Juan-MW04-121920 13	353.2	T	5 mL	5 mL				
600-84503-B-4	San Juan-MW02-121920 13	353.2	T	5 mL	5 mL				
600-84503-B-5	San Juan-EquBlank04- 12192013	353.2	T	5 mL	5 mL				
600-84503-B-6 ^50	San Juan-MW06-121920 13	353.2	T	5 mL	5 mL				
600-84503-B-7 ^50	San Juan-MD03-121920 13	353.2	T	5 mL	5 mL				
CCV 600-124343/43		353.2		5 mL	5 mL	0.005 mL			
CCB 600-124343/44		353.2		5 mL	5 mL				
600-84503-B-2	San Juan-MW09-121920 13	353.2	T	5 mL	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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Batch Number: 124343

Batch Start Date: 01/03/14 11:21

Batch Analyst: Daniel, Kevin R

Batch Method: 353.2

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	WETSICCNO3 00010	WETSICINO3 00009		
600-84503-B-2 MS	San Juan-MW09-121920 13 MS	353.2	T	5 mL	5 mL	0.005 mL			
600-84503-B-2 MSD	San Juan-MW09-121920 13 MSD	353.2	T	5 mL	5 mL	0.005 mL			
CCV 600-124343/55		353.2		5 mL	5 mL	0.005 mL			
CCB 600-124343/56		353.2		5 mL	5 mL				
CCV 600-124343/96		353.2		5 mL	5 mL	0.005 mL			
CCB 600-124343/97		353.2		5 mL	5 mL				
600-84503-B-4 ^250	San Juan-MW02-121920 13	353.2	T	5 mL	5 mL				
600-84503-B-7 ^250	San Juan-MD03-121920 13	353.2	T	5 mL	5 mL				
CCV 600-124343/108		353.2		5 mL	5 mL	0.005 mL			
CCB 600-124343/109		353.2		5 mL	5 mL				
600-84503-B-6 ^250	San Juan-MW06-121920 13	353.2	T	5 mL	5 mL				
600-84503-B-6 MS ^250	San Juan-MW06-121920 13	353.2	T	5 mL	5 mL	0.005 mL			
600-84503-B-6 MSD ^250	San Juan-MW06-121920 13	353.2	T	5 mL	5 mL	0.005 mL			
CCV 600-124343/120		353.2		5 mL	5 mL	0.005 mL			
CCB 600-124343/121		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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.: _____

Batch Number: 124343

Batch Start Date: 01/03/14 11:21

Batch Analyst: Daniel, Kevin R

Batch 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 3 of 3

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Batch Number: 123582

Batch Start Date: 12/23/13 16:12

Batch Analyst: Watson, Don A

Batch Method: 300.0

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	CCV 00023	ICSMS 00031	ICV/LCS 00026	
ICV 600-123582/1		300.0		5 mL	5 mL			5 mL	
ICB 600-123582/2		300.0		5 mL	5 mL				
MB 600-123582/3		300.0		5 mL	5 mL				
LCS 600-123582/4		300.0		5 mL	5 mL			5 mL	
CCV 600-123582/13		300.0		5 mL	5 mL	5 mL			
CCB 600-123582/14		300.0		5 mL	5 mL				
600-84503-A-1	San Juan-MW08-121920 13	300.0	T	5 mL	5 mL				
600-84503-A-2	San Juan-MW09-121920 13	300.0	T	5 mL	5 mL				
600-84503-A-2 MS	San Juan-MW09-121920 13 MS	300.0	T	5 mL	5 mL		0.25 mL		
600-84503-A-2 MSD	San Juan-MW09-121920 13 MSD	300.0	T	5 mL	5 mL		0.25 mL		
600-84503-A-3	San Juan-MW04-121920 13	300.0	T	5 mL	5 mL				
600-84503-A-4	San Juan-MW02-121920 13	300.0	T	5 mL	5 mL				
600-84503-A-5	San Juan-EquBlank04- 12192013	300.0	T	5 mL	5 mL				
600-84503-A-6	San Juan-MW06-121920 13	300.0	T	5 mL	5 mL				
600-84503-A-7	San Juan-MD03-121920 13	300.0	T	5 mL	5 mL				
CCV 600-123582/25		300.0		5 mL	5 mL	5 mL			
CCB 600-123582/26		300.0		5 mL	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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.: _____

Batch Number: 123582

Batch Start Date: 12/23/13 16:12

Batch Analyst: Watson, Don A

Batch Method: 300.0

Batch End Date: _____

Batch Notes	

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.

300.0

Page 2 of 2

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.: _____

Batch Number: 124058 Batch Start Date: 12/24/13 10:15 Batch Analyst: Grimm, Brandon D

Batch Method: 300.0 Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	CCV 00023	ICV/LCS 00026		
ICV 600-124058/1		300.0		5 mL	5 mL		# mL		
ICB 600-124058/2		300.0		5 mL	5 mL				
MB 600-124058/3		300.0		5 mL	5 mL				
LCS 600-124058/4		300.0		5 mL	5 mL		# mL		
600-84503-A-2	San Juan-MW09-121920 13	300.0	T	5 mL	5 mL				
CCV 600-124058/13		300.0		5 mL	5 mL	# mL			
CCB 600-124058/14		300.0		5 mL	5 mL				

Batch Notes

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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.: 600-84503-1

SDG No.:

Batch Number: 124080

Batch Start Date: 01/02/14 06:48

Batch Analyst: Cemer, Sejfudin

Batch Method: SM 2320B

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	Initial pH	BuretStart1	BuretStop1	TitrantVolume1	BuretStart2
MB 600-124080/1		SM 2320B		100 mL	5.66 SU	0 mL	0 mL	0 mL	0 mL
LCS 600-124080/2		SM 2320B		5 mL	10.51 SU	0 mL	0 mL	0 mL	0 mL
600-84503-A-1	San Juan-MW08-121920 13	SM 2320B	T	50 mL	7.48 SU	0 mL	0 mL	0 mL	0 mL
600-84503-A-2	San Juan-MW09-121920 13	SM 2320B	T	50 mL	5.25 SU	0 mL	0 mL	0 mL	0 mL
600-84503-A-2 MS	San Juan-MW09-121920 13 MS	SM 2320B	T	50 mL	7.30 SU	0 mL	0 mL	0 mL	0 mL
600-84503-A-2 MSD	San Juan-MW09-121920 13 MSD	SM 2320B	T	50 mL	7.35 SU	0 mL	0 mL	0 mL	0 mL
600-84503-A-3	San Juan-MW04-121920 13	SM 2320B	T	50 mL	7.22 SU	0 mL	0 mL	0 mL	0 mL
600-84503-A-4	San Juan-MW02-121920 13	SM 2320B	T	50 mL	7.81 SU	0 mL	0 mL	0 mL	0 mL
600-84503-A-5	San Juan-EquBlank04-12192013	SM 2320B	T	50 mL	6.88 SU	0 mL	0 mL	0 mL	0 mL
600-84503-A-6	San Juan-MW06-121920 13	SM 2320B	T	50 mL	4.72 SU	0 mL	0 mL	0 mL	0 mL
600-84503-A-7	San Juan-MD03-121920 13	SM 2320B	T	50 mL	4.57 SU	0 mL	0 mL	0 mL	0 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStop2	TitrantVolume2	CalcMsg	carb	hydr	bCarb
MB 600-124080/1		SM 2320B		0.2 mL	0.2 mL	Case 1	0 mg/L	0 mg/L	1.86196 mg/L
LCS 600-124080/2		SM 2320B		5.2 mL	5.2 mL	Case 1	0 mg/L	0 mg/L	48.41096 mg/L
600-84503-A-1	San Juan-MW08-121920 13	SM 2320B	T	169.3 mL	169.3 mL	Case 1	0 mg/L	0 mg/L	1576.14914 mg/L
600-84503-A-2	San Juan-MW09-121920 13	SM 2320B	T	2.5 mL	2.5 mL	Case 1	0 mg/L	0 mg/L	23.2745 mg/L

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.: 600-84503-1

SDG No.:

Batch Number: 124080

Batch Start Date: 01/02/14 06:48

Batch Analyst: Cemer, Sejfudin

Batch Method: SM 2320B

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStop2	TitrantVolume2	CalcMsg	carb	hydr	bCarb
600-84503-A-2 MS	San Juan-MW09-121920 13 MS	SM 2320B	T	14.7 mL	14.7 mL	Case 1	0 mg/L	0 mg/L	136.85406 mg/L
600-84503-A-2 MSD	San Juan-MW09-121920 13 MSD	SM 2320B	T	14.8 mL	14.8 mL	Case 1	0 mg/L	0 mg/L	137.78504 mg/L
600-84503-A-3	San Juan-MW04-121920 13	SM 2320B	T	41.1 mL	41.1 mL	Case 1	0 mg/L	0 mg/L	382.63278 mg/L
600-84503-A-4	San Juan-MW02-121920 13	SM 2320B	T	10.9 mL	10.9 mL	Case 1	0 mg/L	0 mg/L	101.47682 mg/L
600-84503-A-5	San Juan-EquBlank04- 12192013	SM 2320B	T	1.5 mL	1.5 mL	Case 1	0 mg/L	0 mg/L	13.9647 mg/L
600-84503-A-6	San Juan-MW06-121920 13	SM 2320B	T	0.2 mL	0.2 mL	Case 1	0 mg/L	0 mg/L	1.86196 mg/L
600-84503-A-7	San Juan-MD03-121920 13	SM 2320B	T	0.1 mL	0.1 mL	Case 1	0 mg/L	0 mg/L	0.93098 mg/L

Lab Sample ID	Client Sample ID	Method Chain	Basis	pAlk	tAlk	FinalAmount	WETSNA2CO3 00017	WETSNA3CO3L 00020	
MB 600-124080/1		SM 2320B		0 mg/L	1.86196 mg/L	100 mL			
LCS 600-124080/2		SM 2320B		0 mg/L	48.41096 mg/L	100 mL		5 mL	
600-84503-A-1	San Juan-MW08-121920 13	SM 2320B	T	0 mg/L	1576.14914 mg/L	100 mL			
600-84503-A-2	San Juan-MW09-121920 13	SM 2320B	T	0 mg/L	23.2745 mg/L	100 mL			
600-84503-A-2 MS	San Juan-MW09-121920 13 MS	SM 2320B	T	0 mg/L	136.85406 mg/L	100 mL	5 mL		
600-84503-A-2 MSD	San Juan-MW09-121920 13 MSD	SM 2320B	T	0 mg/L	137.78504 mg/L	100 mL	5 mL		
600-84503-A-3	San Juan-MW04-121920 13	SM 2320B	T	0 mg/L	382.63278 mg/L	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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.:

Batch Number: 124080

Batch Start Date: 01/02/14 06:48

Batch Analyst: Cemer, Sejfudin

Batch Method: SM 2320B

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	pAlk	tAlk	FinalAmount	WETSNA2CO3 00017	WETSNACO3L 00020	
600-84503-A-4	San Juan-MW02-121920 13	SM 2320B	T	0 mg/L	101.47682 mg/L	100 mL			
600-84503-A-5	San Juan-EquBlank04-12192013	SM 2320B	T	0 mg/L	13.9647 mg/L	100 mL			
600-84503-A-6	San Juan-MW06-121920 13	SM 2320B	T	0 mg/L	1.86196 mg/L	100 mL			
600-84503-A-7	San Juan-MD03-121920 13	SM 2320B	T	0 mg/L	0.93098 mg/L	100 mL			

Batch Notes

Nominal Amount Used	100 mL
Normality of first Titrant	0.0186196 N

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.: 600-84503-1

SDG No.:

Batch Number: 123544

Batch Start Date: 12/23/13 14:41

Batch Analyst: Stephney, Amy Y

Batch Method: SM 2540C

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	Conductivity	InitialAmount	TareWeight	Weight1	Weight2	Weight3
MB 600-123544/49		SM 2540C			100 mL	130.5617 g	130.5622 g	130.5622 g	0 g
LCS 600-123544/50		SM 2540C			100 mL	104.1069 g	104.2947 g	104.2947 g	0 g
600-84503-A-1	San Juan-MW08-121920 13	SM 2540C	T	10260 umhos/cm	25 mL	130.4846 g	130.6480 g	130.6480 g	0 g
600-84503-A-2	San Juan-MW09-121920 13	SM 2540C	T	1967 umhos/cm	100 mL	130.8475 g	132.3788 g	132.3788 g	0 g
600-84503-A-3	San Juan-MW04-121920 13	SM 2540C	T	7830 umhos/cm	50 mL	128.6512 g	128.9180 g	128.9179 g	0 g
600-84503-A-4	San Juan-MW02-121920 13	SM 2540C	T	7550 umhos/cm	50 mL	131.5086 g	131.7813 g	131.7814 g	0 g
600-84503-A-5	San Juan-EquBlank04- 12192013	SM 2540C	T	1.21 umhos/cm	100 mL	127.4854 g	127.4898 g	127.4899 g	0 g
600-84503-A-6	San Juan-MW06-121920 13	SM 2540C	T	19930 umhos/cm	10 mL	104.8458 g	105.0090 g	105.0091 g	0 g
600-84503-A-7	San Juan-MD03-121920 13	SM 2540C	T	20020 umhos/cm	10 mL	131.8257 g	131.9935 g	131.9936 g	0 g

Lab Sample ID	Client Sample ID	Method Chain	Basis	WeightOne%Diff	Residue	Residue2	FinalAmount	TDSILCS 00069	
MB 600-123544/49		SM 2540C		PASS_D No Unit	0.00050 g	0.00050 g	100 mL		
LCS 600-123544/50		SM 2540C		PASS_D No Unit	0.18780 g	0.18780 g	100 mL	100 mL	
600-84503-A-1	San Juan-MW08-121920 13	SM 2540C	T	PASS_D No Unit	0.16340 g	0.16340 g	100 mL		
600-84503-A-2	San Juan-MW09-121920 13	SM 2540C	T	PASS_D No Unit	1.53130 g	1.53130 g	100 mL		
600-84503-A-3	San Juan-MW04-121920 13	SM 2540C	T	PASS_D No Unit	0.26680 g	0.26670 g	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 2

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Houston

Job No.: 600-84503-1

SDG No.: _____

Batch Number: 123544 Batch Start Date: 12/23/13 14:41 Batch Analyst: Stephney, Amy Y

Batch Method: SM 2540C Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	WeightOne%Diff	Residue	Residue2	FinalAmount	TDSILCS	00069	
600-84503-A-4	San Juan-MW02-12192013	SM 2540C	T	PASS_D No Unit	0.27270 g	0.27280 g	100 mL			
600-84503-A-5	San Juan-EquBlank04-12192013	SM 2540C	T	PASS_D No Unit	0.00440 g	0.00450 g	100 mL			
600-84503-A-6	San Juan-MW06-12192013	SM 2540C	T	PASS_D No Unit	0.16320 g	0.16330 g	100 mL			
600-84503-A-7	San Juan-MD03-12192013	SM 2540C	T	PASS_D No Unit	0.16780 g	0.16790 g	100 mL			

Batch Notes

Nominal Amount Used | 100 mL

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

Login Sample Receipt Checklist

Client: CH2M Hill Constructors, Inc.

Job Number: 600-84503-1

Login Number: 84503**List Source: TestAmerica Houston****List Number: 1****Creator: Lopez, Sandro R**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	False	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.2/2.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.