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2012 AGWMR

04 / 10 / 2013



COMPLIANCE / ENGINEERING / REMEDIATION

LT Environmental Inc.

Environmental
Engineering
Remediation

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2013 APR 12 P 1:21

April 10, 2013

New Mexico Oil Conservation Division
Attn: Glenn von Goten
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: 2012 Annual Groundwater Reports
Williams Field Services, LLC
PO Box 3483, MD 48-6
Tulsa, Oklahoma 74101

Dear Mr. von Goten:

Please find attached to this letter the “2012 Annual Groundwater Reports” for the following four locations in the San Juan Basin for Williams Field Services, LLC:

- | | |
|------------------|--------|
| • Davis #1 | 3R-311 |
| • Dogie East Pit | 3R-312 |
| • Florance #40 | 3R-315 |
| • Florance #47X | 3R-317 |

If you have any questions or comments, please do not hesitate to contact us at (505) 326-2107 or (970) 385-1096.

Sincerely,

LT ENVIRONMENTAL, INC.

Kyla Vaughan
Environmental Compliance Specialist

cc: Williams Field Services, LLC

2012 ANNUAL GROUNDWATER REPORT

DAVIS #1
ADMINISTRATIVE/ENVIRONMENTAL ORDER NUMBER
3RP-311-0

APRIL 2013

Prepared for:

**WILLIAMS FIELD SERVICES, LLC
TULSA, OKLAHOMA**



2012 ANNUAL GROUNDWATER REPORT

**DAVIS #1
ADMINISTRATIVE/ENVIRONMENTAL ORDER NUMBER
3RP-311-0**

APRIL 2013

Prepared for:

**WILLIAMS FIELD SERVICES, LLC
PO Box 3483, MD 48-6
Tulsa, Oklahoma 74101**

Prepared by:

**LT ENVIRONMENTAL, INC.
2243 Main Avenue, Suite 3
Durango, Colorado 81301
(970) 385-1096**



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EXECUTIVE SUMMARY

Groundwater at the Davis #1 (Administrative/Environmental Order Number 3RP-311-0) natural gas production well (Site) is impacted by petroleum hydrocarbons in excess of the New Mexico Water Quality Control Commission (NMWQCC) groundwater standards for benzene, toluene, ethylbenzene, and total xylenes (BTEX) due to a release from a former dehydrator pit. Williams Field Services, LLC (Williams) conducted groundwater monitoring activities at the Site between April 2012 and December 2012. In January 2013, LT Environmental Inc., (LTE) was retained by Williams to visit the Site and evaluate the status of all groundwater monitoring wells, complete annual sampling requirements, and recommend improvements to the groundwater remediation program.

Between April 2012 and February 2013, five groundwater monitoring events were conducted (April 2012, June 2012, October 2012, December 2012, and February 2013). Depth to groundwater and depth to free-phase hydrocarbon data for the monitoring events conducted in 2012 were not available. Depth to groundwater data from February 2013 indicate the groundwater flow is to the west/northwest. Groundwater monitoring well MW-3 was not sampled between April 2012 and February 2013; it was observed to have been destroyed during the February 2013 site visit. Groundwater monitoring well MW-3 was located cross-gradient from the source area Williams is responsible for; free-phase hydrocarbons had previously been observed in MW-3 between September 1999 and some time prior to March 2010. Groundwater monitoring well MW-5 was not sampled in April 2012, June 2012, or October 2012; however, the monitoring well contained BTEX in excess of the NMWQCC standards in December 2012. In February 2013, groundwater monitoring well MW-5 was not sampled due to the presence of 2.25 feet of free-phase hydrocarbons. BTEX in the three downgradient groundwater monitoring wells MW-4, MW-6, and MW-7 and upgradient groundwater monitoring well MW-1 were compliant with the NMWQCC standards between April 2012 and February 2013. Groundwater monitoring well MW-2 was not sampled between April 2012 and February 2013; during the February 2013 monitoring event, MW-2 did not have sufficient water volume for sampling.

Williams proposes to cease collection of groundwater samples from groundwater monitoring wells MW-1 and MW-4 since these wells have either been compliant with NMWQCC standards for at least eight consecutive quarters or have demonstrated long-term results compliant with NMWQCC standards; Williams will cease monitoring MW-3 since it has been destroyed and is located cross-gradient of the Williams source area. Williams intends to plug and abandon groundwater monitoring well MW-2 and replace it with MW-2R and consider installation of an additional groundwater monitoring well to the south of the source area once groundwater flow direction is confirmed. Williams will continue to collect groundwater samples from MW-2R, MW-5, MW-6, and MW-7, when possible, in addition to recovering free-phase hydrocarbons from MW-5.

1.0 INTRODUCTION

LT Environmental, Inc. (LTE) on behalf of Williams Field Services, LLC (Williams) has prepared this report detailing groundwater monitoring activities completed from April 2012 through February 2013 at the Davis #1 (Administrative/Environmental Order Number 3RP-311-0) natural gas well (Site) (Figure 1). The scope of work for this project was continued monitoring of petroleum hydrocarbon impacts to groundwater as a result of operations of a former earthen dehydrator pit. From April 2012 through December 2012, Williams conducted groundwater sampling and product recovery. In February 2013, LTE visited the Site to evaluate the status of all groundwater monitoring wells, complete annual sampling requirements, and recommend improvements to the groundwater remediation program.

1.1 LOCATION

The Site is located at latitude 36.915721 and longitude -108.070642 in Unit E, Section 11, Township 31 North, Range 12 West. The Site is in the Farmington Glade area of the San Juan Basin in San Juan County, New Mexico.

1.2 HISTORY

The source of impacted groundwater is a former earthen dehydrator pit. Williams removed 192 cubic yards of impacted soil in May 1998. It appears residual hydrocarbon impacted soil was left in place at the Site at a depth of 16 feet below ground surface (bgs); a soil sample from the bottom of the excavation at 16 feet bgs contained 61.8 milligrams per kilogram (mg/kg) toluene, ethylbenzene, and total xylenes and 59 mg/kg diesel range organics (DRO). Soil boring data indicate the impacted soil extends to approximately 55 feet bgs. Between February 1999 and August 1999, monitoring wells MW-1 through MW-7 were installed. Groundwater monitoring well MW-2 was installed in the source area (Figure 2).

Between September 1999 and December 2012, Williams monitored groundwater at the Site. Groundwater monitoring wells MW-2, MW-3, and MW-5 have all contained free-phase hydrocarbons at some time between September 1999 and December 2012, and free-phase hydrocarbons were recovered from groundwater monitoring well MW-2 between 2008 and 2012. Records regarding these activities can be found in previous groundwater reports submitted to the New Mexico Oil Conservation Division (NMOCD).

In February 2013, a site visit was conducted by LTE to observe site conditions and evaluate the status of all groundwater monitoring wells. Depth to groundwater and depth to product were measured and groundwater samples were collected, when possible, for laboratory analysis of benzene, toluene, ethylbenzene, and total xylene (BTEX).

2.0 METHODOLOGY

The April 2012 through December 2012 monitoring events were conducted by a third-party consultant and the methodology used is not known. Water level measurements were not available for the April 2012 through December 2012 monitoring events. Table 1 provides a cross reference

to match the sample identifier with the appropriate groundwater monitoring well for the January 2012 through December 2012 monitoring events. The first quarter 2013 monitoring event was conducted by LTE; the methodology used by LTE is discussed in this below.

2.1 WATER AND PRODUCT LEVEL MEASUREMENTS

Groundwater level monitoring included recording depth to groundwater measurements with a Keck oil/water interface probe. The presence of any free-phase petroleum hydrocarbons was investigated using the interface probe. The interface probe was decontaminated with Alconox™ soap and rinsed with de-ionized water prior to each measurement. These data are summarized in Table 2.

2.2 GROUNDWATER SAMPLING

Prior to sampling groundwater, depth to groundwater and total depth of monitoring wells were measured with a Keck oil/water interface probe. Groundwater monitoring wells containing measurable free-phase petroleum hydrocarbons were not sampled. The volume of water in each monitoring well was calculated, and a minimum of three well casing volumes of water was purged from each well using a new disposable polyvinyl chloride (PVC) bailer. As water was removed from the monitoring well, pH, electric conductivity, and temperature were monitored. Monitoring wells were purged until these properties stabilized, indicating the purge water was representative of aquifer conditions, or until the well was purged dry. Stabilization was defined as three consecutive stable readings for each water property (± 0.4 units for pH, ± 10 percent for electric conductivity and $\pm 2^{\circ}\text{C}$ for temperature). All purge water was containerized and disposed of at a facility designated by Williams. A copy of the laboratory reports are presented in Appendix A and copies of the field sheets are presented in Appendix B.

Once each monitoring well was properly purged, groundwater samples were collected by filling three 40-milliliter (ml) glass vials. The laboratory-supplied vials were filled and capped with no air inside to prevent degradation of the sample. Samples were labeled with the date and time of collection, monitoring well designation, project name, collector's name, and parameters to be analyzed. They were immediately sealed and packed on ice. The samples were transferred to Hall Environmental Analysis Laboratory (HEAL) for analysis. Samples were stored on ice in a sealed cooler and maintained under chain-of-custody (COC) procedures. COC forms were completed documenting the date and time sampled, sample number, type of sample, sampler's name, preservative used (if any), analyses required, and sampler's signature.

Tubing was discovered in groundwater monitoring well MW-5; it was removed and discarded.

2.3 GROUNDWATER CONTOUR MAPS

LTE used existing top of casing well elevations and groundwater elevations obtained from monitoring wells during the February 2013 site visit to draft a groundwater contour map (Figure 2). Contours were inferred based on groundwater elevations obtained and observations of physical characteristics at the Site (topography, proximity to irrigation ditches, etc.).

3.0 RESULTS

Depth to groundwater data during the February 2013 monitoring event is summarized on Table 2. Groundwater flow direction was determined to be to the west/northwest (Figure 2).

Concentrations of BTEX in groundwater monitoring wells MW-1, MW-4, MW-6, and MW-7 were below their respective laboratory-reported detection limits and were compliant with the NMWQCC groundwater standards during all sampling events. Monitoring well MW-2 was not sampled during 2012 and was not sampled in February 2013 due to insufficient groundwater in the well. The surface completion of MW-2 is deformed, making it impossible to secure with a padlock. Groundwater monitoring well MW-3 has been destroyed and cannot be sampled. In December 2012, groundwater from monitoring well MW-5 contained BTEX exceeding the NMWQCC groundwater standards. Groundwater monitoring well MW-5 was not sampled in February 2013 due to the presence of 2.25 feet of free-phase hydrocarbons in the well. The polyvinyl chloride casing of monitoring well MW-5 was loose within the metal surface completion. Table 3 summarizes the groundwater analytical results and copies of the laboratory reports can be found in Appendix A.

4.0 CONCLUSIONS

Impacts to groundwater in the source area at monitoring well MW-2 are currently unknown due to insufficient water in the monitoring well. Elevated concentrations of BTEX and the presence of free-phase hydrocarbons persist in groundwater monitoring well MW-5, downgradient of the source area. BTEX in the three downgradient groundwater monitoring wells (MW-4, MW-6, and MW-7) and the upgradient groundwater monitoring well (MW-1) remain compliant with NMWQCC standards. Groundwater monitoring well MW-3 has been destroyed. Due to the presence of free-phase hydrocarbons in the past, its location cross gradient from the Williams' source area (MW-2) and downgradient from the producer's condensate tank(s); it is likely any impacts to groundwater in groundwater monitoring well MW-3 are not the responsibility of Williams. Williams does not intend to replace groundwater monitoring well MW-3 nor does Williams intend to continue groundwater monitoring in the area of MW-3.

5.0 RECOMMENDATIONS

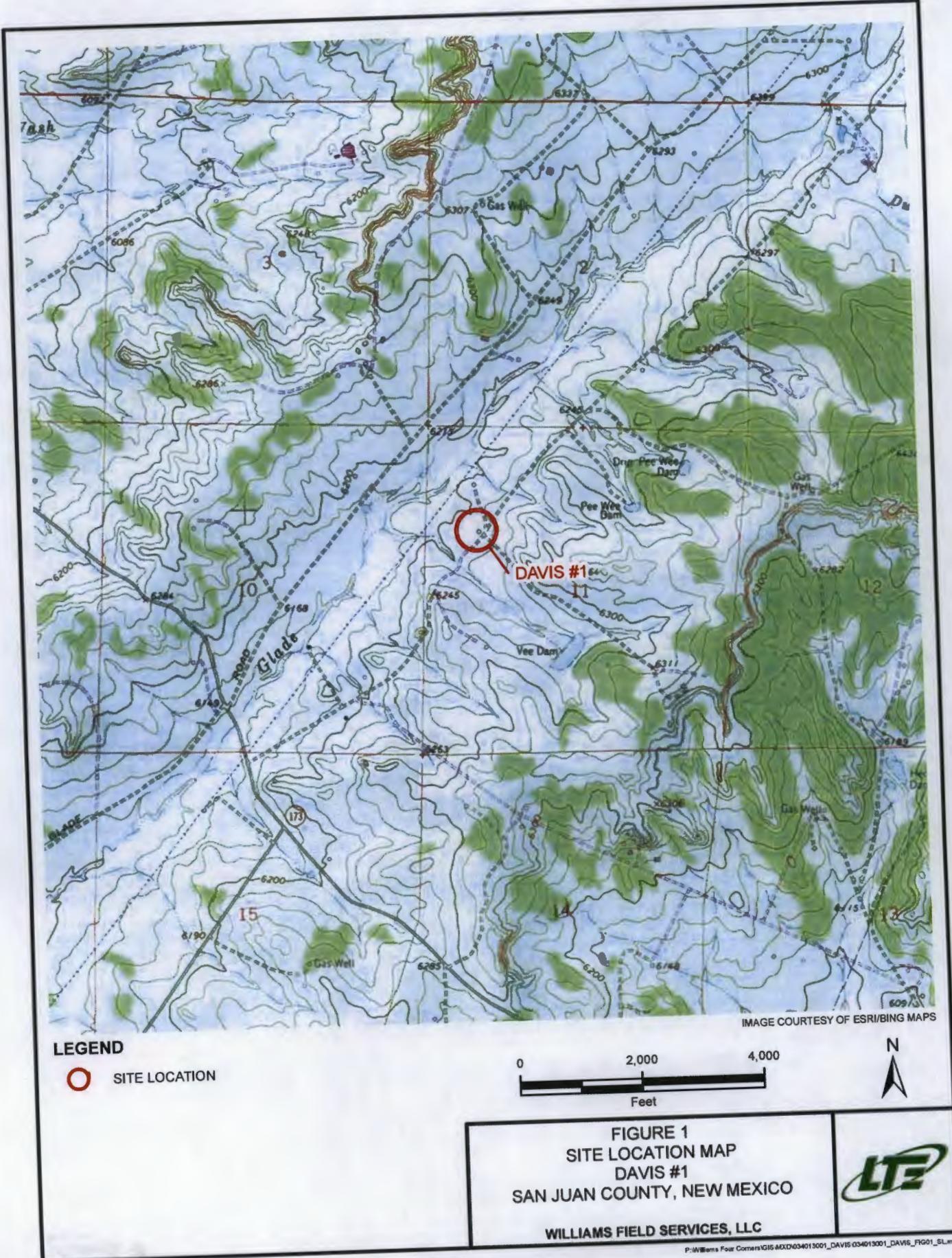
Since analytical results for groundwater samples from MW-1 and MW-4 have been compliant with NMWQCC standards for at least eight consecutive quarters, or have demonstrated long-term results compliant with NMWQCC standards, Williams will cease collection of groundwater quality samples for BTEX analysis from MW-1 and MW-4, and Williams will cease monitoring of MW-3 since it has been destroyed and it is located cross gradient of the Williams source area. Williams will repair the loose casing in MW-5.

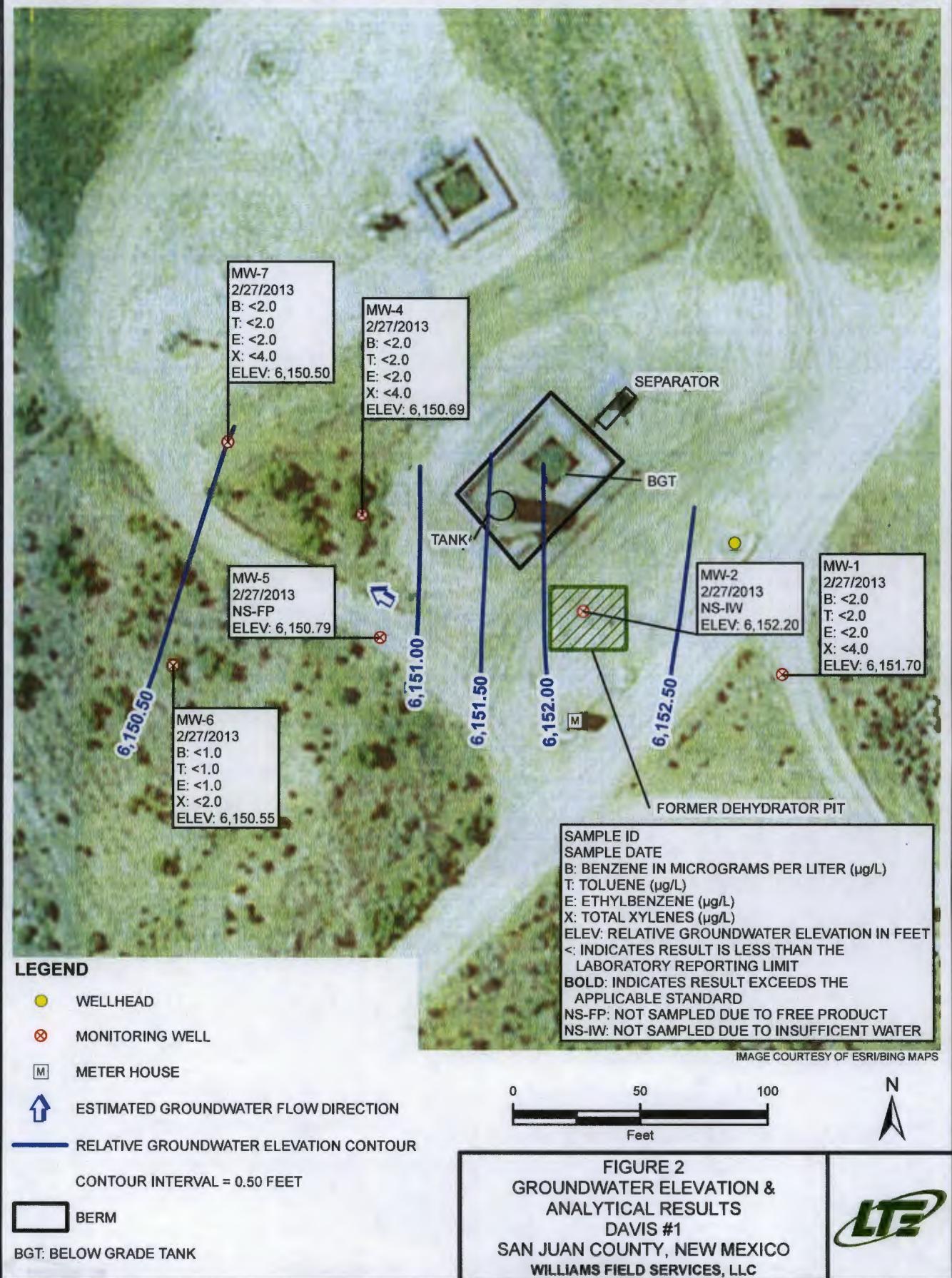
Williams will monitor groundwater elevation in all existing monitoring wells quarterly. Since the source area is not defined, Williams intends to plug and abandon MW-2 and replace it with MW-2R and consider installation of an additional groundwater monitoring well to the south once groundwater flow direction is confirmed. Williams will continue to monitor groundwater quality in MW-2R, MW-5, MW-6, and MW-7 quarterly in addition to recovering free-phase

hydrocarbon in MW-5 as necessary. Any new groundwater monitoring wells will be integrated into the groundwater monitoring program.

FIGURES







TABLES



TABLE 1

**CROSS REFERENCE WELL NAME AND SAMPLE IDENTIFIER
APRIL 2012 THROUGH DECEMBER 2012 SAMPLE DATES
DAVIS #1
WILLIAMS FIELD SERVICES, LLC**

Sample Identifier	Well Name	Sample Date
145104APR12	MW-1	4/4/2012
191613JUN12	MW-1	6/13/2012
164002OCT12	MW-1	10/2/2012
111513DEC12	MW-1	12/13/2012
150704APR12	MW-4	4/4/2012
192413JUN12	MW-4	6/13/2012
164702OCT12	MW-4	10/2/2012
112513DEC12	MW-4	12/13/2012
120913DEC12	MW-5	12/13/2012
153704APR12	MW-6	4/4/2012
193913JUN12	MW-6	6/13/2012
170202OCT12	MW-6	10/2/2012
114113DEC12	MW-6	12/13/2012
152404APR12	MW-7	4/4/2012
193113JUN12	MW-7	6/13/2012
165402OCT12	MW-7	10/2/2012
113213DEC12	MW-7	12/13/2012

Note:

Samples summarized in this table were not collected by LTE



TABLE 2
GROUNDWATER ELEVATION SUMMARY
DAVIS #1
WILLIAMS FIELD SERVICES, LLC

Well ID	Date	Depth to Product (feet BTOC)	Product Thickness (feet)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet AMSL)
MW-1	4/4/2012	UNK	UNK	UNK	UNK
MW-1	6/13/2012	UNK	UNK	UNK	UNK
MW-1	10/2/2012	UNK	UNK	UNK	UNK
MW-1	12/13/2012	UNK	UNK	UNK	UNK
MW-1	2/27/2013	NP	NP	65.44	6151.70
MW-2	4/4/2012	UNK	UNK	UNK	UNK
MW-2	6/13/2012	UNK	UNK	UNK	UNK
MW-2	10/2/2012	UNK	UNK	UNK	UNK
MW-2	12/13/2012	UNK	UNK	UNK	UNK
MW-2	2/27/2013	NP	NP	63.35	6152.20
MW-3	4/4/2012	UNK	UNK	UNK	UNK
MW-3	6/13/2012	UNK	UNK	UNK	UNK
MW-3	10/2/2012	UNK	UNK	UNK	UNK
MW-3	12/13/2012	UNK	UNK	UNK	UNK
MW-3	2/27/2013	DEST	DEST	DEST	DEST
MW-4	4/4/2012	UNK	UNK	UNK	UNK
MW-4	6/13/2012	UNK	UNK	UNK	UNK
MW-4	10/2/2012	UNK	UNK	UNK	UNK
MW-4	12/13/2012	UNK	UNK	UNK	UNK
MW-4	2/27/2013	NP	NP	59.87	6150.69
MW-5	4/4/2012	UNK	UNK	UNK	UNK
MW-5	6/13/2012	UNK	UNK	UNK	UNK
MW-5	10/2/2012	UNK	UNK	UNK	UNK
MW-5	12/13/2012	UNK	UNK	UNK	UNK
MW-5 *	2/27/2013	60.94	2.25	63.19	6150.79

TABLE 2
GROUNDWATER ELEVATION SUMMARY
DAVIS #1
WILLIAMS FIELD SERVICES, LLC

Well ID	Date	Depth to Product (feet BTOC)	Product Thickness (feet)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet AMSL)
MW-6	4/4/2012	UNK	UNK	UNK	UNK
MW-6	6/13/2012	UNK	UNK	UNK	UNK
MW-6	10/2/2012	UNK	UNK	UNK	UNK
MW-6	12/13/2012	UNK	UNK	UNK	UNK
MW-6	2/27/2013	NP	NP	60.68	6150.55
<hr/>					
MW-7	4/4/2012	UNK	UNK	UNK	UNK
MW-7	6/13/2012	UNK	UNK	UNK	UNK
MW-7	10/2/2012	UNK	UNK	UNK	UNK
MW-7	12/13/2012	UNK	UNK	UNK	UNK
MW-7	2/27/2013	NP	NP	58.68	6150.50

Notes:

BTOC - Below Top of Casing

AMSL - Above Mean Sea Level

DEST - well has been destroyed

NP - No Product

UNK - data is not known

Groundwater elevation calculation in wells with product: (Top of Casing Elevation - Depth to Water) + (Product Thickness * 0.8)

* - tubing was present in the well; this is not a static water level

TABLE 3
GROUNDWATER LABORATORY ANALYTICAL RESULTS
DAVIS #1
WILLIAMS FIELD SERVICES, LLC

Well Name	Sample Date	Benzene ($\mu\text{g}/\text{L}$)	Toluene ($\mu\text{g}/\text{L}$)	Ethylbenzene ($\mu\text{g}/\text{L}$)	Total Xylenes ($\mu\text{g}/\text{L}$)
NMWQCC Standard ($\mu\text{g}/\text{L}$)		10	750	750	620
MW-1	4/4/2012	<1.0	<1.0	<1.0	<3.0
MW-1	6/13/2012	<1.0	<1.0	<1.0	<3.0
MW-1	10/2/2012	<1.0	<1.0	<1.0	<3.0
MW-1	12/13/2012	<1.0	<1.0	<1.0	<3.0
MW-1	2/27/2013	<2.0	<2.0	<2.0	<4.0
MW-2	4/4/2012	NS	NS	NS	NS
MW-2	6/13/2012	NS	NS	NS	NS
MW-2	10/2/2012	NS	NS	NS	NS
MW-2	12/13/2012	NS	NS	NS	NS
MW-2	2/27/2013	NSD	NSD	NSD	NSD
MW-3	4/4/2012	NS	NS	NS	NS
MW-3	6/13/2012	NS	NS	NS	NS
MW-3	10/2/2012	NS	NS	NS	NS
MW-3	12/13/2012	NS	NS	NS	NS
MW-3	2/27/2013	DEST	DEST	DEST	DEST
MW-4	4/4/2012	<1.0	<1.0	<1.0	<3.0
MW-4	6/13/2012	<1.0	<1.0	<1.0	<3.0
MW-4	10/2/2012	<1.0	<1.0	<1.0	<3.0
MW-4	12/13/2012	<1.0	<1.0	<1.0	<3.0
MW-4	2/27/2013	<2.0	<2.0	<2.0	<4.0
MW-5	4/4/2012	NS	NS	NS	NS
MW-5	6/13/2012	NS	NS	NS	NS
MW-5	10/2/2012	NS	NS	NS	NS
MW-5	12/13/2012	11,800	1,270	7,620	8,910
MW-5	2/27/2013	NSP	NSP	NSP	NSP
MW-6	4/4/2012	<1.0	<1.0	<1.0	<3.0
MW-6	6/13/2012	<1.0	<1.0	<1.0	<3.0
MW-6	10/2/2012	<1.0	<1.0	<1.0	<3.0
MW-6	12/13/2012	<1.0	<1.0	<1.0	<3.0
MW-6	2/27/2013	<1.0	<1.0	<1.0	<2.0

TABLE 3
GROUNDWATER LABORATORY ANALYTICAL RESULTS
DAVIS #1
WILLIAMS FIELD SERVICES, LLC

Well Name	Sample Date	Benzene ($\mu\text{g}/\text{L}$)	Toluene ($\mu\text{g}/\text{L}$)	Ethylbenzene ($\mu\text{g}/\text{L}$)	Total Xylenes ($\mu\text{g}/\text{L}$)
NMWQCC Standard ($\mu\text{g}/\text{L}$)		10	750	750	620

MW-7	4/4/2012	<1.0	<1.0	<1.0	<3.0
MW-7	6/13/2012	<1.0	<1.0	<1.0	<3.0
MW-7	10/2/2012	<1.0	<1.0	<1.0	<3.0
MW-7	12/13/2012	<1.0	<1.0	<1.0	<3.0
MW-7	2/27/2013	<2.0	<2.0	<2.0	<4.0

Notes:

NMWQCC - New Mexico Water Quality Control Commission

NS- not sampled

NSD - well did not contain sufficient volume of water to be sampled

NSP - not sampled due to the presence of free phase hydrocarbons in the well

DEST - well has been destroyed

$\mu\text{g}/\text{L}$ - micrograms per liter

< - indicates result is less than laboratory reporting detection limit

Bold - indicates sample exceeds NMWQCC standard

APPENDIX A
ANALYTICAL LABORATORY REPORTS





Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

April 17, 2012

Mr. Mark Harvey
Mile High Environmental
811 B West Apache
Farmington, NM 87401

RE: Project: NM GW
Pace Project No.: 60119146

Dear Mr. Harvey:

Enclosed are the analytical results for sample(s) received by the laboratory on April 10, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Heather M. Wilson".

Heather Wilson

heather.wilson@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

CERTIFICATIONS

Project: NM GW
Pace Project No.: 60119146

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219
A2LA Certification #: 2456.01
Arkansas Certification #: 05-008-0
Illinois Certification #: 001191
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407-08-TX
Utah Certification #: 9135995665

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: NM GW
 Pace Project No.: 60119146

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60119146001	164306APR12	Water	04/06/12 16:43	04/10/12 10:00
60119146002	165406APR12	Water	04/06/12 16:54	04/10/12 10:00
60119146003	170706APR12	Water	04/06/12 17:07	04/10/12 10:00
60119146004	171906APR12	Water	04/06/12 17:19	04/10/12 10:00
60119146005	173006APR12	Water	04/06/12 17:30	04/10/12 10:00
60119146006	145104APR12	Water	04/04/12 14:51	04/10/12 10:00
60119146007	150704APR12	Water	04/04/12 15:07	04/10/12 10:00
60119146008	152404APR12	Water	04/04/12 15:24	04/10/12 10:00
60119146009	153704APR12	Water	04/04/12 15:37	04/10/12 10:00
60119146010	132602APR12	Water	04/02/12 13:26	04/10/12 10:00
60119146011	135202APR12	Water	04/02/12 13:52	04/10/12 10:00
60119146012	133702APR12	Water	04/02/12 13:37	04/10/12 10:00

REPORT OF LABORATORY ANALYSIS

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9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE ANALYTE COUNT

Project: NM GW
Pace Project No.: 60119146

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60119146001	164306APR12	EPA 8260	RNS	9
60119146002	165406APR12	EPA 8260	RNS	9
60119146003	170706APR12	EPA 8260	JDM	9
60119146004	171906APR12	EPA 8260	RNS	9
60119146005	173006APR12	EPA 8260	RNS	9
60119146006	145104APR12	EPA 8260	RNS	9
60119146007	150704APR12	EPA 8260	RNS	9
60119146008	152404APR12	EPA 8260	RNS	9
60119146009	153704APR12	EPA 8260	RNS	9
60119146010	132602APR12	EPA 8260	RNS	9
60119146011	135202APR12	EPA 8260	JDM	9
60119146012	133702APR12	EPA 8260	RNS	9

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NM GW

Pace Project No.: 60119146

Sample: 164306APR12 Lab ID: 60119146001 Collected: 04/06/12 16:43 Received: 04/10/12 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1		04/12/12 16:36	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		04/12/12 16:36	100-41-4	
Toluene	ND ug/L		1.0	1		04/12/12 16:36	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		04/12/12 16:36	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	105 %		86-112	1		04/12/12 16:36	1868-53-7	
Toluene-d8 (S)	96 %		90-110	1		04/12/12 16:36	2037-26-5	
4-Bromofluorobenzene (S)	101 %		87-113	1		04/12/12 16:36	460-00-4	
1,2-Dichloroethane-d4 (S)	104 %		82-119	1		04/12/12 16:36	17060-07-0	
Preservation pH	1.0			1.0	1		04/12/12 16:36	



Pace Analytical Services, Inc.
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Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: NM GW
Pace Project No.: 60119146

Sample: 165406APR12 Lab ID: 60119146002 Collected: 04/06/12 16:54 Received: 04/10/12 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1		04/12/12 16:51	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		04/12/12 16:51	100-41-4	
Toluene	ND ug/L		1.0	1		04/12/12 16:51	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		04/12/12 16:51	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	103 %		86-112	1		04/12/12 16:51	1868-53-7	
Toluene-d8 (S)	96 %		90-110	1		04/12/12 16:51	2037-26-5	
4-Bromofluorobenzene (S)	100 %		87-113	1		04/12/12 16:51	460-00-4	
1,2-Dichloroethane-d4 (S)	104 %		82-119	1		04/12/12 16:51	17060-07-0	
Preservation pH	1.0			1.0	1			04/12/12 16:51



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ANALYTICAL RESULTS

Project: NM GW

Pace Project No.: 60119146

Sample: 170706APR12 Lab ID: 60119146003 Collected: 04/06/12 17:07 Received: 04/10/12 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	5.0	ug/L	1.0	1		04/13/12 21:33	71-43-2	
Ethylbenzene	98.3	ug/L	1.0	1		04/13/12 21:33	100-41-4	
Toluene	4.4	ug/L	1.0	1		04/13/12 21:33	108-88-3	
Xylene (Total)	255	ug/L	3.0	1		04/13/12 21:33	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	98 %		86-112	1		04/13/12 21:33	1868-53-7	
Toluene-d8 (S)	101 %		90-110	1		04/13/12 21:33	2037-26-5	
4-Bromofluorobenzene (S)	100 %		87-113	1		04/13/12 21:33	460-00-4	
1,2-Dichloroethane-d4 (S)	97 %		82-119	1		04/13/12 21:33	17060-07-0	
Preservation pH	1.0		1.0	1		04/13/12 21:33		



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ANALYTICAL RESULTS

Project: NM GW
Pace Project No.: 60119146

Sample: 171906APR12 Lab ID: 60119146004 Collected: 04/06/12 17:19 Received: 04/10/12 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	88.8 ug/L		1.0	1		04/12/12 17:21	71-43-2	
Ethylbenzene	3.7 ug/L		1.0	1		04/12/12 17:21	100-41-4	
Toluene	ND ug/L		1.0	1		04/12/12 17:21	108-88-3	
Xylene (Total)	4.4 ug/L		3.0	1		04/12/12 17:21	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	104 %		86-112	1		04/12/12 17:21	1868-53-7	
Toluene-d8 (S)	97 %		90-110	1		04/12/12 17:21	2037-26-5	
4-Bromofluorobenzene (S)	102 %		87-113	1		04/12/12 17:21	460-00-4	
1,2-Dichloroethane-d4 (S)	105 %		82-119	1		04/12/12 17:21	17060-07-0	
Preservation pH	1.0			1.0	1			04/12/12 17:21

ANALYTICAL RESULTS

Project: NM GW

Pace Project No.: 60119146

Sample: 173006APR12 Lab ID: 60119146005 Collected: 04/06/12 17:30 Received: 04/10/12 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		04/12/12 17:36	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		04/12/12 17:36	100-41-4	
Toluene	ND	ug/L	1.0	1		04/12/12 17:36	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		04/12/12 17:36	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	102 %		86-112	1		04/12/12 17:36	1868-53-7	
Toluene-d8 (S)	97 %		90-110	1		04/12/12 17:36	2037-26-5	
4-Bromofluorobenzene (S)	99 %		87-113	1		04/12/12 17:36	460-00-4	
1,2-Dichloroethane-d4 (S)	104 %		82-119	1		04/12/12 17:36	17060-07-0	
Preservation pH	1.0		1.0	1		04/12/12 17:36		



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ANALYTICAL RESULTS

Project: NM GW
Pace Project No.: 60119146

Sample: 145104APR12	Lab ID: 60119146006	Collected: 04/04/12 14:51	Received: 04/10/12 10:00	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1		04/12/12 17:51	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		04/12/12 17:51	100-41-4	
Toluene	ND ug/L		1.0	1		04/12/12 17:51	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		04/12/12 17:51	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	100 %		86-112	1		04/12/12 17:51	1868-53-7	
Toluene-d8 (S)	96 %		90-110	1		04/12/12 17:51	2037-26-5	
4-Bromofluorobenzene (S)	98 %		87-113	1		04/12/12 17:51	460-00-4	
1,2-Dichloroethane-d4 (S)	103 %		82-119	1		04/12/12 17:51	17060-07-0	
Preservation pH	1.0			1.0	1		04/12/12 17:51	

ANALYTICAL RESULTS

Project: NM GW

Pace Project No.: 60119146

Sample: 150704APR12 Lab ID: 60119146007 Collected: 04/04/12 15:07 Received: 04/10/12 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1		04/12/12 18:06	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		04/12/12 18:06	100-41-4	
Toluene	ND ug/L		1.0	1		04/12/12 18:06	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		04/12/12 18:06	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	103 %		86-112	1		04/12/12 18:06	1868-53-7	
Toluene-d8 (S)	97 %		90-110	1		04/12/12 18:06	2037-26-5	
4-Bromofluorobenzene (S)	98 %		87-113	1		04/12/12 18:06	460-00-4	
1,2-Dichloroethane-d4 (S)	108 %		82-119	1		04/12/12 18:06	17060-07-0	
Preservation pH	1.0			1.0	1			04/12/12 18:06



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ANALYTICAL RESULTS

Project: NM GW
Pace Project No.: 60119146

Sample: 152404APR12 Lab ID: 60119146008 Collected: 04/04/12 15:24 Received: 04/10/12 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1		04/12/12 18:21	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		04/12/12 18:21	100-41-4	
Toluene	ND ug/L		1.0	1		04/12/12 18:21	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		04/12/12 18:21	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	101 %		86-112	1		04/12/12 18:21	1868-53-7	
Toluene-d8 (S)	98 %		90-110	1		04/12/12 18:21	2037-26-5	
4-Bromofluorobenzene (S)	99 %		87-113	1		04/12/12 18:21	460-00-4	
1,2-Dichloroethane-d4 (S)	103 %		82-119	1		04/12/12 18:21	17060-07-0	
Preservation pH	1.0			1.0	1			04/12/12 18:21

ANALYTICAL RESULTS

Project: NM GW

Pace Project No.: 60119146

Sample: 153704APR12 Lab ID: 60119146009 Collected: 04/04/12 15:37 Received: 04/10/12 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		04/12/12 18:37	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		04/12/12 18:37	100-41-4	
Toluene	ND	ug/L	1.0	1		04/12/12 18:37	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		04/12/12 18:37	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	100 %		86-112	1		04/12/12 18:37	1868-53-7	
Toluene-d8 (S)	97 %		90-110	1		04/12/12 18:37	2037-26-5	
4-Bromofluorobenzene (S)	101 %		87-113	1		04/12/12 18:37	460-00-4	
1,2-Dichloroethane-d4 (S)	104 %		82-119	1		04/12/12 18:37	17060-07-0	
Preservation pH	1.0			1.0	1	04/12/12 18:37		



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ANALYTICAL RESULTS

Project: NM GW
Pace Project No.: 60119146

Sample: 132602APR12 Lab ID: 60119146010 Collected: 04/02/12 13:26 Received: 04/10/12 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1		04/12/12 18:52	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		04/12/12 18:52	100-41-4	
Toluene	ND ug/L		1.0	1		04/12/12 18:52	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		04/12/12 18:52	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	103 %		86-112	1		04/12/12 18:52	1868-53-7	
Toluene-d8 (S)	96 %		90-110	1		04/12/12 18:52	2037-26-5	
4-Bromofluorobenzene (S)	103 %		87-113	1		04/12/12 18:52	460-00-4	
1,2-Dichloroethane-d4 (S)	106 %		82-119	1		04/12/12 18:52	17060-07-0	
Preservation pH	2.0			1.0	1			04/12/12 18:52

ANALYTICAL RESULTS

Project: NM GW

Pace Project No.: 60119146

Sample: 135202APR12 Lab ID: 60119146011 Collected: 04/02/12 13:52 Received: 04/10/12 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1		04/13/12 21:49	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		04/13/12 21:49	100-41-4	
Toluene	ND ug/L		1.0	1		04/13/12 21:49	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		04/13/12 21:49	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	100 %		86-112	1		04/13/12 21:49	1868-53-7	
Toluene-d8 (S)	112 %		90-110	1		04/13/12 21:49	2037-26-5	P2,S0
4-Bromofluorobenzene (S)	105 %		87-113	1		04/13/12 21:49	460-00-4	
1,2-Dichloroethane-d4 (S)	102 %		82-119	1		04/13/12 21:49	17060-07-0	
Preservation pH	1.0			1.0	1	04/13/12 21:49		



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ANALYTICAL RESULTS

Project: NM GW
Pace Project No.: 60119146

Sample: 133702APR12	Lab ID: 60119146012	Collected: 04/02/12 13:37	Received: 04/10/12 10:00	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	86.7 ug/L		20.0	20		04/12/12 19:22	71-43-2	
Ethylbenzene	799 ug/L		20.0	20		04/12/12 19:22	100-41-4	
Toluene	28.0 ug/L		20.0	20		04/12/12 19:22	108-88-3	
Xylene (Total)	4240 ug/L		60.0	20		04/12/12 19:22	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	98 %		86-112	20		04/12/12 19:22	1868-53-7	
Toluene-d8 (S)	103 %		90-110	20		04/12/12 19:22	2037-26-5	
4-Bromofluorobenzene (S)	103 %		87-113	20		04/12/12 19:22	460-00-4	
1,2-Dichloroethane-d4 (S)	103 %		82-119	20		04/12/12 19:22	17060-07-0	
Preservation pH	1.0		1.0	20		04/12/12 19:22		

QUALITY CONTROL DATA

Project: NM GW

Pace Project No.: 60119146

QC Batch: MSV/44894

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV UST-WATER

Associated Lab Samples: 60119146001, 60119146002, 60119146004, 60119146005, 60119146006, 60119146007, 60119146008,
 60119146009, 60119146010, 60119146012

METHOD BLANK: 980837

Matrix: Water

Associated Lab Samples: 60119146001, 60119146002, 60119146004, 60119146005, 60119146006, 60119146007, 60119146008,
 60119146009, 60119146010, 60119146012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	04/12/12 15:35	
Ethylbenzene	ug/L	ND	1.0	04/12/12 15:35	
Toluene	ug/L	ND	1.0	04/12/12 15:35	
Xylene (Total)	ug/L	ND	3.0	04/12/12 15:35	
1,2-Dichloroethane-d4 (S)	%	100	82-119	04/12/12 15:35	
4-Bromofluorobenzene (S)	%	100	87-113	04/12/12 15:35	
Dibromofluoromethane (S)	%	97	86-112	04/12/12 15:35	
Toluene-d8 (S)	%	95	90-110	04/12/12 15:35	

LABORATORY CONTROL SAMPLE: 980838

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.7	98	82-117	
Ethylbenzene	ug/L	20	18.4	92	79-121	
Toluene	ug/L	20	23.5	118	80-120	
Xylene (Total)	ug/L	60	55.5	93	79-120	
1,2-Dichloroethane-d4 (S)	%			99	82-119	
4-Bromofluorobenzene (S)	%			101	87-113	
Dibromofluoromethane (S)	%			99	86-112	
Toluene-d8 (S)	%			95	90-110	



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QUALITY CONTROL DATA

Project: NM GW

Pace Project No.: 60119146

QC Batch: MSV/44932

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV UST-WATER

Associated Lab Samples: 60119146003, 60119146011

METHOD BLANK: 981755

Matrix: Water

Associated Lab Samples: 60119146003, 60119146011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	04/13/12 21:17	
Ethylbenzene	ug/L	ND	1.0	04/13/12 21:17	
Toluene	ug/L	ND	1.0	04/13/12 21:17	
Xylene (Total)	ug/L	ND	3.0	04/13/12 21:17	
1,2-Dichloroethane-d4 (S)	%	100	82-119	04/13/12 21:17	
4-Bromofluorobenzene (S)	%	100	87-113	04/13/12 21:17	
Dibromofluoromethane (S)	%	98	86-112	04/13/12 21:17	
Toluene-d8 (S)	%	100	90-110	04/13/12 21:17	

LABORATORY CONTROL SAMPLE: 981756

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.6	98	82-117	
Ethylbenzene	ug/L	20	20.4	102	79-121	
Toluene	ug/L	20	19.5	97	80-120	
Xylene (Total)	ug/L	60	60.4	101	79-120	
1,2-Dichloroethane-d4 (S)	%			98	82-119	
4-Bromofluorobenzene (S)	%			101	87-113	
Dibromofluoromethane (S)	%			100	86-112	
Toluene-d8 (S)	%			101	90-110	

QUALIFIERS

Project: NM GW

Pace Project No.: 60119146

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: MSV/44894

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/44932

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

P2 Re-extraction or re-analysis could not be performed due to insufficient sample amount.

S0 Surrogate recovery outside laboratory control limits.



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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NM GW
Pace Project No.: 60119146

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60119146001	164306APR12	EPA 8260	MSV/44894		
60119146002	165406APR12	EPA 8260	MSV/44894		
60119146003	170706APR12	EPA 8260	MSV/44932		
60119146004	171906APR12	EPA 8260	MSV/44894		
60119146005	173006APR12	EPA 8260	MSV/44894		
60119146006	145104APR12	EPA 8260	MSV/44894		
60119146007	150704APR12	EPA 8260	MSV/44894		
60119146008	152404APR12	EPA 8260	MSV/44894		
60119146009	153704APR12	EPA 8260	MSV/44894		
60119146010	132602APR12	EPA 8260	MSV/44894		
60119146011	135202APR12	EPA 8260	MSV/44932		
60119146012	133702APR12	EPA 8260	MSV/44894		



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:	
Company: MILE HIGH SERVICES Address: 811 B, WEST APACHE FARMINGTON, NM Email To: mark@mhenviro.com Phone: (505)326-5422 Fax: Requested Due Date/TAT: 		Report To: MARK HARVEY Copy To: Purchase Order No.: Project Name: NM GW Project Number: D0GE + DVS + FLR 40 SAMPLE ID <small>(A-Z, 0-9, -)</small> Sample IDs MUST BE UNIQUE # 	
Section C Invoice Information:			
Attention: MARK HARVEY Company Name: Address: Pace Quote Reference: Pace Project Manager: Pace Profile #: 60119146		REGULATORY AGENCY <input type="checkbox"/> NPDES <input checked="" type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER	
		Site Location: NM STATE: NM	
		Residual Chlorine (Y/N)	
		Requested Analysis Filtered (Y/N)	
		Analysis Test Y/N	
		Preservatives	
		SAMPLE TEMP AT COLLECTION	
		# OF CONTAINERS	
		UNPRESERVED	
		H ₂ SO ₄	
		NaOH	
		HCl	
		Na ₂ S ₂ O ₃	
		Methanol	
		Other	
		2 PGS4	
		Pace Project No./Lab I.D.	
		D0GE-2	
		D0GE-SUE4	
		D0GE-3	
		D0GE-7	
		D0GE-9	
		DVS-1	
		DVS-4	
		DVS-7	
		DVS-9	
		FRS-6	
		FRS40-7	
		FRS40-2	
		FRS40-6	
		SAMPLE CONDITIONS	
		ACCEPTED BY / AFFILIATION	
		DATE TIME	
		SAMPLE CONDITIONS	
		ORIGINAL	
		SAMPLER NAME AND SIGNATURE	
		PRINT Name of SAMPLER: M. HARVEY	
		SIGNATURE of SAMPLER: mark.j.harvey	
		DATE Signed (MM/DD/YY): 4-9-12	
		Samples intact (Y/N)	
		Received on C	
		Temp in °C	
		Cusotm Order (Y/N)	
		Page: 1 of 1	

F-ALL-Q-020rev.07, 15-May-2007

F-ALL-Q-020rev.07, 15-May-2007

***Important Note:** By signing this form you are accepting Pace's NET[®] 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.



Sample Condition Upon Receipt

Client Name: mileHighProject # Co0119146

Courier: FedEx UPS USPS Client Commercial Pace Other
 Tracking #: 800110205172 Pace Shipping Label Used? Yes No

Optional
Proj. Due Date: <u>4/17/12</u>
Proj. Name:

Custody Seal on Cooler/Box Present: Yes No Seals intact: Yes NoPacking Material: Bubble Wrap Bubble Bags Foam None OtherThermometer Used: T-191 / T-194Type of Ice: Wet Blue None Samples on ice, cooling process has begunCooler Temperature: 4.0

Temperature should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: 4/17/12

Chain of Custody present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8. Did not received 145002 APR12
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9. but received 133702 APR12 not on chain 4/2/12 1337
-Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
-Includes date/time/ID/analyses Matrix:	<u>ENT</u>	
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	14.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Exceptions <u>VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed _____ Lot # of added preservative _____
Trip Blank present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
Pace Trip Blank lot # (if purchased):		
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	17. List State: <u>IN</u>

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: Emailed mark Harvey about mismatched folders 4/11/12
Per mark Harvey use bottle ID 4/11/12

Project Manager Review: AMWDate: 4/12/12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)



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June 22, 2012

Mr. Mark Harvey
Mile High Environmental
811 B West Apache
Farmington, NM 87401

RE: Project: NM GW DVS & ICE
Pace Project No.: 60123513

Dear Mr. Harvey:

Enclosed are the analytical results for sample(s) received by the laboratory on June 18, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Heather Wilson

heather.wilson@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: NM GW DVS & ICE
Pace Project No.: 60123513

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219
A2LA Certification #: 2456.01
Arkansas Certification #: 05-008-0
Illinois Certification #: 001191
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407-08-TX
Utah Certification #: 9135995665

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: NM GW DVS & ICE

Pace Project No.: 60123513

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60123513001	191613JUN12	Water	06/13/12 19:16	06/18/12 08:45
60123513002	192413JUN12	Water	06/13/12 19:24	06/18/12 08:45
60123513003	193113JUN12	Water	06/13/12 19:31	06/18/12 08:45
60123513004	193913JUN12	Water	06/13/12 19:39	06/18/12 08:45
60123513005	103314JUN12	Water	06/14/12 10:33	06/18/12 08:45
60123513006	104014JUN12	Water	06/14/12 10:40	06/18/12 08:45
60123513007	104814JUN12	Water	06/14/12 10:48	06/18/12 08:45
60123513008	105814JUN12	Water	06/14/12 10:58	06/18/12 08:45
60123513009	110414JUN12	Water	06/14/12 11:04	06/18/12 08:45
60123513010	111514JUN12	Water	06/14/12 11:15	06/18/12 08:45
60123513011	TRIP BLANK	Water	06/14/12 00:00	06/18/12 08:45
60123513012	EDD	Water	06/14/12 00:00	06/18/12 08:45

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: NM GW DVS & ICE
Pace Project No.: 60123513

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60123513001	191613JUN12	EPA 8260	JTK	9
60123513002	192413JUN12	EPA 8260	JTK	9
60123513003	193113JUN12	EPA 8260	JTK	9
60123513004	193913JUN12	EPA 8260	JTK	9
60123513005	103314JUN12	EPA 8260	JTK	9
60123513006	104014JUN12	EPA 8260	JTK	9
60123513007	104814JUN12	EPA 8260	JTK	9
60123513008	105814JUN12	EPA 8260	JTK	9
60123513009	110414JUN12	EPA 8260	JTK	9
60123513010	111514JUN12	EPA 8260	JTK	9
60123513011	TRIP BLANK	EPA 8260	JTK	9

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NM GW DVS & ICE

Pace Project No.: 60123513

Sample: 191613JUN12 Lab ID: 60123513001 Collected: 06/13/12 19:16 Received: 06/18/12 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		06/19/12 08:30	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		06/19/12 08:30	100-41-4	
Toluene	ND	ug/L	1.0	1		06/19/12 08:30	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		06/19/12 08:30	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	108 %		86-112	1		06/19/12 08:30	1868-53-7	
Toluene-d8 (S)	99 %		90-110	1		06/19/12 08:30	2037-26-5	
4-Bromofluorobenzene (S)	103 %		87-113	1		06/19/12 08:30	460-00-4	
1,2-Dichloroethane-d4 (S)	97 %		82-119	1		06/19/12 08:30	17060-07-0	
Preservation pH	1.0			1.0	1		06/19/12 08:30	



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ANALYTICAL RESULTS

Project: NM GW DVS & ICE

Pace Project No.: 60123513

Sample: 192413JUN12 Lab ID: 60123513002 Collected: 06/13/12 19:24 Received: 06/18/12 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1		06/19/12 08:47	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		06/19/12 08:47	100-41-4	
Toluene	ND ug/L		1.0	1		06/19/12 08:47	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		06/19/12 08:47	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	108 %		86-112	1		06/19/12 08:47	1868-53-7	
Toluene-d8 (S)	102 %		90-110	1		06/19/12 08:47	2037-26-5	
4-Bromofluorobenzene (S)	103 %		87-113	1		06/19/12 08:47	460-00-4	
1,2-Dichloroethane-d4 (S)	97 %		82-119	1		06/19/12 08:47	17060-07-0	
Preservation pH	1.0			1.0	1	06/19/12 08:47		

ANALYTICAL RESULTS

Project: NM GW DVS & ICE

Pace Project No.: 60123513

Sample: 193113JUN12 Lab ID: 60123513003 Collected: 06/13/12 19:31 Received: 06/18/12 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		06/19/12 09:04	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		06/19/12 09:04	100-41-4	
Toluene	ND	ug/L	1.0	1		06/19/12 09:04	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		06/19/12 09:04	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	100 %		86-112	1		06/19/12 09:04	1868-53-7	
Toluene-d8 (S)	98 %		90-110	1		06/19/12 09:04	2037-26-5	
4-Bromofluorobenzene (S)	102 %		87-113	1		06/19/12 09:04	460-00-4	
1,2-Dichloroethane-d4 (S)	97 %		82-119	1		06/19/12 09:04	17060-07-0	
Preservation pH	1.0			1.0	1			06/19/12 09:04



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ANALYTICAL RESULTS

Project: NM GW DVS & ICE

Pace Project No.: 60123513

Sample: 193913JUN12	Lab ID: 60123513004	Collected: 06/13/12 19:39	Received: 06/18/12 08:45	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water Analytical Method: EPA 8260								
Benzene	ND ug/L		1.0	1		06/19/12 09:21	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		06/19/12 09:21	100-41-4	
Toluene	ND ug/L		1.0	1		06/19/12 09:21	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		06/19/12 09:21	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	108 %		86-112	1		06/19/12 09:21	1868-53-7	
Toluene-d8 (S)	102 %		90-110	1		06/19/12 09:21	2037-26-5	
4-Bromofluorobenzene (S)	104 %		87-113	1		06/19/12 09:21	460-00-4	
1,2-Dichloroethane-d4 (S)	96 %		82-119	1		06/19/12 09:21	17060-07-0	
Preservation pH	1.0			1.0	1	06/19/12 09:21		



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ANALYTICAL RESULTS

Project: NM GW DVS & ICE

Pace Project No.: 60123513

Sample: 103314JUN12 Lab ID: 60123513005 Collected: 06/14/12 10:33 Received: 06/18/12 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water		Analytical Method: EPA 8260						
Benzene	ND ug/L		1.0	1		06/19/12 09:38	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		06/19/12 09:38	100-41-4	
Toluene	ND ug/L		1.0	1		06/19/12 09:38	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		06/19/12 09:38	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	101 %		86-112	1		06/19/12 09:38	1868-53-7	
Toluene-d8 (S)	100 %		90-110	1		06/19/12 09:38	2037-26-5	
4-Bromofluorobenzene (S)	103 %		87-113	1		06/19/12 09:38	460-00-4	
1,2-Dichloroethane-d4 (S)	97 %		82-119	1		06/19/12 09:38	17060-07-0	
Preservation pH	7.0		1.0	1		06/19/12 09:38		pH



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ANALYTICAL RESULTS

Project: NM GW DVS & ICE

Pace Project No.: 60123513

Sample: 104014JUN12 Lab ID: 60123513006 Collected: 06/14/12 10:40 Received: 06/18/12 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1		06/19/12 09:54	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		06/19/12 09:54	100-41-4	
Toluene	ND ug/L		1.0	1		06/19/12 09:54	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		06/19/12 09:54	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	99 %		86-112	1		06/19/12 09:54	1868-53-7	
Toluene-d8 (S)	101 %		90-110	1		06/19/12 09:54	2037-26-5	
4-Bromofluorobenzene (S)	103 %		87-113	1		06/19/12 09:54	460-00-4	
1,2-Dichloroethane-d4 (S)	97 %		82-119	1		06/19/12 09:54	17060-07-0	
Preservation pH	7.0			1.0	1	06/19/12 09:54		pH

ANALYTICAL RESULTS

Project: NM GW DVS & ICE

Pace Project No.: 60123513

Sample: 104814JUN12	Lab ID: 60123513007	Collected: 06/14/12 10:48	Received: 06/18/12 08:45	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	3.1 ug/L		1.0	1		06/19/12 20:28	71-43-2	
Ethylbenzene	52.7 ug/L		1.0	1		06/19/12 20:28	100-41-4	
Toluene	1.5 ug/L		1.0	1		06/19/12 20:28	108-88-3	
Xylene (Total)	121 ug/L		3.0	1		06/19/12 20:28	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	98 %		86-112	1		06/19/12 20:28	1868-53-7	
Toluene-d8 (S)	110 %		90-110	1		06/19/12 20:28	2037-26-5	
4-Bromofluorobenzene (S)	103 %		87-113	1		06/19/12 20:28	460-00-4	
1,2-Dichloroethane-d4 (S)	92 %		82-119	1		06/19/12 20:28	17060-07-0	
Preservation pH	1.0			1.0	1			06/19/12 20:28



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ANALYTICAL RESULTS

Project: NM GW DVS & ICE

Pace Project No.: 60123513

Sample: 105814JUN12	Lab ID: 60123513008	Collected: 06/14/12 10:58	Received: 06/18/12 08:45	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1		06/19/12 10:29	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		06/19/12 10:29	100-41-4	
Toluene	ND ug/L		1.0	1		06/19/12 10:29	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		06/19/12 10:29	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	109 %		86-112	1		06/19/12 10:29	1868-53-7	
Toluene-d8 (S)	105 %		90-110	1		06/19/12 10:29	2037-26-5	
4-Bromofluorobenzene (S)	103 %		87-113	1		06/19/12 10:29	450-00-4	
1,2-Dichloroethane-d4 (S)	96 %		82-119	1		06/19/12 10:29	17060-07-0	
Preservation pH	7.0			1.0	1	06/19/12 10:29		pH



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ANALYTICAL RESULTS

Project: NM GW DVS & ICE

Pace Project No.: 60123513

Sample: 110414JUN12 Lab ID: 60123513009 Collected: 06/14/12 11:04 Received: 06/18/12 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1			06/19/12 20:45	71-43-2
Ethylbenzene	ND ug/L		1.0	1			06/19/12 20:45	100-41-4
Toluene	ND ug/L		1.0	1			06/19/12 20:45	108-88-3
Xylene (Total)	ND ug/L		3.0	1			06/19/12 20:45	1330-20-7
Surrogates								
Dibromofluoromethane (S)	112 %		86-112	1			06/19/12 20:45	1868-53-7
Toluene-d8 (S)	104 %		90-110	1			06/19/12 20:45	2037-26-5
4-Bromofluorobenzene (S)	104 %		87-113	1			06/19/12 20:45	460-00-4
1,2-Dichloroethane-d4 (S)	93 %		82-119	1			06/19/12 20:45	17060-07-0
Preservation pH	1.0			1.0	1			06/19/12 20:45

ANALYTICAL RESULTS

Project: NM GW DVS & ICE

Pace Project No.: 60123513

Sample: 111514JUN12 Lab ID: 60123513010 Collected: 06/14/12 11:15 Received: 06/18/12 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1		06/19/12 21:02	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		06/19/12 21:02	100-41-4	
Toluene	ND ug/L		1.0	1		06/19/12 21:02	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		06/19/12 21:02	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	112 %		86-112	1		06/19/12 21:02	1868-53-7	
Toluene-d8 (S)	102 %		90-110	1		06/19/12 21:02	2037-26-5	
4-Bromofluorobenzene (S)	104 %		87-113	1		06/19/12 21:02	460-00-4	
1,2-Dichloroethane-d4 (S)	93 %		82-119	1		06/19/12 21:02	17060-07-0	
Preservation pH	1.0			1.0	1	06/19/12 21:02		

ANALYTICAL RESULTS

Project: NM GW DVS & ICE

Pace Project No.: 60123513

Sample: TRIP BLANK Lab ID: 60123513011 Collected: 06/14/12 00:00 Received: 06/18/12 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1		06/19/12 21:18	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		06/19/12 21:18	100-41-4	
Toluene	ND ug/L		1.0	1		06/19/12 21:18	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		06/19/12 21:18	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	104 %		86-112	1		06/19/12 21:18	1868-53-7	
Toluene-d8 (S)	99 %		90-110	1		06/19/12 21:18	2037-26-5	
4-Bromofluorobenzene (S)	105 %		87-113	1		06/19/12 21:18	460-00-4	
1,2-Dichloroethane-d4 (S)	92 %		82-119	1		06/19/12 21:18	17060-07-0	
Preservation pH	1.0			1.0	1			06/19/12 21:18

QUALITY CONTROL DATA

Project: NM GW DVS & ICE
Pace Project No.: 60123513

QC Batch:	MSV/46452	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV UST-WATER

Associated Lab Samples: 60123513001, 60123513002, 60123513003, 60123513004, 60123513005, 60123513006, 60123513008

METHOD BLANK: 1016022 Matrix: Water

Associated Lab Samples: 60123513001, 60123513002, 60123513003, 60123513004, 60123513005, 60123513006, 60123513008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	06/19/12 06:46	
Ethylbenzene	ug/L	ND	1.0	06/19/12 06:46	
Toluene	ug/L	ND	1.0	06/19/12 06:46	
Xylene (Total)	ug/L	ND	3.0	06/19/12 06:46	
1,2-Dichloroethane-d4 (S)	%	95	82-119	06/19/12 06:46	
4-Bromofluorobenzene (S)	%	103	87-113	06/19/12 06:46	
Dibromofluoromethane (S)	%	102	86-112	06/19/12 06:46	
Toluene-d8 (S)	%	103	90-110	06/19/12 06:46	

LABORATORY CONTROL SAMPLE: 1016023

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	18.7	93	82-117	
Ethylbenzene	ug/L	20	19.0	95	79-121	
Toluene	ug/L	20	19.6	98	80-120	
Xylene (Total)	ug/L	60	55.9	93	79-120	
1,2-Dichloroethane-d4 (S)	%			95	82-119	
4-Bromofluorobenzene (S)	%			103	87-113	
Dibromofluoromethane (S)	%			102	86-112	
Toluene-d8 (S)	%			104	90-110	

QUALITY CONTROL DATA

Project: NM GW DVS & ICE

Pace Project No.: 60123513

QC Batch:	MSV/46486	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV UST-WATER
Associated Lab Samples:	60123513007, 60123513009, 60123513010, 60123513011		

METHOD BLANK: 1016544 Matrix: Water

Associated Lab Samples: 60123513007, 60123513009, 60123513010, 60123513011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	06/19/12 19:37	
Ethylbenzene	ug/L	ND	1.0	06/19/12 19:37	
Toluene	ug/L	ND	1.0	06/19/12 19:37	
Xylene (Total)	ug/L	ND	3.0	06/19/12 19:37	
1,2-Dichloroethane-d4 (S)	%	94	82-119	06/19/12 19:37	
4-Bromofluorobenzene (S)	%	104	87-113	06/19/12 19:37	
Dibromofluoromethane (S)	%	106	86-112	06/19/12 19:37	
Toluene-d8 (S)	%	103	90-110	06/19/12 19:37	

LABORATORY CONTROL SAMPLE: 1016545

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	18.6	93	82-117	
Ethylbenzene	ug/L	20	20.4	102	79-121	
Toluene	ug/L	20	20.2	101	80-120	
Xylene (Total)	ug/L	60	59.2	99	79-120	
1,2-Dichloroethane-d4 (S)	%			90	82-119	
4-Bromofluorobenzene (S)	%			103	87-113	
Dibromofluoromethane (S)	%			102	86-112	
Toluene-d8 (S)	%			100	90-110	

QUALIFIERS

Project: NM GW DVS & ICE
Pace Project No.: 60123513

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: MSV/46452

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/46486

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

pH Post-analysis pH measurement indicates insufficient VOA sample preservation.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NM GW DVS & ICE

Pace Project No.: 60123513

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60123513001	191613JUN12	EPA 8260	MSV/46452		
60123513002	192413JUN12	EPA 8260	MSV/46452		
60123513003	193113JUN12	EPA 8260	MSV/46452		
60123513004	193913JUN12	EPA 8260	MSV/46452		
60123513005	103314JUN12	EPA 8260	MSV/46452		
60123513006	104014JUN12	EPA 8260	MSV/46452		
60123513007	104814JUN12	EPA 8260	MSV/46486		
60123513008	105814JUN12	EPA 8260	MSV/46452		
60123513009	110414JUN12	EPA 8260	MSV/46486		
60123513010	111514JUN12	EPA 8260	MSV/46486		
60123513011	TRIP BLANK	EPA 8260	MSV/46486		



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

F-ALL-Q-020rev.07, 15-May-2007

***Important Note:** By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.



Sample Condition Upon Receipt

Client Name: Mile High Services Project # 60123513

Courier: FedEx UPS USPS Client Commercial Pace Other
 Tracking #: 800120957033 Pace Shipping Label Used? Yes No

Optional
Proj. Due Date: <u>6/25</u>
Proj. Name:

Custody Seal on Cooler/Box Present: Yes No Seals intact: Yes No

Packing Material: Bubble Wrap Bubble Bags Foam None Other _____

Thermometer Used: T-197 / T-194 Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature: 11.3

Temperature should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: 6-16-12 BA

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1. <u>Out of temp, not enough ice.</u>
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace containers used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
-Includes date/time/ID/analyses Matrix: <u>WT</u>		
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	14.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Exceptions: <u>VOA coliform, TOC, O&G, WI-DRO (water), Phenolics</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed _____ Lot # of added preservative _____
Trip Blank present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	15.
Pace Trip Blank lot # (if purchased): <u>021411-3</u>		
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	17. List State: <u>NC</u>

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: Mark Harley Date/Time: 6/18/12
 Comments/ Resolution: Emailed about cooler out of temp @AMW 6/18/12
Per mark Harley analyze sample @AMW 6/18/12
Emailed about TB - analyze @AMW 6/18/12

Project Manager Review: AMW Date: 6/18/12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)



Pace Analytical Services, Inc.
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October 10, 2012

Mr. Mark Harvey
Mile High Environmental
811 B West Apache
Farmington, NM 87401

RE: Project: NM GW PRTCHD + FLR47X + DVS
Pace Project No.: 60130503

Dear Mr. Harvey:

Enclosed are the analytical results for sample(s) received by the laboratory on October 04, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in cursive ink that reads "Andy Brownfield".

Andy Brownfield for
Heather Wilson
heather.wilson@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: NM GW PRTCHD + FLR47X + DVS

Pace Project No.: 60130503

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219
A2LA Certification #: 2456.01
Arkansas Certification #: 12-019-0
Illinois Certification #: 002885
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407-12-3
Utah Certification #: KS000212012-2

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: NM GW PRTCHD + FLR47X + DVS
Pace Project No.: 60130503

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60130503001	132702OCT12	Water	10/02/12 13:27	10/04/12 08:20
60130503002	141102OCT12	Water	10/02/12 14:11	10/04/12 08:20
60130503003	142202OCT12	Water	10/02/12 14:22	10/04/12 08:20
60130503004	145402OCT12	Water	10/02/12 14:54	10/04/12 08:20
60130503005	150902OCT12	Water	10/02/12 15:09	10/04/12 08:20
60130503006	151502OCT12	Water	10/02/12 15:15	10/04/12 08:20
60130503007	164002OCT12	Water	10/02/12 16:40	10/04/12 08:20
60130503008	164702OCT12	Water	10/02/12 16:47	10/04/12 08:20
60130503009	165402OCT12	Water	10/02/12 16:54	10/04/12 08:20
60130503010	170202OCT12	Water	10/02/12 17:02	10/04/12 08:20

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SAMPLE ANALYTE COUNT

Project: NM GW PRTCHD + FLR47X + DVS

Pace Project No.: 60130503

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60130503001	132702OCT12	EPA 8260	JTK	9
60130503002	141102OCT12	EPA 8260	JTK	9
60130503003	142202OCT12	EPA 8260	JTK	9
60130503004	145402OCT12	EPA 8260	JTK	9
60130503005	150902OCT12	EPA 8260	JTK	9
60130503006	151502OCT12	EPA 8260	JTK	9
60130503007	164002OCT12	EPA 8260	JTK	9
60130503008	164702OCT12	EPA 8260	JTK	9
60130503009	165402OCT12	EPA 8260	JTK	9
60130503010	170202OCT12	EPA 8260	JTK	9

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NM GW PRTC HD + FLR47X + DVS

Pace Project No.: 60130503

Sample: 132702OCT12 Lab ID: 60130503001 Collected: 10/02/12 13:27 Received: 10/04/12 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	8.0 ug/L		1.0	1			10/06/12 06:02	71-43-2
Ethylbenzene	ND ug/L		1.0	1			10/06/12 06:02	100-41-4
Toluene	5.6 ug/L		1.0	1			10/06/12 06:02	108-88-3
Xylene (Total)	40.7 ug/L		3.0	1			10/06/12 06:02	1330-20-7
Surrogates								
Dibromofluoromethane (S)	99 %		80-120	1			10/06/12 06:02	1868-53-7
Toluene-d8 (S)	102 %		80-120	1			10/06/12 06:02	2037-26-5
4-Bromofluorobenzene (S)	104 %		80-120	1			10/06/12 06:02	460-00-4
1,2-Dichloroethane-d4 (S)	101 %		80-120	1			10/06/12 06:02	17060-07-0
Preservation pH	1.0			1.0	1			10/06/12 06:02

ANALYTICAL RESULTS

Project: NM GW PRTCHD + FLR47X + DVS

Pace Project No.: 60130503

Sample: 141102OCT12 Lab ID: 60130503002 Collected: 10/02/12 14:11 Received: 10/04/12 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	18.2	ug/L	1.0	1			10/08/12 00:43	71-43-2
Ethylbenzene	ND	ug/L	1.0	1			10/08/12 00:43	100-41-4
Toluene	3.7	ug/L	1.0	1			10/08/12 00:43	108-88-3
Xylene (Total)	21.2	ug/L	3.0	1			10/08/12 00:43	1330-20-7
Surrogates								
Dibromofluoromethane (S)	105 %		80-120	1			10/08/12 00:43	1868-53-7
Toluene-d8 (S)	106 %		80-120	1			10/08/12 00:43	2037-26-5
4-Bromofluorobenzene (S)	96 %		80-120	1			10/08/12 00:43	460-00-4
1,2-Dichloroethane-d4 (S)	98 %		80-120	1			10/08/12 00:43	17060-07-0
Preservation pH	1.0			1.0	1		10/08/12 00:43	

ANALYTICAL RESULTS

Project: NM GW PRTCHD + FLR47X + DVS

Pace Project No.: 60130503

Sample: 142202OCT12 Lab ID: 60130503003 Collected: 10/02/12 14:22 Received: 10/04/12 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	882 ug/L		20.0	20		10/06/12 07:19	71-43-2	
Ethylbenzene	375 ug/L		20.0	20		10/06/12 07:19	100-41-4	
Toluene	40.8 ug/L		20.0	20		10/06/12 07:19	108-88-3	
Xylene (Total)	767 ug/L		60.0	20		10/06/12 07:19	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	99 %		80-120	20		10/06/12 07:19	1868-53-7	
Toluene-d8 (S)	116 %		80-120	20		10/06/12 07:19	2037-26-5	
4-Bromofluorobenzene (S)	105 %		80-120	20		10/06/12 07:19	460-00-4	
1,2-Dichloroethane-d4 (S)	100 %		80-120	20		10/06/12 07:19	17060-07-0	
Preservation pH	1.0			1.0	20			10/06/12 07:19



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ANALYTICAL RESULTS

Project: NM GW PRTCHD + FLR47X + DVS

Pace Project No.: 60130503

Sample: 145402OCT12 Lab ID: 60130503004 Collected: 10/02/12 14:54 Received: 10/04/12 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	1.1 ug/L		1.0	1			10/06/12 07:34	71-43-2
Ethylbenzene	ND ug/L		1.0	1			10/06/12 07:34	100-41-4
Toluene	ND ug/L		1.0	1			10/06/12 07:34	108-88-3
Xylene (Total)	ND ug/L		3.0	1			10/06/12 07:34	1330-20-7
Surrogates								
Dibromofluoromethane (S)	106 %		80-120	1			10/06/12 07:34	1868-53-7
Toluene-d8 (S)	100 %		80-120	1			10/06/12 07:34	2037-26-5
4-Bromofluorobenzene (S)	106 %		80-120	1			10/06/12 07:34	460-00-4
1,2-Dichloroethane-d4 (S)	105 %		80-120	1			10/06/12 07:34	17060-07-0
Preservation pH	1.0			1.0	1			10/06/12 07:34



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ANALYTICAL RESULTS

Project: NM GW PRTC HD + FLR47X + DVS
Pace Project No.: 60130503

Sample: 150902OCT12	Lab ID: 60130503005	Collected: 10/02/12 15:09	Received: 10/04/12 08:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	10200 ug/L		100 100			10/06/12 07:50	71-43-2	
Ethylbenzene	765 ug/L		100 100			10/06/12 07:50	100-41-4	
Toluene	ND ug/L		100 100			10/06/12 07:50	108-88-3	
Xylene (Total)	7260 ug/L		300 100			10/06/12 07:50	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	98 %		80-120 100			10/06/12 07:50	1868-53-7	
Toluene-d8 (S)	106 %		80-120 100			10/06/12 07:50	2037-26-5	
4-Bromofluorobenzene (S)	107 %		80-120 100			10/06/12 07:50	460-00-4	
1,2-Dichloroethane-d4 (S)	102 %		80-120 100			10/06/12 07:50	17060-07-0	
Preservation pH	1.0		1.0 100			10/06/12 07:50		



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ANALYTICAL RESULTS

Project: NM GW PRTCHD + FLR47X + DVS

Pace Project No.: 60130503

Sample: 151502OCT12 Lab ID: 60130503006 Collected: 10/02/12 15:15 Received: 10/04/12 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		10/06/12 08:05	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		10/06/12 08:05	100-41-4	
Toluene	ND	ug/L	1.0	1		10/06/12 08:05	108-88-3	
Xylene (Total)	4.5	ug/L	3.0	1		10/06/12 08:05	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	97 %		80-120	1		10/06/12 08:05	1868-53-7	
Toluene-d8 (S)	100 %		80-120	1		10/06/12 08:05	2037-26-5	
4-Bromofluorobenzene (S)	98 %		80-120	1		10/06/12 08:05	460-00-4	
1,2-Dichloroethane-d4 (S)	100 %		80-120	1		10/06/12 08:05	17060-07-0	
Preservation pH	1.0		1.0	1		10/06/12 08:05		

ANALYTICAL RESULTS

Project: NM GW PRTCHD + FLR47X + DVS

Pace Project No.: 60130503

Sample: 164002OCT12	Lab ID: 60130503007	Collected: 10/02/12 16:40	Received: 10/04/12 08:20	Matrix: Water
---------------------	---------------------	---------------------------	--------------------------	---------------

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1		10/06/12 08:21	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		10/06/12 08:21	100-41-4	
Toluene	ND ug/L		1.0	1		10/06/12 08:21	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		10/06/12 08:21	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	101 %		80-120	1		10/06/12 08:21	1868-53-7	
Toluene-d8 (S)	106 %		80-120	1		10/06/12 08:21	2037-26-5	
4-Bromofluorobenzene (S)	104 %		80-120	1		10/06/12 08:21	460-00-4	
1,2-Dichloroethane-d4 (S)	105 %		80-120	1		10/06/12 08:21	17060-07-0	
Preservation pH	1.0			1.0	1			10/06/12 08:21

ANALYTICAL RESULTS

Project: NM GW PRTCHD + FLR47X + DVS

Pace Project No.: 60130503

Sample: 164702OCT12 Lab ID: 60130503008 Collected: 10/02/12 16:47 Received: 10/04/12 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1			10/06/12 08:36	71-43-2
Ethylbenzene	ND	ug/L	1.0	1			10/06/12 08:36	100-41-4
Toluene	ND	ug/L	1.0	1			10/06/12 08:36	108-88-3
Xylene (Total)	ND	ug/L	3.0	1			10/06/12 08:36	1330-20-7
Surrogates								
Dibromofluoromethane (S)	97 %		80-120	1			10/06/12 08:36	1868-53-7
Toluene-d8 (S)	104 %		80-120	1			10/06/12 08:36	2037-26-5
4-Bromofluorobenzene (S)	92 %		80-120	1			10/06/12 08:36	460-00-4
1,2-Dichloroethane-d4 (S)	101 %		80-120	1			10/06/12 08:36	17060-07-0
Preservation pH	1.0		1.0	1			10/06/12 08:36	



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ANALYTICAL RESULTS

Project: NM GW PRTCHD + FLR47X + DVS

Pace Project No.: 60130503

Sample: 165402OCT12 Lab ID: 60130503009 Collected: 10/02/12 16:54 Received: 10/04/12 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1		10/06/12 08:51	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		10/06/12 08:51	100-41-4	
Toluene	ND ug/L		1.0	1		10/06/12 08:51	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		10/06/12 08:51	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	104 %		80-120	1		10/06/12 08:51	1868-53-7	
Toluene-d8 (S)	96 %		80-120	1		10/06/12 08:51	2037-26-5	
4-Bromofluorobenzene (S)	98 %		80-120	1		10/06/12 08:51	460-00-4	
1,2-Dichloroethane-d4 (S)	106 %		80-120	1		10/06/12 08:51	17060-07-0	
Preservation pH	1.0			1.0	1		10/06/12 08:51	

ANALYTICAL RESULTS

Project: NM GW PRTCHD + FLR47X + DVS

Pace Project No.: 60130503

Sample: 170202OCT12	Lab ID: 60130503010	Collected: 10/02/12 17:02	Received: 10/04/12 08:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1		10/06/12 09:07	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		10/06/12 09:07	100-41-4	
Toluene	ND ug/L		1.0	1		10/06/12 09:07	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		10/06/12 09:07	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	99 %		80-120	1		10/06/12 09:07	1868-53-7	
Toluene-d8 (S)	110 %		80-120	1		10/06/12 09:07	2037-26-5	
4-Bromofluorobenzene (S)	101 %		80-120	1		10/06/12 09:07	460-00-4	
1,2-Dichloroethane-d4 (S)	106 %		80-120	1		10/06/12 09:07	17060-07-0	
Preservation pH	1.0			1.0	1			10/06/12 09:07

QUALITY CONTROL DATA

Project: NM GW PRTCHD + FLR47X + DVS
 Pace Project No.: 60130503

QC Batch:	MSV/49035	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV UST-WATER
Associated Lab Samples: 60130503001			

METHOD BLANK: 1074431 Matrix: Water

Associated Lab Samples: 60130503001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	10/06/12 00:37	
Ethylbenzene	ug/L	ND	1.0	10/06/12 00:37	
Toluene	ug/L	ND	1.0	10/06/12 00:37	
Xylene (Total)	ug/L	ND	3.0	10/06/12 00:37	
1,2-Dichloroethane-d4 (S)	%	98	80-120	10/06/12 00:37	
4-Bromofluorobenzene (S)	%	98	80-120	10/06/12 00:37	
Dibromofluoromethane (S)	%	99	80-120	10/06/12 00:37	
Toluene-d8 (S)	%	101	80-120	10/06/12 00:37	

LABORATORY CONTROL SAMPLE: 1074432

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	17.9	89	74-123	
Ethylbenzene	ug/L	20	18.4	92	76-123	
Toluene	ug/L	20	17.6	88	75-123	
Xylene (Total)	ug/L	60	52.1	87	76-123	
1,2-Dichloroethane-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Dibromofluoromethane (S)	%			101	80-120	
Toluene-d8 (S)	%			102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1074433 1074434

Parameter	Units	MS		MSD		MS Result	MS % Rec	MSD Result	MSD % Rec	% Rec Limits	Max	
		60130008014	Spike Conc.	Spike Conc.	MS Result						RPD	RPD
Benzene	ug/L	ND	20	20	18.7	18.2	93	91	40-155	2	45	
Ethylbenzene	ug/L	ND	20	20	20.4	19.8	102	99	40-158	3	48	
Toluene	ug/L	ND	20	20	20.4	19.6	102	98	42-151	4	46	
Xylene (Total)	ug/L	60	60	59.4	58.8	99	98	98	40-151	1	45	
1,2-Dichloroethane-d4 (S)	%					97	101	80-120				
4-Bromofluorobenzene (S)	%					101	99	80-120				
Dibromofluoromethane (S)	%					99	101	80-120				
Toluene-d8 (S)	%					106	98	80-120				
Preservation pH		1.0			1.0	1.0				0		

QUALITY CONTROL DATA

Project: NM GW PRTCHD + FLR47X + DVS

Pace Project No.: 60130503

QC Batch: MSV/49039

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV UST-WATER

Associated Lab Samples: 60130503003, 60130503004, 60130503005, 60130503006, 60130503007, 60130503008, 60130503009,
60130503010

METHOD BLANK: 1074538

Matrix: Water

Associated Lab Samples: 60130503003, 60130503004, 60130503005, 60130503006, 60130503007, 60130503008, 60130503009,
60130503010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	10/06/12 07:04	
Ethylbenzene	ug/L	ND	1.0	10/06/12 07:04	
Toluene	ug/L	ND	1.0	10/06/12 07:04	
Xylene (Total)	ug/L	ND	3.0	10/06/12 07:04	
1,2-Dichloroethane-d4 (S)	%	97	80-120	10/06/12 07:04	
4-Bromofluorobenzene (S)	%	95	80-120	10/06/12 07:04	
Dibromofluoromethane (S)	%	99	80-120	10/06/12 07:04	
Toluene-d8 (S)	%	104	80-120	10/06/12 07:04	

LABORATORY CONTROL SAMPLE: 1074539

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	16.2	81	74-123	
Ethylbenzene	ug/L	20	17.6	88	76-123	
Toluene	ug/L	20	17.1	85	75-123	
Xylene (Total)	ug/L	60	54.3	91	76-123	
1,2-Dichloroethane-d4 (S)	%			96	80-120	
4-Bromofluorobenzene (S)	%			90	80-120	
Dibromofluoromethane (S)	%			96	80-120	
Toluene-d8 (S)	%			100	80-120	



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QUALITY CONTROL DATA

Project: NM GW PRTCHD + FLR47X + DVS

Pace Project No.: 60130503

QC Batch:	MSV/49051	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV UST-WATER
Associated Lab Samples: 60130503002			

METHOD BLANK: 1075346 Matrix: Water

Associated Lab Samples: 60130503002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	10/08/12 00:12	
Ethylbenzene	ug/L	ND	1.0	10/08/12 00:12	
Toluene	ug/L	ND	1.0	10/08/12 00:12	
Xylene (Total)	ug/L	ND	3.0	10/08/12 00:12	
1,2-Dichloroethane-d4 (S)	%	100	80-120	10/08/12 00:12	
4-Bromofluorobenzene (S)	%	99	80-120	10/08/12 00:12	
Dibromofluoromethane (S)	%	101	80-120	10/08/12 00:12	
Toluene-d8 (S)	%	110	80-120	10/08/12 00:12	

LABORATORY CONTROL SAMPLE: 1075347

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	16.8	84	74-123	
Ethylbenzene	ug/L	20	17.9	89	76-123	
Toluene	ug/L	20	16.9	85	75-123	
Xylene (Total)	ug/L	60	56.2	94	76-123	
1,2-Dichloroethane-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			91	80-120	
Dibromofluoromethane (S)	%			98	80-120	
Toluene-d8 (S)	%			98	80-120	

QUALIFIERS

Project: NM GW PRTCHD + FLR47X + DVS

Pace Project No.: 60130503

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: MSV/49039

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/49051

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.



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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NM GW PRTCHD + FLR47X + DVS

Pace Project No.: 60130503

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60130503001	132702OCT12	EPA 8260	MSV/49035		
60130503002	141102OCT12	EPA 8260	MSV/49051		
60130503003	142202OCT12	EPA 8260	MSV/49039		
60130503004	145402OCT12	EPA 8260	MSV/49039		
60130503005	150902OCT12	EPA 8260	MSV/49039		
60130503006	151502OCT12	EPA 8260	MSV/49039		
60130503007	164002OCT12	EPA 8260	MSV/49039		
60130503008	164702OCT12	EPA 8260	MSV/49039		
60130503009	165402OCT12	EPA 8260	MSV/49039		
60130503010	170202OCT12	EPA 8260	MSV/49039		



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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F-ALL-Q-020rev 07; 15-May-2007



ple Upon

Client Name: Mile HighProject # 600130503

Courier: Fed Ex UPS USPS Client Commercial Pace Other
 Tracking #: 20090444088

Pace Shipping Label Used?

 Yes No

Optional
Proj. Due Date: <u>11/11/12</u>
Proj. Name: <u>NM GCU</u>

Custody Seal on Cooler/Box Present: Yes No Seals intact: Yes NoPacking Material: Bubble Wrap Bubble Bags Foam None Other 2910PLTCHD a FLK 47A+
DVSThermometer Used: 1-19 / T-194Type of Ice: Wet Blue None Samples on ice, cooling process has begunCooler Temperature: 3.8
Temperature should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: JV/16/11

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
-Includes date/time/ID/analyses Matrix:	<u>WT</u>	
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	14.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed _____ Lot # of added preservative _____
Trip Blank present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
Pace Trip Blank lot # (if purchased):		
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: TMWDate: 10/5/12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)



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December 20, 2012

Mr. Mark Harvey
Mile High Environmental
811 B West Apache
Farmington, NM 87401

RE: Project: NMGW DVS & ICE
Pace Project No.: 60135430

Dear Mr. Harvey:

Enclosed are the analytical results for sample(s) received by the laboratory on December 14, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Heather M. Wilson".

Heather Wilson

heather.wilson@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: NMGW DVS & ICE
Pace Project No.: 60135430

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219
A2LA Certification #: 2456.01
Arkansas Certification #: 12-019-0
Illinois Certification #: 002885
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407-12-3
Utah Certification #: KS000212012-2

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: NMGW DVS & ICE
 Pace Project No.: 60135430

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60135430001	111513DEC12	Water	12/13/12 11:15	12/14/12 08:30
60135430002	112513DEC12	Water	12/13/12 11:25	12/14/12 08:30
60135430003	113213DEC12	Water	12/13/12 11:32	12/14/12 08:30
60135430004	114113DEC12	Water	12/13/12 11:41	12/14/12 08:30
60135430005	120913DEC12	Water	12/13/12 12:09	12/14/12 08:30
60135430006	112407DEC12	Water	12/07/12 11:24	12/14/12 08:30
60135430007	113607DEC12	Water	12/07/12 11:36	12/14/12 08:30
60135430008	114507DEC12	Water	12/07/12 11:45	12/14/12 08:30
60135430009	115507DEC12	Water	12/07/12 11:55	12/14/12 08:30
60135430010	120207DEC12	Water	12/07/12 12:02	12/14/12 08:30
60135430011	121007DEC12	Water	12/07/12 12:10	12/14/12 08:30
60135430012	122007DEC12	Water	12/07/12 12:20	12/14/12 08:30
60135430013	EDD	Water		12/14/12 13:22

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: NMGW DVS & ICE
 Pace Project No.: 60135430

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60135430001	111513DEC12	EPA 8260	PRG	9
60135430002	112513DEC12	EPA 8260	PRG	9
60135430003	113213DEC12	EPA 8260	PRG	9
60135430004	114113DEC12	EPA 8260	PRG	9
60135430005	120913DEC12	EPA 8260	PRG	9
60135430006	112407DEC12	EPA 8260	PRG	9
60135430007	113607DEC12	EPA 8260	PRG	9
60135430008	114507DEC12	EPA 8260	JTS	9
60135430009	115507DEC12	EPA 8260	PRG	9
60135430010	120207DEC12	EPA 8260	PRG	9
60135430011	121007DEC12	EPA 8260	PRG	9
60135430012	122007DEC12	EPA 8260	PRG	9

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NMGW DVS & ICE

Pace Project No.: 60135430

Sample: 111513DEC12 **Lab ID:** 60135430001 **Collected:** 12/13/12 11:15 **Received:** 12/14/12 08:30 **Matrix:** Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1			12/18/12 01:54	71-43-2
Ethylbenzene	ND ug/L		1.0	1			12/18/12 01:54	100-41-4
Toluene	ND ug/L		1.0	1			12/18/12 01:54	108-88-3
Xylene (Total)	ND ug/L		3.0	1			12/18/12 01:54	1330-20-7
Surrogates								
Dibromofluoromethane (S)	111 %		80-120	1			12/18/12 01:54	1868-53-7
Toluene-d8 (S)	109 %		80-120	1			12/18/12 01:54	2037-26-5
4-Bromofluorobenzene (S)	98 %		80-120	1			12/18/12 01:54	460-00-4
1,2-Dichloroethane-d4 (S)	105 %		80-120	1			12/18/12 01:54	17060-07-0
Preservation pH	1.0			1.0	1		12/18/12 01:54	

ANALYTICAL RESULTS

Project: NMGW DVS & ICE

Pace Project No.: 60135430

Sample: 112513DEC12 Lab ID: 60135430002 Collected: 12/13/12 11:25 Received: 12/14/12 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1		12/18/12 02:08	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		12/18/12 02:08	100-41-4	
Toluene	ND ug/L		1.0	1		12/18/12 02:08	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		12/18/12 02:08	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	101 %		80-120	1		12/18/12 02:08	1868-53-7	
Toluene-d8 (S)	106 %		80-120	1		12/18/12 02:08	2037-26-5	
4-Bromofluorobenzene (S)	100 %		80-120	1		12/18/12 02:08	460-00-4	
1,2-Dichloroethane-d4 (S)	103 %		80-120	1		12/18/12 02:08	17060-07-0	
Preservation pH	1.0			1.0	1			12/18/12 02:08



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ANALYTICAL RESULTS

Project: NMGW DVS & ICE

Pace Project No.: 60135430

Sample: 113213DEC12 Lab ID: 60135430003 Collected: 12/13/12 11:32 Received: 12/14/12 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1		12/18/12 02:23	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		12/18/12 02:23	100-41-4	
Toluene	ND ug/L		1.0	1		12/18/12 02:23	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		12/18/12 02:23	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	102 %		80-120	1		12/18/12 02:23	1868-53-7	
Toluene-d8 (S)	105 %		80-120	1		12/18/12 02:23	2037-26-5	
4-Bromofluorobenzene (S)	98 %		80-120	1		12/18/12 02:23	460-00-4	
1,2-Dichloroethane-d4 (S)	107 %		80-120	1		12/18/12 02:23	17060-07-0	
Preservation pH	1.0			1.0	1			12/18/12 02:23

ANALYTICAL RESULTS

Project: NMGW DVS & ICE
 Pace Project No.: 60135430

Sample: 114113DEC12	Lab ID: 60135430004	Collected: 12/13/12 11:41	Received: 12/14/12 08:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1		12/18/12 02:37	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		12/18/12 02:37	100-41-4	
Toluene	ND ug/L		1.0	1		12/18/12 02:37	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		12/18/12 02:37	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	108 %		80-120	1		12/18/12 02:37	1868-53-7	
Toluene-d8 (S)	105 %		80-120	1		12/18/12 02:37	2037-26-5	
4-Bromofluorobenzene (S)	98 %		80-120	1		12/18/12 02:37	460-00-4	
1,2-Dichloroethane-d4 (S)	108 %		80-120	1		12/18/12 02:37	17060-07-0	
Preservation pH	1.0			1.0	1		12/18/12 02:37	

ANALYTICAL RESULTS

Project: NMGW DVS & ICE

Pace Project No.: 60135430

Sample: 120913DEC12 Lab ID: 60135430005 Collected: 12/13/12 12:09 Received: 12/14/12 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	11800	ug/L	100	100		12/18/12 02:52	71-43-2	
Ethylbenzene	1270	ug/L	100	100		12/18/12 02:52	100-41-4	
Toluene	7620	ug/L	100	100		12/18/12 02:52	108-88-3	
Xylene (Total)	8910	ug/L	300	100		12/18/12 02:52	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	101	%	80-120	100		12/18/12 02:52	1868-53-7	HS
Toluene-d8 (S)	107	%	80-120	100		12/18/12 02:52	2037-26-5	
4-Bromofluorobenzene (S)	102	%	80-120	100		12/18/12 02:52	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120	100		12/18/12 02:52	17060-07-0	
Preservation pH	1.0		1.0	100		12/18/12 02:52		



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ANALYTICAL RESULTS

Project: NMGW DVS & ICE

Pace Project No.: 60135430

Sample: 112407DEC12	Lab ID: 60135430006	Collected: 12/07/12 11:24	Received: 12/14/12 08:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1		12/18/12 03:06	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		12/18/12 03:06	100-41-4	
Toluene	ND ug/L		1.0	1		12/18/12 03:06	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		12/18/12 03:06	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	102 %		80-120	1		12/18/12 03:06	1868-53-7	
Toluene-d8 (S)	107 %		80-120	1		12/18/12 03:06	2037-26-5	
4-Bromofluorobenzene (S)	96 %		80-120	1		12/18/12 03:06	460-00-4	
1,2-Dichloroethane-d4 (S)	107 %		80-120	1		12/18/12 03:06	17060-07-0	
Preservation pH	1.0		1.0	1		12/18/12 03:06		

ANALYTICAL RESULTS

Project: NMGW DVS & ICE

Pace Project No.: 60135430

Sample: 113607DEC12 Lab ID: 60135430007 Collected: 12/07/12 11:36 Received: 12/14/12 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1		12/18/12 03:21	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		12/18/12 03:21	100-41-4	
Toluene	ND ug/L		1.0	1		12/18/12 03:21	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		12/18/12 03:21	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	107 %		80-120	1		12/18/12 03:21	1868-53-7	
Toluene-d8 (S)	110 %		80-120	1		12/18/12 03:21	2037-26-5	
4-Bromofluorobenzene (S)	99 %		80-120	1		12/18/12 03:21	460-00-4	
1,2-Dichloroethane-d4 (S)	107 %		80-120	1		12/18/12 03:21	17060-07-0	
Preservation pH	1.0			1.0	1			12/18/12 03:21



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ANALYTICAL RESULTS

Project: NMGW DVS & ICE

Pace Project No.: 60135430

Sample: 114507DEC12	Lab ID: 60135430008	Collected: 12/07/12 11:45	Received: 12/14/12 08:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND ug/L		5.0	5		12/18/12 19:40	71-43-2	
Ethylbenzene	38.5 ug/L		5.0	5		12/18/12 19:40	100-41-4	
Toluene	ND ug/L		5.0	5		12/18/12 19:40	108-88-3	
Xylene (Total)	92.6 ug/L		15.0	5		12/18/12 19:40	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	100 %		80-120	5		12/18/12 19:40	1868-53-7	D3
Toluene-d8 (S)	101 %		80-120	5		12/18/12 19:40	2037-26-5	
4-Bromofluorobenzene (S)	105 %		80-120	5		12/18/12 19:40	460-00-4	
1,2-Dichloroethane-d4 (S)	106 %		80-120	5		12/18/12 19:40	17060-07-0	
Preservation pH	1.0		1.0	5		12/18/12 19:40		

ANALYTICAL RESULTS

Project: NMGW DVS & ICE

Pace Project No.: 60135430

Sample: 115507DEC12 Lab ID: 60135430009 Collected: 12/07/12 11:55 Received: 12/14/12 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1		12/18/12 03:50	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		12/18/12 03:50	100-41-4	
Toluene	ND ug/L		1.0	1		12/18/12 03:50	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		12/18/12 03:50	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	104 %		80-120	1		12/18/12 03:50	1868-53-7	
Toluene-d8 (S)	106 %		80-120	1		12/18/12 03:50	2037-26-5	
4-Bromofluorobenzene (S)	100 %		80-120	1		12/18/12 03:50	460-00-4	
1,2-Dichloroethane-d4 (S)	104 %		80-120	1		12/18/12 03:50	17060-07-0	
Preservation pH	1.0			1.0	1			12/18/12 03:50



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ANALYTICAL RESULTS

Project: NMGW DVS & ICE

Pace Project No.: 60135430

Sample: 120207DEC12	Lab ID: 60135430010	Collected: 12/07/12 12:02	Received: 12/14/12 08:30	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1		12/18/12 04:05	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		12/18/12 04:05	100-41-4	
Toluene	ND ug/L		1.0	1		12/18/12 04:05	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		12/18/12 04:05	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	98 %		80-120	1		12/18/12 04:05	1868-53-7	
Toluene-d8 (S)	108 %		80-120	1		12/18/12 04:05	2037-26-5	
4-Bromofluorobenzene (S)	96 %		80-120	1		12/18/12 04:05	460-00-4	
1,2-Dichloroethane-d4 (S)	100 %		80-120	1		12/18/12 04:05	17060-07-0	
Preservation pH	1.0			1.0	1	12/18/12 04:05		

ANALYTICAL RESULTS

Project: NMGW DVS & ICE

Pace Project No.: 60135430

Sample: 121007DEC12 Lab ID: 60135430011 Collected: 12/07/12 12:10 Received: 12/14/12 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		12/18/12 04:19	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		12/18/12 04:19	100-41-4	
Toluene	ND	ug/L	1.0	1		12/18/12 04:19	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		12/18/12 04:19	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	111	%	80-120	1		12/18/12 04:19	1868-53-7	
Toluene-d8 (S)	108	%	80-120	1		12/18/12 04:19	2037-26-5	
4-Bromofluorobenzene (S)	100	%	80-120	1		12/18/12 04:19	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-120	1		12/18/12 04:19	17060-07-0	
Preservation pH	1.0			1.0	1			12/18/12 04:19



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ANALYTICAL RESULTS

Project: NMGW DVS & ICE
Pace Project No.: 60135430

Sample: 122007DEC12 Lab ID: 60135430012 Collected: 12/07/12 12:20 Received: 12/14/12 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8260							
Benzene	ND ug/L		1.0	1		12/18/12 04:34	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		12/18/12 04:34	100-41-4	
Toluene	ND ug/L		1.0	1		12/18/12 04:34	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		12/18/12 04:34	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	109 %		80-120	1		12/18/12 04:34	1868-53-7	
Toluene-d8 (S)	109 %		80-120	1		12/18/12 04:34	2037-26-5	
4-Bromofluorobenzene (S)	101 %		80-120	1		12/18/12 04:34	460-00-4	
1,2-Dichloroethane-d4 (S)	103 %		80-120	1		12/18/12 04:34	17060-07-0	
Preservation pH	1.0			1.0	1	12/18/12 04:34		

QUALITY CONTROL DATA

Project: NMGW DVS & ICE

Pace Project No.: 60135430

QC Batch: MSV/50853

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV UST-WATER

Associated Lab Samples: 60135430001, 60135430002, 60135430003, 60135430004, 60135430005, 60135430006, 60135430007,
 60135430009, 60135430010, 60135430011, 60135430012

METHOD BLANK: 1116016

Matrix: Water

Associated Lab Samples: 60135430001, 60135430002, 60135430003, 60135430004, 60135430005, 60135430006, 60135430007,
 60135430009, 60135430010, 60135430011, 60135430012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	12/18/12 01:39	
Ethylbenzene	ug/L	ND	1.0	12/18/12 01:39	
Toluene	ug/L	ND	1.0	12/18/12 01:39	
Xylene (Total)	ug/L	ND	3.0	12/18/12 01:39	
1,2-Dichloroethane-d4 (S)	%	105	80-120	12/18/12 01:39	
4-Bromofluorobenzene (S)	%	100	80-120	12/18/12 01:39	
Dibromofluoromethane (S)	%	102	80-120	12/18/12 01:39	
Toluene-d8 (S)	%	111	80-120	12/18/12 01:39	

LABORATORY CONTROL SAMPLE: 1116017

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	20.2	101	74-123	
Ethylbenzene	ug/L	20	22.6	113	76-123	
Toluene	ug/L	20	22.1	110	75-123	
Xylene (Total)	ug/L	60	67.6	113	76-123	
1,2-Dichloroethane-d4 (S)	%			108	80-120	
4-Bromofluorobenzene (S)	%			96	80-120	
Dibromofluoromethane (S)	%			107	80-120	
Toluene-d8 (S)	%			107	80-120	



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QUALITY CONTROL DATA

Project: NMGW DVS & ICE
Pace Project No.: 60135430

QC Batch: MSV/50879 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 60135430008

METHOD BLANK: 1116579 Matrix: Water

Associated Lab Samples: 60135430008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	12/18/12 17:43	
Ethylbenzene	ug/L	ND	1.0	12/18/12 17:43	
Toluene	ug/L	ND	1.0	12/18/12 17:43	
Xylene (Total)	ug/L	ND	3.0	12/18/12 17:43	
1,2-Dichloroethane-d4 (S)	%	105	80-120	12/18/12 17:43	
4-Bromofluorobenzene (S)	%	104	80-120	12/18/12 17:43	
Dibromofluoromethane (S)	%	100	80-120	12/18/12 17:43	
Toluene-d8 (S)	%	99	80-120	12/18/12 17:43	

LABORATORY CONTROL SAMPLE: 1116580

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.1	95	74-123	
Ethylbenzene	ug/L	20	20.3	101	76-123	
Toluene	ug/L	20	20.9	105	75-123	
Xylene (Total)	ug/L	60	60.4	101	76-123	
1,2-Dichloroethane-d4 (S)	%			103	80-120	
4-Bromofluorobenzene (S)	%			105	80-120	
Dibromofluoromethane (S)	%			101	80-120	
Toluene-d8 (S)	%			101	80-120	

QUALIFIERS

Project: NMGW DVS & ICE

Pace Project No.: 60135430

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: MSV/50853

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/50879

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

HS Results are from sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter).



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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NMGW DVS & ICE
Pace Project No.: 60135430

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60135430001	111513DEC12	EPA 8260	MSV/50853		
60135430002	112513DEC12	EPA 8260	MSV/50853		
60135430003	113213DEC12	EPA 8260	MSV/50853		
60135430004	114113DEC12	EPA 8260	MSV/50853		
60135430005	120913DEC12	EPA 8260	MSV/50853		
60135430006	112407DEC12	EPA 8260	MSV/50853		
60135430007	113607DEC12	EPA 8260	MSV/50853		
60135430008	114507DEC12	EPA 8260	MSV/50879		
60135430009	115507DEC12	EPA 8260	MSV/50853		
60135430010	120207DEC12	EPA 8260	MSV/50853		
60135430011	121007DEC12	EPA 8260	MSV/50853		
60135430012	122007DEC12	EPA 8260	MSV/50853		



WO# : 60135430



60135430

Client Name: Mile High

Optional

Courier: Fed Ex UPS USPS Client Commercial Pace Other

Proj Due Date:

Tracking #: B022 4403 7980 Pace Shipping Label Used? Yes No

Proj Name:

Custody Seal on Cooler/Box Present: Yes No Seals intact: Yes No

Packing Material: Bubble Wrap Bubble Bags Foam None Other

Thermometer Used: T-191 / T-194

Type of Ice: Wet Blue None Samples received on ice, cooling process has begun
(circle one)

Cooler Temperature: 1.1

Date and initials of person examining
contents: JP 12/14/12 140

Temperature should be above freezing to 6°C

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Includes date/time/ID/analyses	Matrix: <u>water</u>	13.
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed <u>12/13 Dec 12</u> Lot # of added preservative <u>water</u>
Trip Blank present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12/13 Dec 12 20+2 vials w/ headspace
Pace Trip Blank lot # (if purchased): <u>MF</u>		15.
Headspace in VOA vials (>6mm):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: Mark Harvey Date/Time: 12/14/12

Comments/ Resolution: Email - Headspace in 12/09/12 Dec 12 - analysis? (Email to 12/14/12)

Per Mark Harvey analysis sample return 12/14/12

Project Manager Review: TMHLL

Date 12/17/12



Pace Analytical
www.paceanalytical.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

***Important Note:** By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.



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

March 06, 2013

Julie Linn
LTE
2243 Main Ave Suite 3
Durango, CO 81301
TEL: (970) 385-1096
FAX

RE: Davis #1

OrderNo.: 1302934

Dear Julie Linn:

Hall Environmental Analysis Laboratory received 4 sample(s) on 2/28/2013 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1302934

Date Reported: 3/6/2013

CLIENT: LTE

Project: Davis #1

Lab ID: 1302934-001

Matrix: AQUEOUS

Client Sample ID: MW-1

Collection Date: 2/27/2013 10:05:00 AM

Received Date: 2/28/2013 9:59:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Analyst: NSB
EPA METHOD 8021B: VOLATILES							
Benzene	ND	2.0	,	µg/L	2	3/4/2013 8:08:58 PM	
Toluene	ND	2.0		µg/L	2	3/4/2013 8:08:58 PM	
Ethylbenzene	ND	2.0		µg/L	2	3/4/2013 8:08:58 PM	
Xylenes, Total	ND	4.0		µg/L	2	3/4/2013 8:08:58 PM	
Surr: 4-Bromofluorobenzene	91.1	69.7-152		%REC	2	3/4/2013 8:08:58 PM	

Qualifiers: * Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2
RL Reporting Detection Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1302934**
Date Reported: **3/6/2013**

CLIENT: LTE	Client Sample ID: MW-7				
Project: Davis #1	Collection Date: 2/27/2013 11:15:00 AM				
Lab ID: 1302934-002	Matrix: AQUEOUS		Received Date: 2/28/2013 9:59:00 AM		
Analyses	Result	RL	Qual	Units	DF
EPA METHOD 8021B: VOLATILES					
Benzene	ND	2.0	µg/L	2	3/5/2013 12:09:44 AM
Toluene	ND	2.0	µg/L	2	3/5/2013 12:09:44 AM
Ethylbenzene	ND	2.0	µg/L	2	3/5/2013 12:09:44 AM
Xylenes, Total	ND	4.0	µg/L	2	3/5/2013 12:09:44 AM
Surr: 4-Bromofluorobenzene	89.1	69.7-152	%REC	2	3/5/2013 12:09:44 AM

Qualifiers: * Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2
RL Reporting Detection Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1302934**
Date Reported: **3/6/2013**

CLIENT: LTE
Project: Davis #1
Lab ID: 1302934-003

Matrix: AQUEOUS

Client Sample ID: MW-6

Collection Date: 2/27/2013 12:07:00 PM

Received Date: 2/28/2013 9:59:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Analyst: NSB
EPA METHOD 8021B: VOLATILES							
Benzene	ND	1.0		µg/L	1	3/5/2013 12:39:51 AM	
Toluene	ND	1.0		µg/L	1	3/5/2013 12:39:51 AM	
Ethylbenzene	ND	1.0		µg/L	1	3/5/2013 12:39:51 AM	
Xylenes, Total	ND	2.0		µg/L	1	3/5/2013 12:39:51 AM	
Surrogate: 4-Bromofluorobenzene	87.2	69.7-152		%REC	1	3/5/2013 12:39:51 AM	

Qualifiers: * Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH greater than 2
RL Reporting Detection Limit

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

Analytical Report
Lab Order **1302934**
Date Reported: **3/6/2013**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Project: Davis #1

Lab ID: 1302934-004

Client Sample ID: MW-4

Collection Date: 2/27/2013 1:11:00 PM

Received Date: 2/28/2013 9:59:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						
Benzene	ND	2.0		µg/L	2	3/5/2013 1:09:48 AM
Toluene	ND	2.0		µg/L	2	3/5/2013 1:09:48 AM
Ethylbenzene	ND	2.0		µg/L	2	3/5/2013 1:09:48 AM
Xylenes, Total	ND	4.0		µg/L	2	3/5/2013 1:09:48 AM
Surr: 4-Bromofluorobenzene	86.8	69.7-152		%REC	2	3/5/2013 1:09:48 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1302934

06-Mar-13

Client: LTE
Project: Davis #1

Sample ID	5ML RB	SampType:	MBLK	TestCode: EPA Method 8021B: Volatiles						
Client ID:	PBW	Batch ID:	R8955	RunNo: 8955						
Prep Date:		Analysis Date:	3/4/2013	SeqNo: 255896 Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surrogate: 4-Bromofluorobenzene	19		20.00		93.9	69.7	152			

Sample ID	100NG BTEX LCS	SampType:	LCS	TestCode: EPA Method 8021B: Volatiles						
Client ID:	LCSW	Batch ID:	R8955	RunNo: 8955						
Prep Date:		Analysis Date:	3/4/2013	SeqNo: 255897 Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	80	120			
Toluene	20	1.0	20.00	0	102	80	120			
Ethylbenzene	21	1.0	20.00	0	103	80	120			
Xylenes, Total	63	2.0	60.00	0	105	80	120			
Surrogate: 4-Bromofluorobenzene	21		20.00		103	69.7	152			

Sample ID	1302934-001AMS	SampType:	MS	TestCode: EPA Method 8021B: Volatiles						
Client ID:	MW-1	Batch ID:	R8955	RunNo: 8955						
Prep Date:		Analysis Date:	3/4/2013	SeqNo: 255911 Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	39	2.0	40.00	0	96.7	80	120			
Toluene	39	2.0	40.00	0	98.0	80	120			
Ethylbenzene	39	2.0	40.00	0	98.0	80	120			
Xylenes, Total	120	4.0	120.0	0	101	80	120			
Surrogate: 4-Bromofluorobenzene	39		40.00		98.5	69.7	152			

Sample ID	1302934-001AMSD	SampType:	MSD	TestCode: EPA Method 8021B: Volatiles						
Client ID:	MW-1	Batch ID:	R8955	RunNo: 8955						
Prep Date:		Analysis Date:	3/4/2013	SeqNo: 255912 Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	36	2.0	40.00	0	90.1	80	120	7.02	20	
Toluene	37	2.0	40.00	0	91.9	80	120	6.44	20	
Ethylbenzene	37	2.0	40.00	0	92.5	80	120	5.74	20	
Xylenes, Total	110	4.0	120.0	0	95.0	80	120	6.27	20	
Surrogate: 4-Bromofluorobenzene	40		40.00		99.9	69.7	152	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits



HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE
Albuquerque, NM 87105
TEL: 505-345-3975 FAX: 505-345-4101
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name:	LTE	Work Order Number:	1302934
Received by/date:	1/26/2013		
Logged By:	Anne Thorne	2/28/2013 9:59:00 AM	<i>Anne Thorne</i>
Completed By:	Anne Thorne	2/28/2013	<i>Anne Thorne</i>
Reviewed By:	<i>MJ</i> 02/28/13		

Chain of Custody

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

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes No NA
5. Was an attempt made to cool the samples? Yes No NA
6. Were all samples received at a temperature of >0° C to 6.0°C Yes No NA
7. Sample(s) in proper container(s)? Yes No
8. Sufficient sample volume for indicated test(s)? Yes No
9. Are samples (except VOA and ONG) properly preserved? Yes No
10. Was preservative added to bottles? Yes No NA
11. VOA vials have zero headspace? Yes No No VOA Vials
12. Were any sample containers received broken? Yes No
13. Does paperwork match bottle labels?
(Note discrepancies on chain of custody)
Yes No
14. Are matrices correctly identified on Chain of Custody? Yes No
15. Is it clear what analyses were requested? Yes No
16. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes No

of preserved bottles checked for pH:
<2 or >12 unless noted
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes No NA

Person Notified:	Date
By Whom:	Via: <input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	
Client Instructions:	

18. Additional remarks:

19. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.9	Good	Yes			

APPENDIX B
FEBRUARY 2013 FIELD NOTES



Water Sample Collection Form

Sample Location	Davis #1	Client	Williams Field Services, LLC
Sample Date	2/27/2013	Project Name	Historical Groundwater
Sample Time	10:05	Project #	034013001
Sample ID	MW-1	Sampler	Brooke Herb
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	65.44	TD of Well	70.15
Time	9:30	Depth to Product	NA
Vol. of H ₂ O to purge	4.71 * 0.1631 = 1.075 * 3 = 2.26 <i>(height of water column * 0.1631 for 2" well or 0.6524 for 4" well) * 3 well vols</i>		
Method of Purging	PVC Bailer		
Method of Sampling	PVC Bailer		

Time	Vol. Removed (gallons)	Total Vol H ₂ O removed (gallons)	pH (standard units)	Temp. (°C)	Conductivity (ms)	Comments
9:35	0.25	0.25	7.04	14.2	1922 µs	Brown, very silty, no HC odor, no sheen
	0.25	0.50	7.00	14.1	3.53	No change
	0.25	0.75	7.25	13.9	3.55	No change
	0.25	1.00	7.22	14.1	3.51	No change
	0.25	1.25	7.23	14.1	3.57	No change
	0.25	1.50	7.25	14.1	3.55	No change
	0.25	1.75	7.24	14.1	3.59	No change
	0.25	2.00	7.24	14.1	3.58	No change
	0.25	2.25	7.25	14.1	3.57	No change
10:05	0.25	2.50	7.25	14.1	3.57	No change

Comments:

Describe Deviations from SOP:

Signature: Brooke Herb Date: 2/27/2013



Water Sample Collection Form

Sample Location	Davis #1	Client	Williams Field Services, LLC
Sample Date	2/27/2013	Project Name	Historical Groundwater
Sample Time	NA	Project #	034013001
Sample ID	MW-2	Sampler	Brooke Herb
Analyses	NA		
Matrix	Groundwater	Laboratory	NA
Turn Around Time	NA	Shipping Method	NA
Depth to Water	63.35	TD of Well	63.4
Time	13:30	Depth to Product	NA
Vol. of H2O to purge	<i>(height of water column * 0.1631 for 2" well or 0.6524 for 4" well) * 3 well vols</i>		
Method of Purging	NA		
Method of Sampling	NA		

Comments: Not enough water to collect a sample. Oil-water interface probe has a strong hydrocarbon odor. Was unable to lock well due to metal casing deformation.

Product recovery sock was observed in the metal casing of the well; but not low enough to be in the water. Left sock in well.

Describe Deviations from SOP:

Signature: B. Miller Date: 2/27/2013

Signature: Brooke Hart Date: 2/27/2013



Water Sample Collection Form

Sample Location	Davis #1	Client	Williams Field Services, LLC
Sample Date	2/27/2013	Project Name	Historical Groundwater
Sample Time	2:38	Project #	034013001
Sample ID	MW-4	Sampler	Brooke Herb
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	59.87	TD of Well	67.68
Time	12:15	Depth to Product	NA
Vol. of H ₂ O to purge	7.81 * 0.1631 = 1.25 * 3 = 3.75 <i>(height of water column * 0.1631 for 2" well or 0.6524 for 4" well) * 3 well vols</i>		
Method of Purging	PVC Bailer		
Method of Sampling	PVC Bailer		

Time	Vol. Removed (gallons)	Total Vol H ₂ O removed (gallons)	pH (standard units)	Temp. (°C)	Conductivity (ms)	Comments
12:15	0.25	0.25	7.25	15.0	5.34	Brown, very silty
	0.25	0.50	7.20	15.3	5.26	No change
	0.25	0.75	7.23	15.3	5.19	No change
	0.25	1.00	7.22	15.2	5.14	No change
	0.50	1.50	7.24	15.2	5.21	No change
	0.50	2.00	7.23	15.2	5.09	No change
	0.75	2.75	7.25	15.1	5.05	No change
	0.25	3.00	7.28	15.2	5.13	No change
	0.25	3.25	7.30	15.3	5.11	No change
	0.25	3.50	7.31	15.2	5.12	No change
13:11	0.25	3.75	7.31	15.3	5.11	No change

Comments: _____

Describe Deviations from SOP: _____

Signature: Brooke Herb Date: 2/27/2013



Water Sample Collection Form

Sample Location	Davis #1	Client	Williams Field Services, LLC
Sample Date	2/27/2013	Project Name	Historical Groundwater
Sample Time	NA	Project #	034013001
Sample ID	MW-5	Sampler	Brooke Herb
Analyses	NA		
Matrix	Groundwater	Laboratory	NA
Turn Around Time	NA	Shipping Method	NA
Depth to Water	63.19	TD of Well	NM
Time	12:10	Depth to Product	60.94
Vol. of H2O to purge	<i>(height of water column * 0.1631 for 2" well or 0.6524 for 4" well) * 3 well vols</i>		
Method of Purging	NA		
Method of Sampling	NA		

Comments: No sample was collected due to the presence of product.

Well contained tubing to total depth. The tubing was removed from the well; the bottom 3 feet of tubing were black. The tubing was discarded.

PVC is loose within the casing.

Describe Deviations from SOP:

Signature: Brooke Huber **Date:** 2/27/2013



Water Sample Collection Form

Sample Location	Davis #1	Client	Williams Field Services, LLC
Sample Date	2/27/2013	Project Name	Historical Groundwater
Sample Time	12:07	Project #	034013001
Sample ID	MW-6	Sampler	Brooke Herb
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	60.68	TD of Well	62.75
Time	11:20	Depth to Product	NA
Vol. of H2O to purge	$2.07 * 0.1631 = 0.33 * 3 = 0.99$ <i>(height of water column * 0.1631 for 2" well or 0.6524 for 4" well) * 3 well vols</i>		
Method of Purging	PVC Bailer		
Method of Sampling	PVC Bailer		

Comments:

Describe Deviations from SOP:

Signature: Brooke Hest **Date:** 2/27/2013



Water Sample Collection Form

Sample Location	Davis #1	Client	Williams Field Services, LLC
Sample Date	2/27/2013	Project Name	Historical Groundwater
Sample Time	11:15	Project #	034013001
Sample ID	MW-7	Sampler	Brooke Herb
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	58.68	TD of Well	67.40
Time	10:10	Depth to Product	NA
Vol. of H ₂ O to purge	8.72 * 0.1631 = 1.42 * 3 = 4.26 (height of water column * 0.1631 for 2" well or 0.6524 for 4" well) * 3 well vols		
Method of Purging	PVC Bailer		
Method of Sampling	PVC Bailer		

Time	Vol. Removed (gallons)	Total Vol H ₂ O removed (gallons)	pH (standard units)	Temp. (°C)	Conductivity (ms)	Comments
10:10	0.25	0.25	7.25	14.9	5.51	Light brown, silty, no sheen, no HC odor
	0.25	0.50	7.26	14.7	5.50	No change
	0.25	0.75	7.37	14.5	5.45	More silt
	0.25	1.00	7.39	14.7	5.42	No change
	0.25	1.25	7.36	14.6	5.46	No change
	0.25	2.00	7.24	14.6	5.50	Very silty
	0.50	2.50	7.39	14.6	5.49	No change
	0.50	3.00	7.34	14.4	5.37	No change
	0.50	3.50	7.41	14.7	5.43	No change
	0.25	3.75	7.41	14.7	5.38	No change
	0.25	4.00	7.36	14.7	5.35	No change
	0.25	4.25	7.37	14.7	5.44	No change
11:15	0.25	4.50	7.38	14.7	5.35	No change

Comments: _____

Describe Deviations from SOP: _____

Signature: Brooke Herb Date: 2/27/2013

