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2014 AGWMR

04 / 10 / 2015

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One Williams Center
P.O. Box 645
Tulsa, OK 74101-0645

April 10, 2014

Glenn Von Gonten
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Online Submission of 2014 Annual Groundwater Reports

Dear Mr. Von Gonten,

Williams Field Services (Williams) is electronically submitting the attached 2014 annual groundwater monitoring reports covering the period from January 1, 2014 to December 31, 2014 for the following sites:

- Davis #1 (3RP-311-0);
- Dogie East Pit (3RP-312-0);
- Florance #40 (3RP-315-0);
- Florance #47X (3RP-317-0);
- Ice Canyon Drip (3RP-322-0);
- Jicarilla Contract #147-6 (3RP-325-0); and
- Pritchard #2A (3RP-339-0).

If you have any questions regarding these reports please contact me at 918-573-4371 or Danny.Reutlinger@Williams.com or Ashley Ager with LT Environmental at 970-385-1096 or aager@ltenv.com.

Sincerely,
Williams Field Services

Danny L. Reutlinger

Danny Reutlinger
Senior Project Manager

cc:
Attachments (7)

2014 ANNUAL GROUNDWATER REPORT

JICARILLA CONTRACT 147-6
ADMINISTRATIVE/ENVIRONMENTAL ORDER NUMBER 3RP-325-0

APRIL 2015

Prepared for:

WILLIAMS FIELD SERVICES, LLC
Tulsa, Oklahoma

2014 ANNUAL GROUNDWATER REPORT

JICARILLA CONTRACT 147-6
ADMINISTRATIVE/ENVIRONMENTAL ORDER NUMBER
3RP-325-0

APRIL 2015

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 Jicarilla Contract 147-6 natural gas production well (Administrative/ Environmental Order Number 3RP-325-0) (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 operated by Gas Company of New Mexico (GCNM). Impacted soil was excavated in 1998 and five monitoring wells (MW-1, MW-2, MW-3, MW-4, and MW-5) were installed in 1999 to assess groundwater quality. Based on the results of initial groundwater sampling, additional monitoring wells were installed in the downgradient direction (MW-5, MW-6, MW-7, MW-8, and MW-9) and one well was installed upgradient (MW-10). Over time, three monitoring wells located near a wash adjacent to the Site were destroyed by erosion (MW-4, MW-5, and MW-7). Williams Field Services, LLC (Williams) purchased the GCNM facility from Public Service Company of New Mexico (PNM) in 2000 and assumed environmental liability for the Site. Since that time, Williams has monitored groundwater quality. In 2013, Williams installed two monitoring wells (MW-11 and MW-12) to better understand current site conditions. Between January 2014 and December 2014, LT Environmental Inc., (LTE) was retained by Williams to conduct two groundwater monitoring events (June 2014 and December 2014). LTE measured depth to water for all existing monitoring wells and sampled groundwater from monitoring wells MW-3, MW-6, and MW-12 in June 2014 and December 2014.

Groundwater monitoring wells MW-3 and MW-6 contained BTEX in excess of the NMWQCC groundwater standards during the two 2014 monitoring events. Monitoring well MW-12 did not contain detectable BTEX concentrations during the two 2014 sampling events.

Impacted groundwater is delineated by monitoring wells MW-3 and MW-6 near the wash adjacent to the Site, which is downgradient from the original source area. Williams will monitor groundwater elevations and presence of PSH in the existing monitoring wells quarterly during 2015. Williams will sample groundwater from monitoring well MW-12 quarterly until eight consecutive quarters with BTEX concentrations compliant with NMWQCC standards have been obtained. Williams will sample groundwater from monitoring wells containing elevated BTEX concentrations (MW-3 and MW-6) annually. Additionally, Williams will evaluate potential remediation options for dissolved-phase BTEX.

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 January 2014 through December 2014 at the Jicarilla Contract 147-6 natural gas production well (Administrative/Environmental Order Number 3RP-325-0) (Site). The scope of work for this project was continued monitoring of petroleum hydrocarbon impacts to groundwater as a result of a release from a former dehydrator pit.

1.1 LOCATION

The Site is located at latitude 36.433803 and longitude -107.403562 in Unit C, Section 6, Township 25 North, Range 5 West (Figure 1). The Site is adjacent to a tributary to Tapacito Creek, which drains into Largo Wash, in the San Juan Basin of Rio Arriba County, New Mexico.

1.2 HISTORY

The source of groundwater impact is a former unlined dehydrator pit operated by Gas Company of New Mexico (GCNM). In July 1998, over 12,000 cubic yards of impacted soil were excavated from the Site. A groundwater sample collected from the excavation at approximately 26 feet below ground surface (bgs) contained 1,400 micrograms per liter (µg/L) of benzene, 4,500 µg/L of toluene, 580 µg/L of ethylbenzene, and 6,800 µg/L of total xylenes. In January 1999, five groundwater monitoring wells were installed. Based on the results of groundwater sampling, an additional five groundwater monitoring wells were installed at an unknown time. Over time, three monitoring wells located near a wash adjacent to the Site were destroyed by erosion (MW-4, MW-5, and MW-7). Records regarding these activities can be found in previous groundwater reports submitted to the New Mexico Oil Conservation Division (NMOCD). Williams purchased the GCNM facility from Public Service Company of New Mexico (PNM) in 2000, including environmental liability from the former unlined dehydrator pit. Between 2000 and December 2012, Williams monitored groundwater quality in the monitoring wells at the Site. Williams installed two groundwater monitoring wells (MW-11 and MW-12) on October 21, 2013 to better understand current site conditions.

2.0 METHODOLOGY

During 2014, LTE monitored groundwater in June 2014 and December 2014. Groundwater monitoring consisted of measuring groundwater elevations at all nine groundwater monitoring wells and sampling groundwater in monitoring wells MW-3, MW-6, and MW-12. Monitoring wells MW-1, MW-2, MW-8, and MW-9 were not sampled since there are eight previous quarters of sampling documenting BTEX concentrations compliant with NMWQCC standards in those wells. Monitoring well MW-10 is an upgradient monitoring well that has never contained concentrations of BTEX in excess of NWQCC standards. A small thickness of phase-separated hydrocarbons (PSH) was detected during one sampling event in 2013, but previous and subsequent sampling results suggest the oil/water interface probe malfunctioned at that time. Monitoring well MW-11 did not contain BTEX in excess of NMWQCC concentrations upon installation, so it has not been sampled again.

2.1 WATER LEVEL MEASUREMENTS

LTE measured depth to groundwater in the monitoring wells with a Keck oil/water interface probe. The presence of PSH 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 1.

2.2 GROUNDWATER SAMPLING

Prior to sampling groundwater, LTE measured depth to groundwater and total depth of monitoring wells with a Keck oil/water interface probe. 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 (plus or minus (±)0.4 units for pH, ±10 percent for electric conductivity, and ±2 degrees (º) Celsius for temperature). Purge water was containerized and disposed of at a facility designated by Williams. A copy of the 2014 field notes are presented in Appendix A.

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, packed on ice, and transferred to Hall Environmental Analysis Laboratory (HEAL) under chain-of-custody (COC) procedures for analysis of BTEX using United States Environmental Protection Agency Method 8021. 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. The COC forms are included in the laboratory analytical reports in Appendix B.

2.3 GROUNDWATER CONTOUR MAPS

LTE used existing top-of-casing well elevations and measured groundwater elevations to draft groundwater contours and determine groundwater flow direction for the June and December 2014 monitoring events (Figures 2 and 3). 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

Groundwater elevations calculated with depth to water data presented in Table 1 indicate groundwater flow direction is consistently to the north-northwest as depicted on Figures 2 and 3.

Groundwater monitoring wells MW-3 and MW-6 contained BTEX in excess of the NMWQCC groundwater standards during the two 2014 groundwater monitoring events. Monitoring well

MW-12 did not contain detectable BTEX concentrations during the two 2014 groundwater monitoring events. Table 2 summarizes the groundwater analytical results and copies of the laboratory reports can be found in Appendix B.

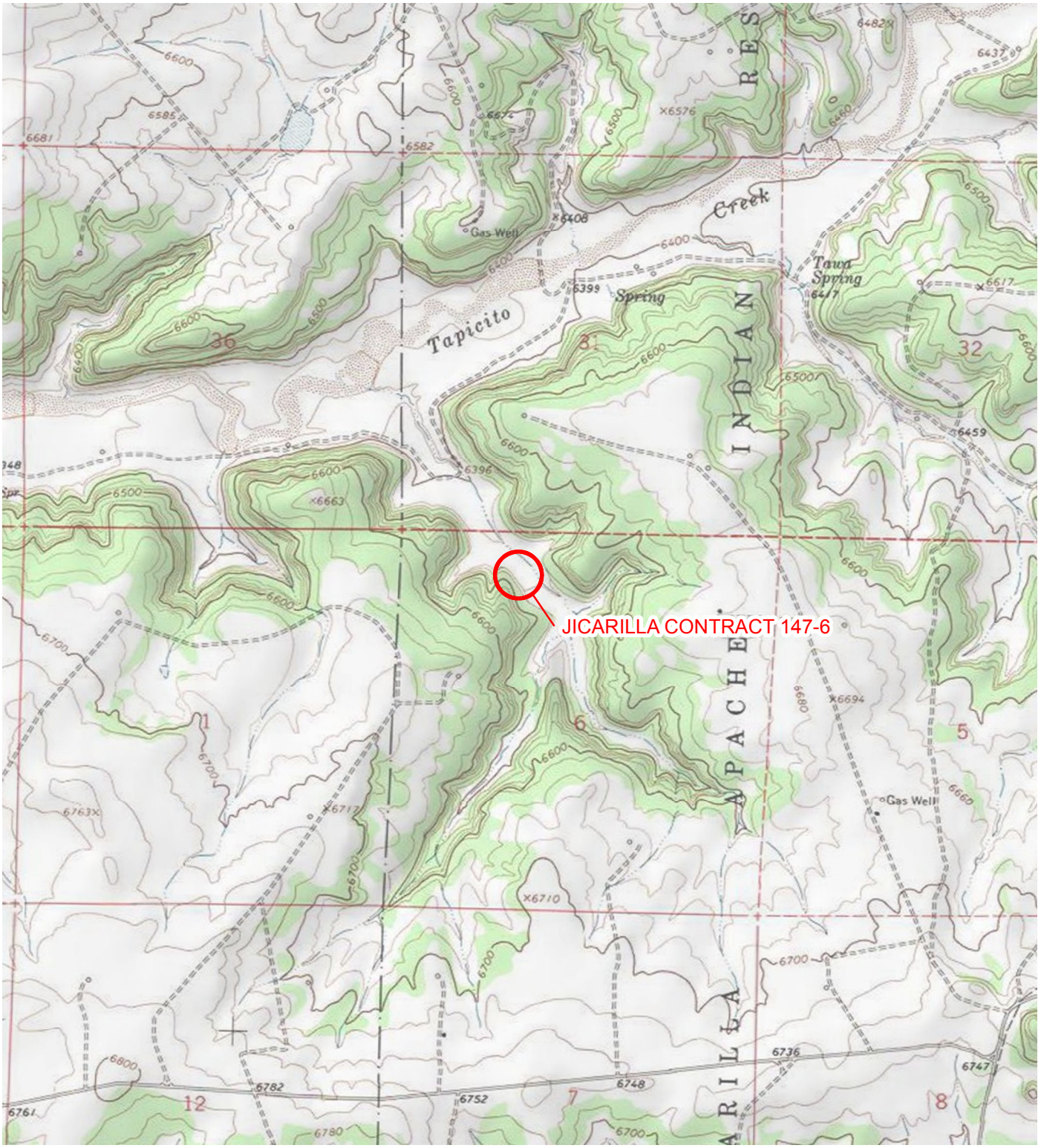
4.0 CONCLUSIONS

Impacted groundwater is delineated by monitoring wells MW-3 andMW-6 and exists near the wash adjacent to the Site, which is downgradient of the original source area.

5.0 RECOMMENDATIONS

Williams will monitor groundwater elevations and presence of PSH in all existing monitoring wells quarterly during 2015. Williams will sample groundwater from monitoring well MW-12 quarterly until eight consecutive quarters with BTEX concentrations compliant with NMWQCC groundwater standards have been obtained. Williams will sample groundwater from monitoring wells containing elevated BTEX concentrations (MW-3 and MW-6) annually. Using data from 2014 and 2015, Williams will evaluate potential remediation options.

FIGURES



LEGEND

SITE LOCATION

IMAGE COURTESY OF ESRI/BING MAPS

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Feet

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FIGURE 1
SITE LOCATION MAP
JICARILLA CONTRACT 147-6
RIO ARRIBA COUNTY, NEW MEXICO

WILLIAMS FIELD SERVICES, LLC

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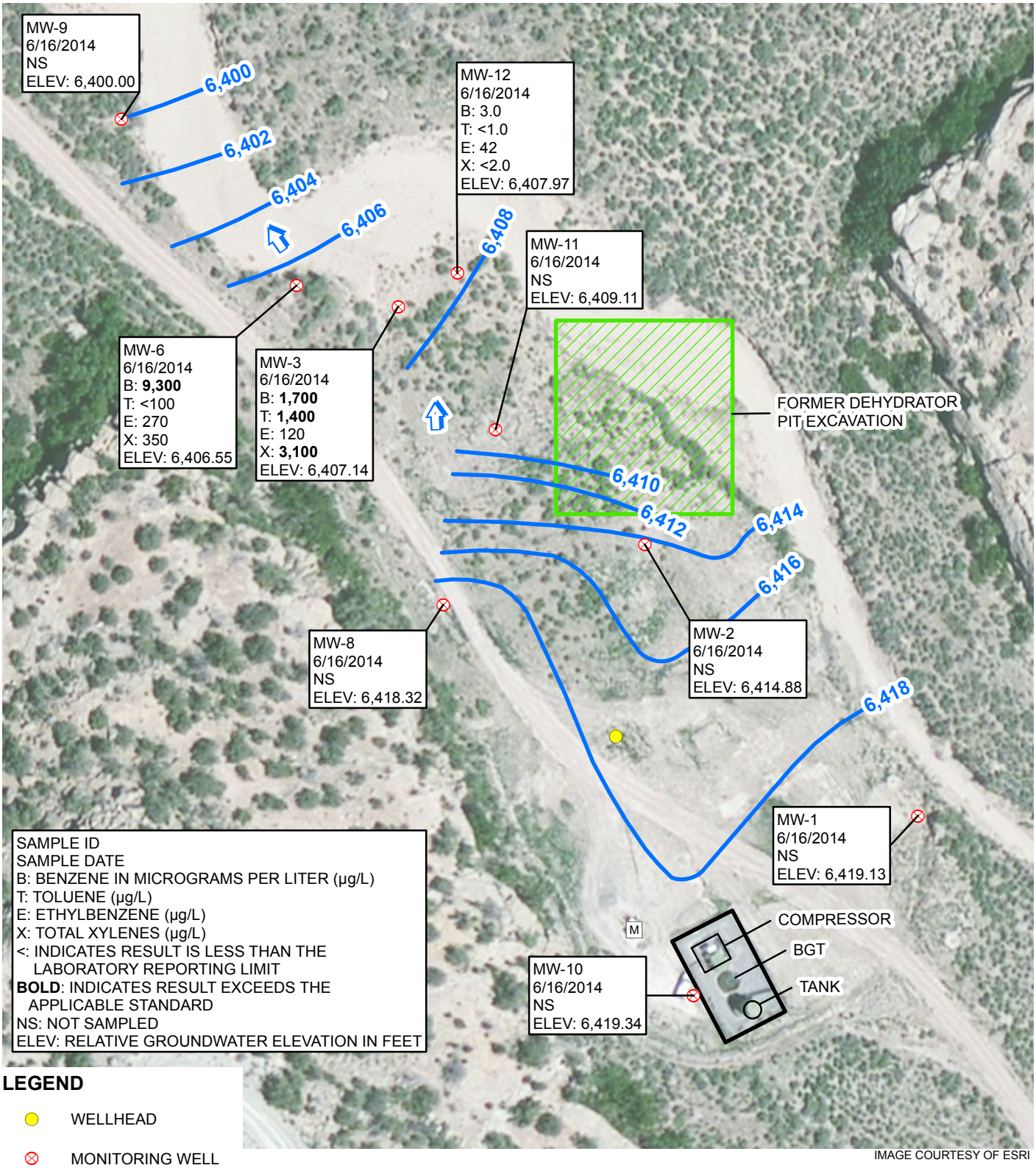

FIGURE 2
GROUNDWATER ELEVATION & ANALYTICAL RESULTS (JUNE 2014)
JICARILLA CONTRACT 147-6
RIO ARRIBA COUNTY, NEW MEXICO
WILLIAMS FIELD SERVICES, LLC

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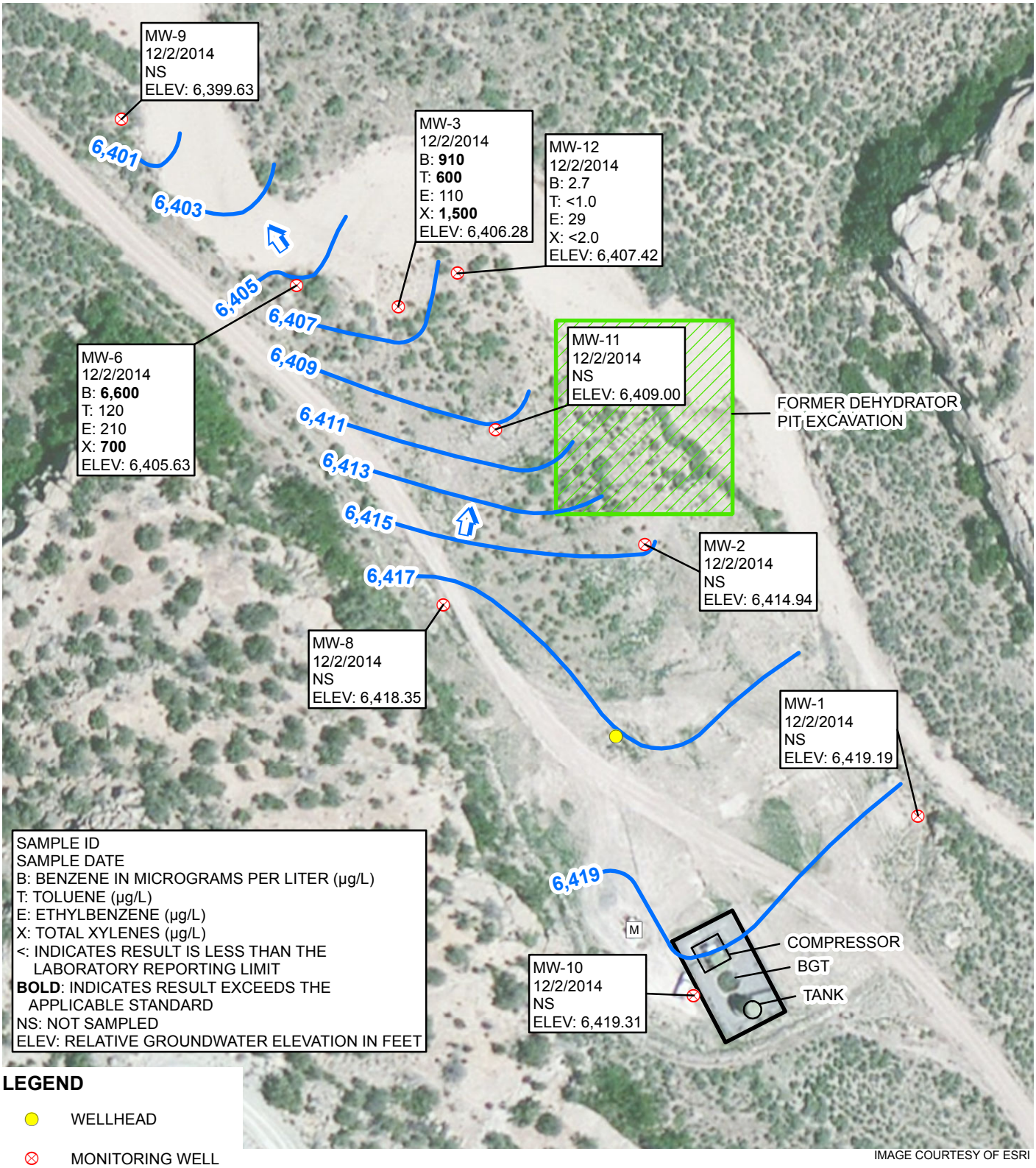

FIGURE 3
GROUNDWATER ELEVATION & ANALYTICAL RESULTS (DECEMBER 2014)
JICARILLA CONTRACT 147-6
RIO ARRIBA COUNTY, NEW MEXICO
WILLIAMS FIELD SERVICES, LLC

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TABLES

TABLE 1

GROUNDWATER ELEVATIONS SUMMARY
JICARILLA CONTRACT 147-6
WILLIAMS FIELD SERVICES, LLC

Well ID	Date	Top of Casing Elevation (feet AMSL)	Depth to Groundwater (feet BTOC)	Depth to Product (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
MW-1	3/4/2013	6,435.75	21.85	NP	NP	6,413.90
MW-1**	6/25/2013	6,440.95	22.51	NP	NP	6,418.44
MW-1	12/2/2013	6,440.95	21.11	NP	NP	6,419.84
MW-1	6/16/2014	6,440.95	21.82	NP	NP	6,419.13
MW-1	12/2/2014	6,440.95	21.76	NP	NP	6,419.19
MW-2*	3/4/2013	6,432.70	22.34	22.33	0.01	6,411.17
MW-2**	6/25/2013	6,437.27	22.90	NP	NP	6,414.37
MW-2	12/2/2013	6,437.27	21.76	NP	NP	6,415.51
MW-2	6/16/2014	6,437.27	22.39	NP	NP	6,414.88
MW-2	12/2/2014	6,437.27	22.33	NP	NP	6,414.94
MW-3	3/4/2013	6,422.80	21.26	NP	NP	6,401.54
MW-3**	6/25/2013	6,427.87	21.37	NP	NP	6,406.50
MW-3	12/2/2013	6,427.87	21.44	NP	NP	6,406.43
MW-3	6/16/2014	6,427.87	20.73	NP	NP	6,407.14
MW-3	12/9/2014	6,427.87	21.59	NP	NP	6,406.28
MW-4	3/4/2013	DEST	DEST	DEST	DEST	DEST
MW-5	3/4/2013	DEST	DEST	DEST	DEST	DEST
MW-6	3/4/2013	6,426.77	25.61	NP	NP	6,401.16
MW-6**	6/25/2013	6,431.94	26.14	NP	NP	6,405.80
MW-6	12/2/2013	6,431.94	26.08	NP	NP	6,405.86
MW-6	6/16/2014	6,431.94	25.39	NP	NP	6,406.55
MW-6	12/2/2014	6,431.94	26.31	NP	NP	6,405.63
MW-7	3/4/2013	DEST	DEST	DEST	DEST	DEST
MW-8	3/4/2013	6,430.33	16.36	NP	NP	6,413.97
MW-8**	6/25/2013	6,435.14	17.31	NP	NP	6,417.83
MW-8	12/2/2013	6,435.14	17.65	NP	NP	6,417.49
MW-8	6/16/2014	6,435.14	16.82	NP	NP	6,418.32
MW-8	12/2/2014	6,435.14	16.79	NP	NP	6,418.35
MW-9	3/4/2013	6,423.04	28.55	NP	NP	6,394.49
MW-9**	6/25/2013	6,428.08	28.83	NP	NP	6,399.25
MW-9	12/2/2013	6,428.08	28.65	NP	NP	6,399.43
MW-9	6/16/2014	6,428.08	28.08	NP	NP	6,400.00
MW-9	12/2/2014	6,428.08	28.45	NP	NP	6,399.63
MW-10*	3/4/2013	6,435.38	20.90	20.89	0.01	6,415.29
MW-10**	6/25/2013	6,440.48	21.59	NP	NP	6,418.89
MW-10	12/2/2013	6,440.48	20.93	NP	NP	6,419.55
MW-10	6/16/2014	6,440.48	21.14	NP	NP	6,419.34
MW-10	12/2/2014	6,440.48	21.17	NP	NP	6,419.31
MW-11	12/2/2013	6,433.46	24.38	NP	NP	6,409.08
MW-11	6/16/2014	6,433.46	24.35	NP	NP	6,409.11
MW-11	12/2/2014	6,433.46	24.46	NP	NP	6,409.00
MW-12	12/2/2013	6,429.62	21.87	NP	NP	6,407.75
MW-12	6/16/2014	6,429.62	21.65	NP	NP	6,407.97
MW-12	12/2/2014	6,429.62	22.20	NP	NP	6,407.42

Notes:
* - Interface probe appeared to be malfuntioning and presence of product is unlikely
** - Top of casing elevation was resurveyed on 6/19/13
AMSL - Above Mean Sea Level
BTOC - Below Top of Casing
DEST - well has been destroyed
NP - No Product

TABLE 2

GROUNDWATER LABORATORY ANALYTICAL RESULTS
JICARILLA CONTRACT 147-6
WILLIAMS FIELD SERVICES, LLC

Well Name	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standard (µg/L)		**10**	**750**	**750**	**620**
MW-1	1/28/1999	<0.5	1.5	<0.5	2.6
MW-1	4/14/1999	<0.5	<0.5	<0.5	<1.5
MW-1	9/27/1999	<0.5	<0.5	<0.5	<1.5
MW-1	11/15/1999	<0.5	<0.5	<0.5	<1.5
MW-1	2/13/2001	<1	<1	<1	<1
MW-1	5/9/2001	<1	<1	<1	<1
MW-1	11/2/2001	<1.0	3.1	<2.0	<2.0
MW-1	3/20/2010	<1.0	<1.0	<1.0	<3.0
MW-1	6/22/2010	<1.0	<1.0	<1.0	<3.0
MW-1	9/16/2010	<1.0	<1.0	<1.0	<3.0
MW-1	12/8/2010	<1.0	<1.0	<1.0	<3.0
MW-1	3/10/2011	<1.0	<1.0	<1.0	<3.0
MW-1	6/15/2011	<1.0	<1.0	<1.0	<3.0
MW-1	9/13/2011	<1.0	<1.0	<1.0	<3.0
MW-1	1/6/2012	<1.0	<1.0	<1.0	<3.0
MW-1	4/6/2012	<1.0	<1.0	<1.0	<3.0
MW-1	6/12/2012	<1.0	<1.0	<1.0	<3.0
MW-1	9/27/2012	<1.0	<1.0	<1.0	<3.0
MW-1	12/7/2012	<1.0	<1.0	<1.0	<3.0
MW-1	3/4/2013	<1.0	<1.0	<1.0	<2.0
MW-1	6/25/2013	<2.0	<2.0	<2.0	<4.0
MW-2	1/28/1999*	**490**	38	<5	**1700**
MW-2	4/14/1999*	**230**	<5	<5	**671**
MW-2	10/14/1999	**55**	<0.5	2.6	**196.5**
MW-2	11/15/1999	**130**	<0.5	15	**272**
MW-2	3/20/2000	**140**	5.3	120	**440***
MW-2	6/6/2000	**52**	<0.5	48	46
MW-2	2/13/2001	**124**	14.8	72.3	**681**
MW-2	5/9/2001	**35.4**	15.1	27	23
MW-2	11/2/2001	**150**	3.4	120	**1200**
MW-2	9/24/2003	**2.8**	5.1	2.8	<5.0
MW-2	12/17/2003	**2.5**	5.9	<2.0	<5.0
MW-2	9/19/2004	<2.0	3.2	<2.0	<5.0
MW-2	12/4/2004	<2.0	2.4	<2.0	<5.0
MW-2	3/9/2005*	**23**	13	<10	<25
MW-2	9/17/2005	**<2.0**	<2.0	4.3	<5.0
MW-2	12/1/2005	<2.0	2.8	<2.0	<5.0
MW-2	3/20/2010	<1.0	<1.0	<1.0	<3.0
MW-2	6/22/2010	<1.0	<1.0	<1.0	<3.0
MW-2	9/16/2010	<1.0	<1.0	<1.0	4.8
MW-2	12/8/2010	<1.0	<1.0	<1.0	<3.0
MW-2	3/10/2011	<1.0	<1.0	<1.0	<3.0
MW-2	6/15/2011	<1.0	<1.0	<1.0	<3.0
MW-2	9/13/2011	<1.0	<1.0	<1.0	17.8
MW-2	1/6/2012	<1.0	<1.0	<1.0	<3.0
MW-2	4/6/2012	<1.0	<1.0	<1.0	<3.0
MW-2	6/12/2012	<1.0	<1.0	<1.0	<3.0
MW-2	9/27/2012	<1.0	<1.0	<1.0	18.5
MW-2	12/7/2012	<1.0	<1.0	<1.0	<3.0
MW-2	3/4/2013	NSP	NSP	NSP	NSP
MW-2	6/25/2013	<2.0	<2.0	8.1	19

TABLE 2

GROUNDWATER LABORATORY ANALYTICAL RESULTS
JICARILLA CONTRACT 147-6
WILLIAMS FIELD SERVICES, LLC

Well Name	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standard (µg/L)		**10**	**750**	**750**	**620**
MW-3	1/28/1999	**7,100**	**5,900**	260	**4,130**
MW-3	4/14/1999	**6,700**	**3,100**	220	**3,360**
MW-3	9/27/1999*	**5,800**	**2,800**	260	**3,560**
MW-3	11/15/1999*	**5,200**	**1,800**	200	**2,970**
MW-3	3/20/2000*	**3,900**	**460**	230	**1,710**
MW-3	6/7/2000*	**4,400**	**64**	190	**1,232**
MW-3	2/13/2001	**7,250**	**1,660**	305	**5,800**
MW-3	5/9/2001	**7,810**	**1,860**	531	**7,610**
MW-3	11/2/2001	**6,700**	**7,400**	420	**7,900**
MW-3	9/24/2003*	**5,800**	**7,300**	320	**5,700**
MW-3	12/17/2003	**4,900**	**5,300**	280	**5,200**
MW-3	9/19/2004*	**5,400**	**9,500**	310	**6,500**
MW-3	12/4/2004*	**5,700**	**11,000**	330	**7,100**
MW-3	3/9/2005*	**4,700**	**7,900**	280	**5,600**
MW-3	6/16/2005*	**6,100**	**9,800**	380	**6,600**
MW-3	9/17/2005	**4,500**	**10,000**	260	**5,900**
MW-3	12/1/2005*	**5,570**	**9,970**	324	**6,760**
MW-3	3/20/2010	**3,590**	**1,990**	252	**2,310**
MW-3	6/22/2010	**2,710**	**1,080**	191	**1,170**
MW-3	9/16/2010	**3,240**	**3,630**	219	**2,210**
MW-3	12/8/2010	**2,950**	**3,380**	229	**1,900**
MW-3	3/10/2011	**1,800**	729	122	**1,900**
MW-3	6/15/2011	**2,150**	**1,710**	124	**1,000**
MW-3	9/13/2011	**3,460**	**4,500**	330	**4,670**
MW-3	1/6/2012	**1,790**	**1,970**	144	**1,400**
MW-3	4/6/2012	**1,900**	127	**955**	**1,040**
MW-3	6/12/2012	**2,700**	203	**4,990**	**2,890**
MW-3	9/27/2012	**2,070**	194	**4,380**	**2,690**
MW-3	12/7/2012	**1,650**	145	**1,810**	**1,630**
MW-3	3/4/2013	**1,200**	720	88	**680**
MW-3	6/25/2013	**2,300**	**3,300**	250	**4,000**
MW-3	12/2/2013	**2,900**	**7,700**	350	**5,700**
MW-3	6/16/2014	**1,700**	**1,400**	120	**3,100**
MW-3	12/2/2014	**910**	**600**	110	**1,500**
MW-4	1/28/1999*	**1500**	**10,000**	**810**	**9,300**
MW-4	4/14/1999*	**280**	30	5.0	500
MW-4	9/27/1999	**56**	<0.5	3.6	22
MW-4	11/15/1999	**120**	<0.5	8.1	41.5
MW-4	3/20/2000	**250**	<0.5	45	47
MW-4	6/7/2000	**270**	1.6	5.6	10.2
MW-4	2/13/2001	**353**	3.85	69.5	59.8
MW-4	5/9/2001	**684**	6.10	110	97.2
MW-4	11/2/2001	**480**	7.9	84	34
MW-4	9/24/2003	**190**	45	57	60
MW-4	12/17/2003	**200**	2.9	58	<5.0
MW-4	12/4/2004	**170**	<2.0	49	<5.0
MW-4	9/19/2004	**55**	<2.0	14	<5.0
MW-4	3/9/2005	**68**	<2.0	22	18
MW-4	6/16/2005	**130**	<2.0	40	<5.0
MW-4	9/17/2005	**100**	<2.0	38	55
MW-4	12/6/2005	**100**	<2.0	36.6	<5.0
MW-4	4/6/2012	NS	NS	NS	NS

TABLE 2

GROUNDWATER LABORATORY ANALYTICAL RESULTS
JICARILLA CONTRACT 147-6
WILLIAMS FIELD SERVICES, LLC

Well Name	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standard (µg/L)		**10**	**750**	**750**	**620**
MW-4	6/12/2012	NS	NS	NS	NS
MW-4	9/27/2012	NS	NS	NS	NS
MW-4	12/7/2012	NS	NS	NS	NS
MW-4**	3/4/2013	<2.0	<2.0	<2.0	<4.0
MW-4**	6/25/2013	DEST	DEST	DEST	DEST
MW-5	1/28/1999*	**1,600**	**10,000**	**820**	**9,500**
MW-5	4/14/1999*	**310**	**26**	**3.6**	**479**
MW-5	9/27/1999	<0.5	<0.5	1.5	2
MW-5	11/15/1999*	<2.5	6	39.0	<3.0
MW-5	3/20/2000	5.1	<0.5	210.0	8.0
MW-5	6/7/2000	1.5	<0.5	3.3	2.9
MW-5	2/13/2001	3.49	<1	222	31.5
MW-5	5/9/2001	4.68	20.8	244	28.7
MW-5	11/2/2001	2.8	<2.0	200	13
MW-5	3/4/2013	DEST	DEST	DEST	DEST
MW-6	9/27/1999*	**16,000**	460.0	280	**1,299**
MW-6	11/15/1999*	**20,000**	940	330	**1,640**
MW-6	3/20/2000*	**18,000**	630	380	**1,530**
MW-6	6/7/2000*	**19,000**	820	370	**1,960**
MW-6	2/13/2001	**22,300**	60	358	**1,560**
MW-6	5/9/2001	**33,900**	**2,310**	577	**3,820**
MW-6	11/2/2001	**31,000**	**2,200**	730	**4,500**
MW-6	9/24/2003*	**18,000**	**1,200**	370	**2,000**
MW-6	12/17/2003*	**21,000**	<400	500	**2,200**
MW-6	12/4/2004*	**16,000**	120	360	**1,800**
MW-6	9/19/2004*	**18,000**	**1,900**	380	**2,300**
MW-6	3/9/2005*	**19,000**	**810**	410	**2,100**
MW-6	6/16/2005*	**24,000**	<400	620	**2,500**
MW-6	9/17/2005	**15,000**	370	380	**1,400**
MW-6	12/1/2005*	**15,600**	**957**	460	**2,580**
MW-6	3/20/2010	**19,400**	**10,900**	570	**3,330**
MW-6	6/22/2010	**13,500**	<100	411	**16,740**
MW-6	9/16/2010	**10,200**	**2,190**	280	**1,410**
MW-6	12/8/2010	**10,000**	495	380	**1,510**
MW-6	3/10/2011	**13,000**	**4,260**	380	**1,740**
MW-6	6/15/2011	**14,400**	518	364	**1,450**
MW-6	9/13/2011	**12,300**	**2,570**	498	**2,730**
MW-6	1/6/2012	**11,600**	730	339	**1,660**
MW-6	4/6/2012	**13,800**	333	**3,070**	**1,590**
MW-6	6/12/2012	**13,000**	406	**1,010**	**1,560**
MW-6	9/27/2012	**10,300**	360	**3,430**	**2,070**
MW-6	12/7/2012	**10,200**	315	**1,540**	**1,760**
MW-6	3/4/2013	**7,900**	180	5.4	300
MW-6	6/25/2013	**10,000**	270	340	**920**
MW-6	12/2/2013	**8,400**	250	250	**930**
MW-6	6/16/2014	**9,300**	<100	270	350
MW-6	12/2/2014	**6,600**	120	210	**700**
MW-7	10/14/1999	**30**	120	8.9	165
MW-7	11/15/1999	0.5	1.3	0.5	4.6
MW-7	3/20/2000	5.5	0.8	0.9	4.7

TABLE 2

GROUNDWATER LABORATORY ANALYTICAL RESULTS
JICARILLA CONTRACT 147-6
WILLIAMS FIELD SERVICES, LLC

Well Name	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standard (µg/L)		**10**	**750**	**750**	**620**
MW-7	6/7/2000	<0.5	<0.5	<0.5	<1.5
MW-7	2/13/2001	<1	<1	<1	<1
MW-7	5/9/2001	4.00	<1	<1	<1
MW-7	11/2/2001	**16**	<2.0	<2.0	2
MW-7	4/6/2012	NS	NS	NS	NS
MW-7	6/12/2012	NS	NS	NS	NS
MW-7	9/27/2012	NS	NS	NS	NS
MW-7	12/7/2012	NS	NS	NS	NS
MW-7	3/4/2013	DEST	DEST	DEST	DEST
MW-8	3/20/2000*	**2,400**	**2,300**	55.0	540
MW-8	6/7/2000*	**1,100**	**130**	27.0	106.7
MW-8	2/13/2001	**613**	16.2	13.0	12.4
MW-8	5/9/2001	**182**	3.65	6.98	2.41
MW-8	11/2/2001	**370**	<2.0	8.9	2.0
MW-8	9/24/2003	**78**	2.2	4.2	<5.0
MW-8	12/17/2003	**55**	<2.0	3.2	<5.0
MW-8	12/4/2004	**19**	<2.0	<2.0	<5.0
MW-8	9/19/2004	**81**	<2.0	2.8	<5.0
MW-8	3/9/2005	**210***	4.6	5.2	8.6
MW-8	6/16/2005	**43**	<2.0	<2.0	<5.0
MW-8	9/17/2005	**38**	<2.0	<2.0	<5.0
MW-8	12/1/2005	**23**	<2.0	<2.0	<5.0
MW-8	3/20/2010	6.3	<1.0	<1.0	<3.0
MW-8	6/22/2010	3.0	<1.0	<1.0	<3.0
MW-8	9/16/2010	**22.9**	<1.0	<1.0	<3.0
MW-8	12/8/2010	<1.0	<1.0	<1.0	<3.0
MW-8	3/10/2011	2	<1.0	<1.0	<3.0
MW-8	6/15/2011	4.1	<1.0	<1.0	<3.0
MW-8	9/13/2011	1.9	<1.0	<1.0	<3.0
MW-8	1/6/2012	2.4	<1.0	<1.0	<3.0
MW-8	4/6/2012	<1.0	<1.0	<1.0	<3.0
MW-8	6/12/2012	2.5	<1.0	<1.0	<3.0
MW-8	9/27/2012	<1.0	<1.0	<1.0	<3.0
MW-8	12/7/2012	<1.0	<1.0	<1.0	<3.0
MW-8	3/4/2013	<1.0	<1.0	<1.0	<2.0
MW-9	3/20/2000	<0.5	1.4	<0.5	1.5
MW-9	6/7/2000	<0.5	<0.5	<0.5	<1.5
MW-9	2/13/2001	<1	<1	<1	<1
MW-9	5/9/2001	<1	<1	<1	<1
MW-9	11/2/2001	150	<2.0	<2.0	<2.0
MW-9	9/24/2003	86	<2.0	<2.0	<5.0
MW-9	12/17/2003	69	<2.0	<2.0	<5.0
MW-9	12/4/2004	5.2	<2.0	<2.0	<5.0
MW-9	9/19/2004	45	<2.0	<2.0	<5.0
MW-9	3/9/2005	3.8	<2.0	<2.0	<5.0
MW-9	6/16/2005	<2.0	<2.0	<2.0	<5.0
MW-9	9/17/2005	<2.0	<2.0	<2.0	<5.0
MW-9	12/1/2005	<2.0	<2.0	<2.0	<5.0
MW-9	3/20/2010	<1.0	<1.0	<1.0	<3.0
MW-9	6/22/2010	<1.0	<1.0	<3.0	<3.0
MW-9	9/16/2010	8.6	<1.0	<1.0	<3.0

TABLE 2

GROUNDWATER LABORATORY ANALYTICAL RESULTS
JICARILLA CONTRACT 147-6
WILLIAMS FIELD SERVICES, LLC

Well Name	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Standard (µg/L)		**10**	**750**	**750**	**620**
MW-9	12/8/2010	7.8	<1.0	<1.0	<3.0
MW-9	3/10/2011	<1.0	<1.0	<1.0	<3.0
MW-9	6/15/2011	<1.0	<1.0	<1.0	<3.0
MW-9	9/13/2011	<1.0	<1.0	<1.0	<3.0
MW-9	1/6/2012	<1.0	<1.0	<1.0	<3.0
MW-9	4/6/2012	<1.0	<1.0	<1.0	<3.0
MW-9	6/12/2012	<1.0	2.1	<1.0	<3.0
MW-9	9/27/2012	<1.0	<1.0	<1.0	<3.0
MW-9	12/7/2012	<1.0	<1.0	<1.0	<3.0
MW-9	3/4/2013	<2.0	<2.0	<2.0	<4.0
MW-9	6/25/2013	<2.0	<2.0	<2.0	<4.0
MW-10	3/20/2000	0.8	2.9	<0.5	1.5
MW-10	6/7/2000	<0.5	<0.5	<0.5	<1.5
MW-10	2/13/2001	<1	<1	1.5	<1
MW-10	5/9/2001	<1	<1	<1	<1
MW-10	11/2/2001	<1.0	<2.0	<2.0	<2.0
MW-10	4/6/2012	NS	NS	NS	NS
MW-10	6/12/2012	NS	NS	NS	NS
MW-10	9/27/2012	NS	NS	NS	NS
MW-10	12/7/2012	<1.0	<1.0	<1.0	<3.0
MW-10	3/4/2013	NSP	NSP	NSP	NSP
MW-10	6/25/2013	<2.0	<2.0	<2.0	<4.0
MW-11	12/2/2013	<1.0	6.5	2.7	39
MW-12	12/2/2013	**12**	<1.0	74	<2.0
MW-12	6/16/2014	3.0	<1.0	42	<2.0
MW-12	12/2/2014	2.7	<1.0	29	<2.0

Notes:

< - indicates result is less than laboratory reporting detection limit

* - indicates sample was diluted

** Sample identified as MW-4 on laboratory reports was later determined to be an unknown well and MW-4 was determined to be destroyed

µg/L - micrograms per liter

Bold - indicates sample exceeds NMWQCC standard

DEST - well has been destroyed

NMWQCC - New Mexico Water Quality Control Commission

NS - not sampled

NSC - not sampled due to eight quarters below NMWQCC standards

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

APPENDIX A

2014 FIELD NOTES

Water Sample Collection Form

Sample Location	Jicarilla Contract #147	Client	Williams Field Services
Sample Date	6/16/14	Project Name	San Juan Basin Remediation
Sample Time	1200	Project #	034013010
Sample ID	MW-3	Sampler	B Hero
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	20.73	TD of Well	23.04
Time	11:30	Depth to Product	NA

Vol. of H2O to purge: 2.91 x 1631 = 0.47 x 3 = 1.42

*(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 (gal.)	Total Vol H2O removed (gal.)	pH (std. units)	Temp. (Ø) F	Conductivity (us or ms)	Comments
1140	0.25	0.25	7.73	61.3	4.34	Yellowish clear, whitebugs
	0.20	0.45	7.80	59.5	4.14	HC odor
						Bailed Dry

Comments: Bailed dry after purging 0.20 gallons

Describe Deviations from SOP: Bailed dry before 3 casing volumes were purged

Signature: B Hero **Date:** 6/16/14

Water Sample Collection Form

Sample Location	Jicarilla Contract #147-C	Client	Williams Field Services
Sample Date	6/16/14	Project Name	San Juan Basin Remediation
Sample Time	1325	Project #	034013010
Sample ID	MW-C	Sampler	B Hess
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	25.39	TD of Well	31.50
Time	1300	Depth to Product	N/A

Vol. of H2O to purge: 6.11 x .1631 = .99 x 3 = 2.99

*(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 (gal.)	Total Vol H2O removed (gal.)	pH (std. units)	Temp. (°F)	Conductivity (us or ~~ms~~)	Comments
1300	0.25	0.25	8.24	62.1	8.20	Yellowish clear slight HC odor
	0.25	0.50	8.34	58.5	8.27	Gray clear minor silt
	0.25	0.75	8.35	56.1	8.39	no change
	0.25	1.00	8.35	56.5	8.43	"
	1.00	2.00	8.39	56.7	8.39	Blackish clear minor silt
	0.25	2.25	8.40	56.9	8.37	no change
	0.25	2.50	8.41	57.1	8.36	"
	0.25	2.75	8.41	57.2	8.33	"
	0.25	3.00	8.41	57.3	8.34	"

Comments: Water Reacted w/ HCl VOAs. Filled 3 non-preserved VOAs

Describe Deviations from SOP: See above

Signature: B Hess **Date:** 6/16/14

LTE

Water Sample Collection Form

Sample Location	Jicarilla Contract #147	Client	Williams Field Services
Sample Date	6/16/14	Project Name	San Juan Basin Remediation
Sample Time	1245	Project #	034013010
Sample ID	MW-12	Sampler	B Herb
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	21.45	TD of Well	31.84
Time	1210	Depth to Product	N/A

Vol. of H2O to purge: 10.19 x .1631 = 1.66 x 3 = 4.98
*(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 (gal.)	Total Vol H2O removed (gal.)	pH (std. units)	Temp. (C)F	Conductivity (us or ms)	Comments
1210	0.25	0.25	8.13	59.5	1902 us	Cloudy no odor minor silt
	0.25	0.50	8.17	59.5	1842 us	Brown silty
	0.25	0.75	8.27	56.7	1.99 ms	no change
	0.25	1.00	8.30	56.5	2.08 ms	"
	1.00	2.00	8.33	58.5	2.04	Grayish Brown Very silty
	1.00	3.00	8.38	58.5	1.98	Cloudy gray, less silt
	1.00	4.00	8.38	57.6	2.07	no change
	0.25	4.25	8.40	57.6	2.00	no change
	0.25	4.50	8.41	57.7	2.02	~~Clearish~~ "
	0.25	4.75	8.41	57.6	2.03	Clearish Gray minor silt
	0.25	5.00	8.42	57.7	2.04	Clear very minor silt

Comments:

Describe Deviations from SOP: NA

Signature: B Herb **Date:** 6/16/14

LTE

Water Sample Collection Form

Sample Location	Jicarilla Contract	Client	Williams Field Services
Sample Date	12/2/14	Project Name	San Juan Basin Remediation
Sample Time	1235	Project #	034013010
Sample ID	MW-6	Sampler	Daniel Newman
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Christine
Depth to Water	26.31	TD of Well	31.50
Time	1200	Depth to Product	N/A

Vol. of H2O to purge: 31.50 - 26.31 = 5.19 x 0.1631 = 0.846 x 3 = 2.53

*(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 (gal.)	Total Vol H2O removed (gal.)	pH (std. units)	Temp. (C)	Conductivity (us or ms)	Comments
1200	0.25	0.25	8.45	56.5	2.51	Black, sed, odor, No sheen
	0.25	0.50	8.47	56.7	2.51	No change
	0.25	0.75	8.43	56.7	2.52	NO change
	0.25	1.00	8.42	56.3	2.51	NO change
	0.50	1.50	8.41	56.1	2.53	NO change
	0.50	2.00	8.40	55.9	2.52	NO change
	0.50	2.50	8.42	56.1	2.54	NO change
	0.50	3.00	8.45	56.1	2.55	NO change

12/2/14

Comments: Fill 3 HCL VOAS
Purge 3 gallons
Decon Equipment

Describe Deviations from SOP: N/A

Signature: _____ **Date:** 12/2/14

Water Sample Collection Form

Sample Location	Jicarilla Contract	Client	Williams Field Services
Sample Date	12/2/14	Project Name	San Juan Basin Remediation
Sample Time	1310	Project #	034013010
Sample ID	MW-3	Sampler	Daniel Newman
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Christine
Depth to Water	21.59	TD of Well	23.44
Time	1250	Depth to Product	N/A

Vol. of H2O to purge: 23.44-21.59 = 1.85 x 0.1631 = .30 x 3 = ~~.90~~ 0.905

*(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 (gal.)	Total Vol H2O removed (gal.)	pH (std. units)	Temp. (C)	Conductivity (us or ms)	Comments
1250	.15	.15	7.81	57.0	1.51	clear Black, slight odor
	.10	~~.25~~	7.81	57.2	1.49	Black, sed NO sheen slight odor
	.10	0.35	7.81	57.1	1.50	NO change, Bailing down
	.10	0.45	7.81	57.2	1.50	NO change, Bailing down

12/2/14

Comments: 3 NON Preserve VOA's did Decon equipment Bail 0.45 gallons Bailing down

Describe Deviations from SOP: N/A Did not bail complete amount of water, Bailing down

Signature: _____ Date: 12/2/14

Water Sample Collection Form

Sample Location	Jicarilla Contract	Client	Williams Field Services
Sample Date	12/2/14	Project Name	San Juan Basin Remediation
Sample Time	1355	Project #	034013010
Sample ID	MW-12	Sampler	Daniel Newman
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Christine
Depth to Water	22.20	TD of Well	31.84
Time	1320	Depth to Product	NA

Vol. of H2O to purge: 31.84 - 22.20 = 9.64 x 0.1631 = 1.57 x 3 = 4.71

*(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 (gal.)	Total Vol H2O removed (gal.)	pH (std. units)	Temp. (C)	Conductivity (us or ms)	Comments
1320	0.25	0.25	8.11	57.9	1594	clear No sed, No odor sheen
	0.25	0.50	8.13	57.4	1627	clear, sed, NO odor, No sheen
	0.25	0.75	8.19	57.2	1747	NO change
	0.25	1.00	8.19	57.2	1794	Lt gray, sed, NO odor, No sheen
	0.50	1.50	8.27	57.0	1997	NO change
	0.50	2.00	8.35	56.8	1778	NO change
	1.00	3.00	8.85	56.7	1775	NO change
	0.50	3.50	8.17	56.8	1739	NO change
	0.50	4.00	8.15	56.8	1730	NO change
	0.50	4.50	8.16	56.8	1729	NO change
	0.25	4.75	8.15	56.8	1730	"

Comments:

Purge 4.75 gallons
Fill 3 HCL VOAs
Decon Equipment

Describe Deviations from SOP: N/A

Signature: [signature] **Date:** 12/2/14

APPENDIX B

LABORATORY ANALYTICAL REPORTS

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

June 20, 2014

Brook Herb
LTE
2243 Main Ave Suite 3
Durango, CO 81301
TEL: (970) 946-1093
FAX

RE: Jicarilla Contract 147-6 OrderNo.: 1406727

Dear Brook Herb:

Hall Environmental Analysis Laboratory received 4 sample(s) on 6/17/2014 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1406727**
Date Reported: **6/20/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Client Sample ID: MW-3
Project: Jicarilla Contract 147-6
Collection Date: 6/16/2014 12:00:00 PM
Lab ID: 1406727-001
Matrix: AQUEOUS
Received Date: 6/17/2014 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	1700	100	P	µg/L	100	6/18/2014 7:29:06 PM	R19363
Toluene	1400	100	P	µg/L	100	6/18/2014 7:29:06 PM	R19363
Ethylbenzene	120	100	P	µg/L	100	6/18/2014 7:29:06 PM	R19363
Xylenes, Total	3100	200	P	µg/L	100	6/18/2014 7:29:06 PM	R19363
Surr: 4-Bromofluorobenzene	106	82.9-139	P	%REC	100	6/18/2014 7:29:06 PM	R19363

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Client Sample ID: MW-6
Project: Jicarilla Contract 147-6
Collection Date: 6/16/2014 1:25:00 PM
Lab ID: 1406727-002
Matrix: AQUEOUS
Received Date: 6/17/2014 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	9300	100	P	µg/L	100	6/18/2014 7:57:44 PM	R19363
Toluene	ND	100	P	µg/L	100	6/18/2014 7:57:44 PM	R19363
Ethylbenzene	270	100	P	µg/L	100	6/18/2014 7:57:44 PM	R19363
Xylenes, Total	350	200	P	µg/L	100	6/18/2014 7:57:44 PM	R19363
Surr: 4-Bromofluorobenzene	104	82.9-139	P	%REC	100	6/18/2014 7:57:44 PM	R19363

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Client Sample ID: MW-12
Project: Jicarilla Contract 147-6
Collection Date: 6/16/2014 12:45:00 PM
Lab ID: 1406727-003
Matrix: AQUEOUS
Received Date: 6/17/2014 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	3.0	1.0		µg/L	1	6/18/2014 8:26:19 PM	R19363
Toluene	ND	1.0		µg/L	1	6/18/2014 8:26:19 PM	R19363
Ethylbenzene	42	1.0		µg/L	1	6/18/2014 8:26:19 PM	R19363
Xylenes, Total	ND	2.0		µg/L	1	6/18/2014 8:26:19 PM	R19363
Surr: 4-Bromofluorobenzene	121	82.9-139		%REC	1	6/18/2014 8:26:19 PM	R19363

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Client Sample ID: Trip Blank
Project: Jicarilla Contract 147-6
Collection Date:
Lab ID: 1406727-004
Matrix: TRIP BLANK
Received Date: 6/17/2014 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	6/18/2014 9:23:46 PM	R19363
Toluene	ND	1.0		µg/L	1	6/18/2014 9:23:46 PM	R19363
Ethylbenzene	ND	1.0		µg/L	1	6/18/2014 9:23:46 PM	R19363
Xylenes, Total	ND	2.0		µg/L	1	6/18/2014 9:23:46 PM	R19363
Surr: 4-Bromofluorobenzene	99.9	82.9-139		%REC	1	6/18/2014 9:23:46 PM	R19363

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1406727**

20-Jun-14

Client: LTE

Project: Jicarilla Contract 147-6

Sample ID	**5ML RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBW**	Batch ID:	**R19363**	RunNo:	**19363**					
Prep Date:		Analysis Date:	**6/18/2014**	SeqNo:	**560010**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	21		20.00		106	82.9	139			

Sample ID	**100NG BTEX LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSW**	Batch ID:	**R19363**	RunNo:	**19363**					
Prep Date:		Analysis Date:	**6/18/2014**	SeqNo:	**560011**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	112	80	120			
Toluene	22	1.0	20.00	0	109	80	120			
Ethylbenzene	22	1.0	20.00	0	111	80	120			
Xylenes, Total	66	2.0	60.00	0	110	80	120			
Surr: 4-Bromofluorobenzene	22		20.00		109	82.9	139			

Sample ID	**1406727-001AMS**	SampType:	**MS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**MW-3**	Batch ID:	**R19363**	RunNo:	**19363**					
Prep Date:		Analysis Date:	**6/18/2014**	SeqNo:	**560023**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3900	100	2000	1673	111	71	129			
Toluene	3600	100	2000	1360	112	68.4	135			
Ethylbenzene	2400	100	2000	124.6	112	69.4	135			
Xylenes, Total	9600	200	6000	3078	108	72.4	135			
Surr: 4-Bromofluorobenzene	2100		2000		107	82.9	139			

Sample ID	**1406727-001AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**MW-3**	Batch ID:	**R19363**	RunNo:	**19363**					
Prep Date:		Analysis Date:	**6/18/2014**	SeqNo:	**560024**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3700	100	2000	1673	99.4	71	129	6.40	20	
Toluene	3400	100	2000	1360	100	68.4	135	6.41	20	
Ethylbenzene	2200	100	2000	124.6	102	69.4	135	8.40	20	
Xylenes, Total	9000	200	6000	3078	97.9	72.4	135	6.63	20	
Surr: 4-Bromofluorobenzene	2200		2000		112	82.9	139	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: LTE | Work Order Number: 1406727 | RcptNo: 1

Received by/date: LM 06/17/14

Logged By: **Michelle Garcia** 6/17/2014 7:45:00 AM Michelle Garcia

Completed By: **Michelle Garcia** 6/17/2014 9:32:08 AM Michelle Garcia

Reviewed By: 06/17/14

Chain of Custody

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

Log In

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

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

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

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

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Yes			

Chain-of-Custody Record

Client: LT Environmental

Mailing Address: 2243 Main Ave Ste 3
Durango CO 81301

Phone #: 970.385.1096

email or Fax#: bherbe@lt-env.com

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: Jicarilla Contract 147-C

Project #: 03401 3010

Project Manager: Brooke Herb

Sampler: Brooke Herb

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.8

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

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1406727	BTEX + MTBE + TMBs (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
6/16/14	1200	GW	MW-3	VOA/3	1001	-001	X															
6/16/14	1325	GW	MW-6	VOA/3	1001	-002	X															
6/16/14	1245	GW	MW-12	VOA/3	HCl	-003	X															
			Trip Blank	VOA/2	HCl	-004	X															

Date	Time	Relinquished by:	Received by:	Date	Time
6/16/14	1800	[signature]	Christy Walt	6/16/14	1800
6/16/14	1845	Christy Walt	[signature]	06/17/14	0745

Remarks:

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

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

December 09, 2014

Ashley Ager
LTE
2243 Main Ave Suite 3
Durango, CO 81301
TEL: (970) 946-1093
FAX

RE: Jicarilla Contract OrderNo.: 1412264

Dear Ashley Ager:

Hall Environmental Analysis Laboratory received 4 sample(s) on 12/4/2014 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1412264**
Date Reported: **12/9/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Client Sample ID: MW-3
Project: Jicarilla Contract
Collection Date: 12/2/2014 1:10:00 PM
Lab ID: 1412264-001
Matrix: AQUEOUS
Received Date: 12/4/2014 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	910	50	P	µg/L	50	12/5/2014 9:24:23 PM	R22975
Toluene	600	50	P	µg/L	50	12/5/2014 9:24:23 PM	R22975
Ethylbenzene	110	50	P	µg/L	50	12/5/2014 9:24:23 PM	R22975
Xylenes, Total	1500	100	P	µg/L	50	12/5/2014 9:24:23 PM	R22975
Surr: 4-Bromofluorobenzene	103	66.6-167	P	%REC	50	12/5/2014 9:24:23 PM	R22975

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Client Sample ID: MW-6
Project: Jicarilla Contract
Collection Date: 12/2/2014 12:35:00 PM
Lab ID: 1412264-002
Matrix: AQUEOUS
Received Date: 12/4/2014 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	6600	100	P	µg/L	100	12/5/2014 10:18:46 PM	R22975
Toluene	120	100	P	µg/L	100	12/5/2014 10:18:46 PM	R22975
Ethylbenzene	210	100	P	µg/L	100	12/5/2014 10:18:46 PM	R22975
Xylenes, Total	700	200	P	µg/L	100	12/5/2014 10:18:46 PM	R22975
Surr: 4-Bromofluorobenzene	100	66.6-167	P	%REC	100	12/5/2014 10:18:46 PM	R22975

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Client Sample ID: MW-12
Project: Jicarilla Contract
Collection Date: 12/2/2014 1:55:00 PM
Lab ID: 1412264-003
Matrix: AQUEOUS
Received Date: 12/4/2014 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	2.7	1.0		µg/L	1	12/5/2014 10:46:00 PM	R22975
Toluene	ND	1.0		µg/L	1	12/5/2014 10:46:00 PM	R22975
Ethylbenzene	29	1.0		µg/L	1	12/5/2014 10:46:00 PM	R22975
Xylenes, Total	ND	2.0		µg/L	1	12/5/2014 10:46:00 PM	R22975
Surr: 4-Bromofluorobenzene	119	66.6-167		%REC	1	12/5/2014 10:46:00 PM	R22975

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Client Sample ID: TRIP BLANK
Project: Jicarilla Contract
Collection Date:
Lab ID: 1412264-004
Matrix: TRIP BLANK
Received Date: 12/4/2014 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	12/5/2014 11:13:18 PM	R22975
Toluene	ND	1.0		µg/L	1	12/5/2014 11:13:18 PM	R22975
Ethylbenzene	ND	1.0		µg/L	1	12/5/2014 11:13:18 PM	R22975
Xylenes, Total	ND	2.0		µg/L	1	12/5/2014 11:13:18 PM	R22975
Surr: 4-Bromofluorobenzene	102	66.6-167		%REC	1	12/5/2014 11:13:18 PM	R22975

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1412264**

09-Dec-14

Client: LTE

Project: Jicarilla Contract

Sample ID	**5ML RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBW**	Batch ID:	**R22975**	RunNo:	**22975**					
Prep Date:		Analysis Date:	**12/5/2014**	SeqNo:	**678626**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	21		20.00		104	66.6	167			

Sample ID	**100NG BTEX LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSW**	Batch ID:	**R22975**	RunNo:	**22975**					
Prep Date:		Analysis Date:	**12/5/2014**	SeqNo:	**678627**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	90.9	80	120			
Toluene	18	1.0	20.00	0	92.3	80	120			
Ethylbenzene	18	1.0	20.00	0	92.0	80	120			
Xylenes, Total	59	2.0	60.00	0	98.7	80	120			
Surr: 4-Bromofluorobenzene	21		20.00		103	66.6	167			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **LTE** Work Order Number: **1412264** RcptNo: 1

Received by/date: AT 12/04/14

Logged By: **Ashley Gallegos** **12/4/2014 7:55:00 AM**

Completed By: **Ashley Gallegos** **12/4/2014 3:04:28 PM**

Reviewed By: AT 12/05/14

Chain of Custody

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

Log In

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

Special Handling (if applicable)

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

Person Notified: _____ Date _____

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

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

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

Chain-of-Custody Record

Client: LT Environmental

Mailing Address: 2243 Main Ave #3
Durango Co 81301

Phone #: 970-385-1096

email or Fax#: aager@ltenv.com

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name:
Jicarilla Contract

Project #:
03401301O

Project Manager:
Ashley Ager

Sampler: Daniel Newman

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.2

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1412264	BTEX + ~~MTBE + TMB's~~ (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)				Air Bubbles (Y or N)
12/1/14	1310	GW	MW-3	VOA 3	Cool	-001	X														
12/1/14	1235	GW	MW-6	VOA 3	HCl	-002	X														
12/1/14	1355	GW	MW-12	VOA 3	HCl	-003	X														
		GW	TRIPBLANK	VOA 2	Cool	-004	X														

Date:	Time:	Relinquished by:	Received by:	Date	Time
12/3/14	1558			12/3/14	1558
12/3/14	1730	Christie Walker		12/04/14	0755

Remarks:

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