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2014 AGWMR

APRIL 2015

2014 ANNUAL GROUNDWATER REPORT

PRITCHARD #2A
ADMINISTRATIVE/ENVIRONMENTAL ORDER NUMBER 3RP-339-0

APRIL 2015

Prepared for:

WILLIAMS FIELD SERVICES, LLC
Tulsa, Oklahoma

2014 ANNUAL GROUNDWATER REPORT

PRITCHARD #2A
ADMINISTRATIVE/ENVIRONMENTAL ORDER NUMBER 3RP-339-0

APRIL 2015

Prepared for:

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EXECUTIVE SUMMARY

Groundwater at the Pritchard #2A (Administrative/Environmental Order Number 3RP-339-0) (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 two former pits: the former dehydrator pit and the former abandoned pit formerly operated by Gas Company of New Mexico (GCNM).

Impacted soil was excavated in 1997 and one monitoring well (MW-2) was installed in 1999 to assess groundwater quality. Additional groundwater monitoring wells were installed upgradient (MW-1) and downgradient (MW-3, MW-4, MW-5, and MW-6) of the former pits. 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 and conducted free product removal. During 2014, Williams retained LT Environmental Inc. (LTE) to complete annual sampling requirements. Between January 2014 and December 2014, LTE conducted four groundwater monitoring events (March 2014, June 2014, September 2014, and December 2014).

LTE sampled groundwater from monitoring wells MW-1, MW-3, MW-5, and MW-6 during 2014 and laboratory analytical results indicated all samples contained BTEX concentrations exceeding NMWQCC standards. Monitoring well MW-2 was dry and monitoring well MW-4 contained phase-separated hydrocarbons (PSH). Approximately 57 ounces of PSH were recovered from MW-4 during 2014 with oil adsorbent socks and manual recovery.

Williams will continue to monitor groundwater elevations and presence of PSH in the existing monitoring wells quarterly during 2015. Williams will collect groundwater samples annually for analysis of BTEX to monitor natural attenuation in monitoring wells MW-1, MW-2, MW-3, MW-5, and MW-6. Williams will manually recover PSH from monitoring well MW-4 when present and install oil absorbent socks for passive PSH recovery between site visits. If PSH is not present, the monitoring well MW-4 will be sampled annually for BTEX analysis.

Williams intends to install two additional monitoring wells to delineate the downgradient extent of impacted groundwater once a surface agreement can be negotiated with the Bureau of Land Management (BLM). The new wells will be developed and sampled to reassess the Site for plume delineation and PSH recovery options.

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 Pritchard #2A (Site) (Administrative/Environmental Order Number 3RP-339-0) (Site). The scope of work for this project was continued monitoring of petroleum hydrocarbon impacts to groundwater as a result of a release from two former pits: the former dehydrator pit and the former abandoned pit.

1.1 LOCATION

The Site is located at latitude 36.837444 and longitude -107.713236 in Unit J, Section 6, Township 30 North, Range 8 West (Figure 1). The Site is at the confluence of an unnamed tributary to La Manga Canyon, which drains into Pump Canyon, in the San Juan Basin in San Juan County, New Mexico.

1.2 HISTORY

The source is two former pits: the former dehydrator pit and the former abandoned pit, which are considered a single source due to their proximity to each other. In December 1997, approximately 800 cubic yards of impacted soil were excavated from the Site. Soil samples from the floors of the two excavations revealed total petroleum hydrocarbons-diesel range organics and benzene, toluene, ethylbenzene, and total xylenes (BTEX) in excess of the New Mexico Water Quality Control Commission (NMWQCC) standards. A groundwater sample collected from a monitoring well drilled in the east pit at approximately 76.5 feet below ground surface (bgs) contained 8,600 micrograms per liter (µg/L) benzene. Sometime prior to April 2000, groundwater monitoring wells MW-2, MW-3, and MW-4 were installed, and in April 2000, MW-5 and MW-6 were installed at the Site. Between April 2000 (or earlier) and December 2012, Williams monitored groundwater at the Site. Records regarding these activities can be found in previous groundwater reports submitted to the New Mexico Oil Conservation Division (NMOCD).

On November 5, 2013, LTE performed a product bail down test at groundwater monitoring well MW-4 to assess potential product recovery options. Phase-separated hydrocarbons (PSH) recovery was minimal and only 12 percent of the original PSH thickness was recovered within 6 days. On September 12, 2013, LTE collected a sample of PSH from groundwater monitoring wells MW-2 and MW-4 for analysis of paraffins, isoparaffins, aromatics, naphthenes, and olefins (PIANO) to attempt to differentiate the chemical composition of the PSH and identify potential additional sources at the Site. The PSH samples collected indicated a natural gas condensate source, however results were inconclusive for differentiating two sources based on age or chemical composition.

2.0 METHODOLOGY

Groundwater monitoring activities were conducted at the Site in March 2014, June 2014, September 2014, and December 2014. Groundwater monitoring consisted of measuring groundwater elevations and sampling groundwater in monitoring wells MW-1, MW-3, MW-5, and MW-6. LTE recovered PSH from monitoring well MW-4.

2.1 WATER AND PRODUCT 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. Groundwater monitoring wells containing measurable PSH 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 dedicated polyvinyl chloride (PVC) bailer. As water was removed from the monitoring well, pH, electric conductivity, and temperature were monitored. 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 groundwater 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 benzene, toluene, ethylbenzene, and total xylenes (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 March, June, September, and December 2014 quarterly monitoring events (Figures 2 through 5). Contours were inferred based on groundwater elevations obtained and observations of physical characteristics at the Site (topography, proximity to irrigation ditches, etc.).

2.4 PSH RECOVERY

Oil absorbent socks and manual bailing were used to passively recover PSH in monitoring well MW-4. Oil absorbent socks were removed from the well at least seven days prior to sampling to allow groundwater to equilibrate. LTE estimated the volume of recovered PSH in the socks based on percent saturation observed in the socks. Once the oil absorbent socks were removed, LTE manually bailed as much PSH from the monitoring well as possible. After sampling, new oil absorbent socks were installed.

3.0 RESULTS

Depth to groundwater and depth to PSH data collected during the 2014 quarterly monitoring events are summarized in Table 1. Groundwater flow direction is to the southeast as depicted on Figures 3 through 5.

Laboratory analytical results indicated concentrations of benzene in groundwater sampled from monitoring well MW-1, which is upgradient of the original source, exceeded NMWQCC groundwater standards in September and December 2014. Benzene concentrations in groundwater sampled from monitoring well MW-3 exceeded the NMWQCC groundwater standard every quarter except March 2014. Benzene concentrations in groundwater sampled from downgradient monitoring wells MW-5 and MW-6 exceeded the NMWQCC groundwater standard during all 2014 quarterly monitoring events. Additionally, groundwater from monitoring well MW-6 contained concentrations of total xylenes exceeding the NMWQCC standard during three of four 2014 monitoring events. Monitoring well MW-2 was not sampled due to insufficient water volume in the monitoring well. Table 2 summarizes the groundwater analytical results and copies of the laboratory reports can be found in Appendix B.

Groundwater monitoring well MW-4 was not sampled during the 2014 quarterly monitoring events due to measurable PSH in the monitoring well. Measurable PSH ranged in thickness from 0.03 feet on December 8, 2014 to 0.32 feet on March 19, 2014, in monitoring well MW-4. A total of approximately 57 ounces of PSH was recovered from MW-4 during 2014 through passive oil adsorbent socks and manual recovery.

4.0 CONCLUSIONS

Impacts to groundwater in the source area at groundwater monitoring well MW-2 are currently unknown due to insufficient water in the monitoring well. The presence of PSH persists in groundwater monitoring well MW-4, downgradient of the source area. Surrounding monitoring wells MW-1, MW-3, MW-5, and MW-6 contained one or more BTEX constituents exceeding the NMWQCC groundwater standards in 2014.

5.0 RECOMMENDATIONS

Williams will continue quarterly monitoring groundwater elevations and presence of PSH in designated monitoring wells. Williams will collect groundwater samples from MW-1, MW-2, MW-3, MW-5, and MW-6 annually. Williams will use oil absorbent socks and manual bailing to recover PSH from groundwater monitoring well MW-4 as necessary. If PSH is not present, monitoring well MW-4 will be sampled for BTEX analysis annually. Williams intends to install two additional monitoring wells (MW-7 and MW-8) to delineate impacted groundwater once a surface agreement can be negotiated with the Bureau of Land Management (BLM). The new monitoring wells will be developed and sampled to reassess the Site for plume delineation and PSH recovery options.

FIGURES

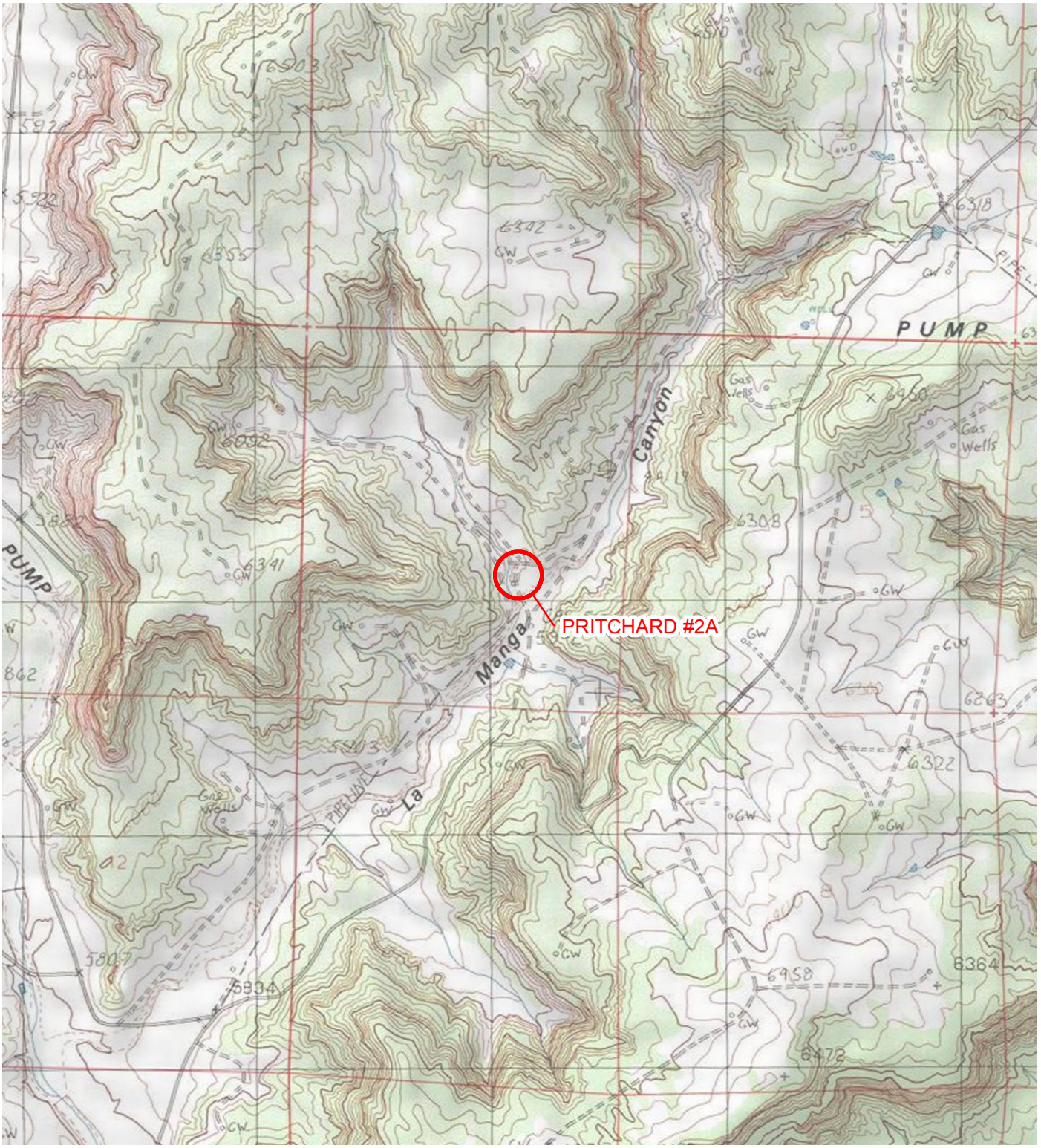


IMAGE COURTESY OF ESRI/BING MAPS

LEGEND

SITE LOCATION

0 2,000 4,000

Feet

N

FIGURE 1
SITE LOCATION MAP
PRITCHARD #2A
SAN JUAN COUNTY, NEW MEXICO

WILLIAMS FIELD SERVICES, LLC

P:\Williams Four Corners\GIS\MXD\034013001_PRITCHARD2\034013001_PRITCHARD_FIG01_SL.mxd

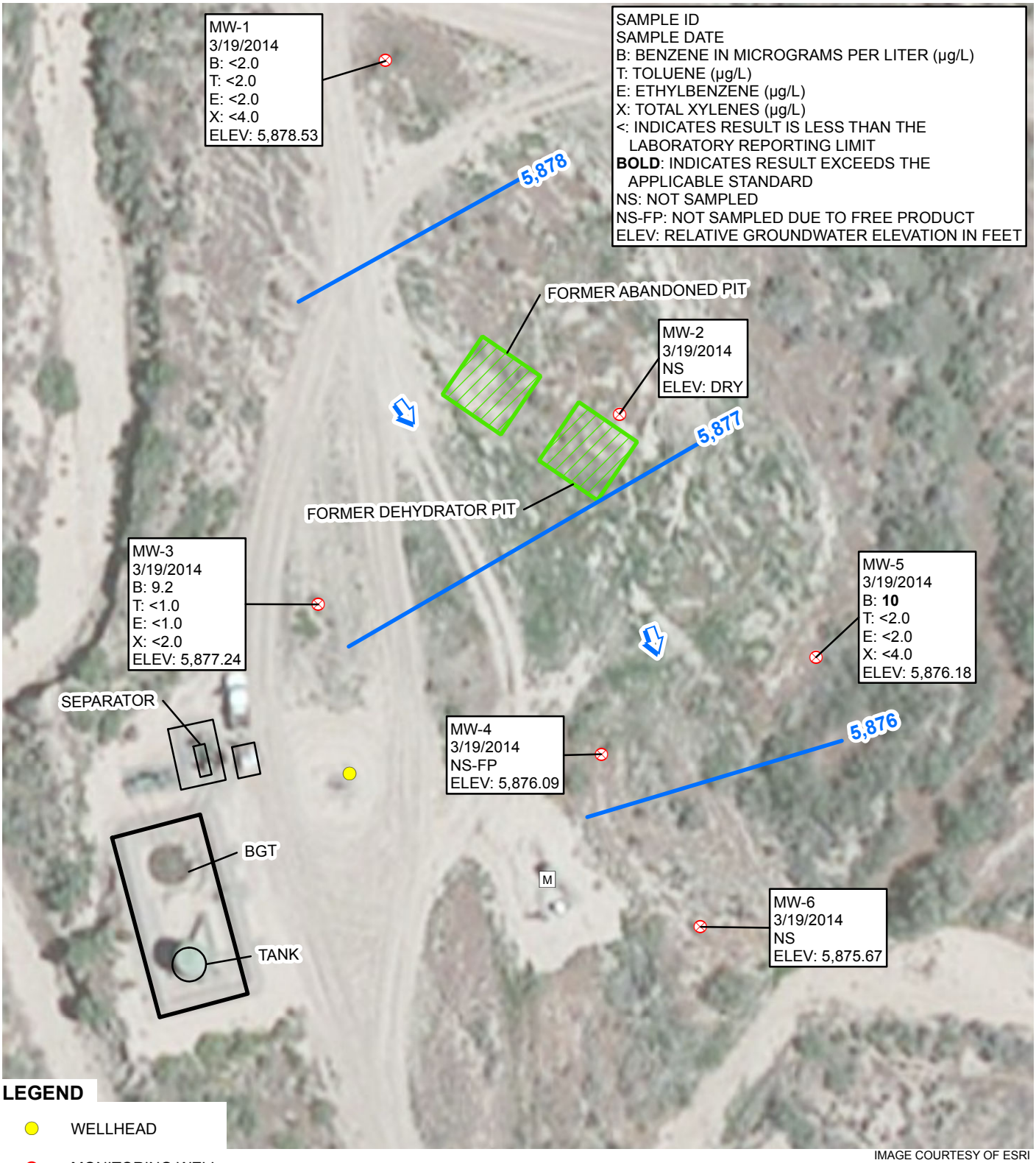
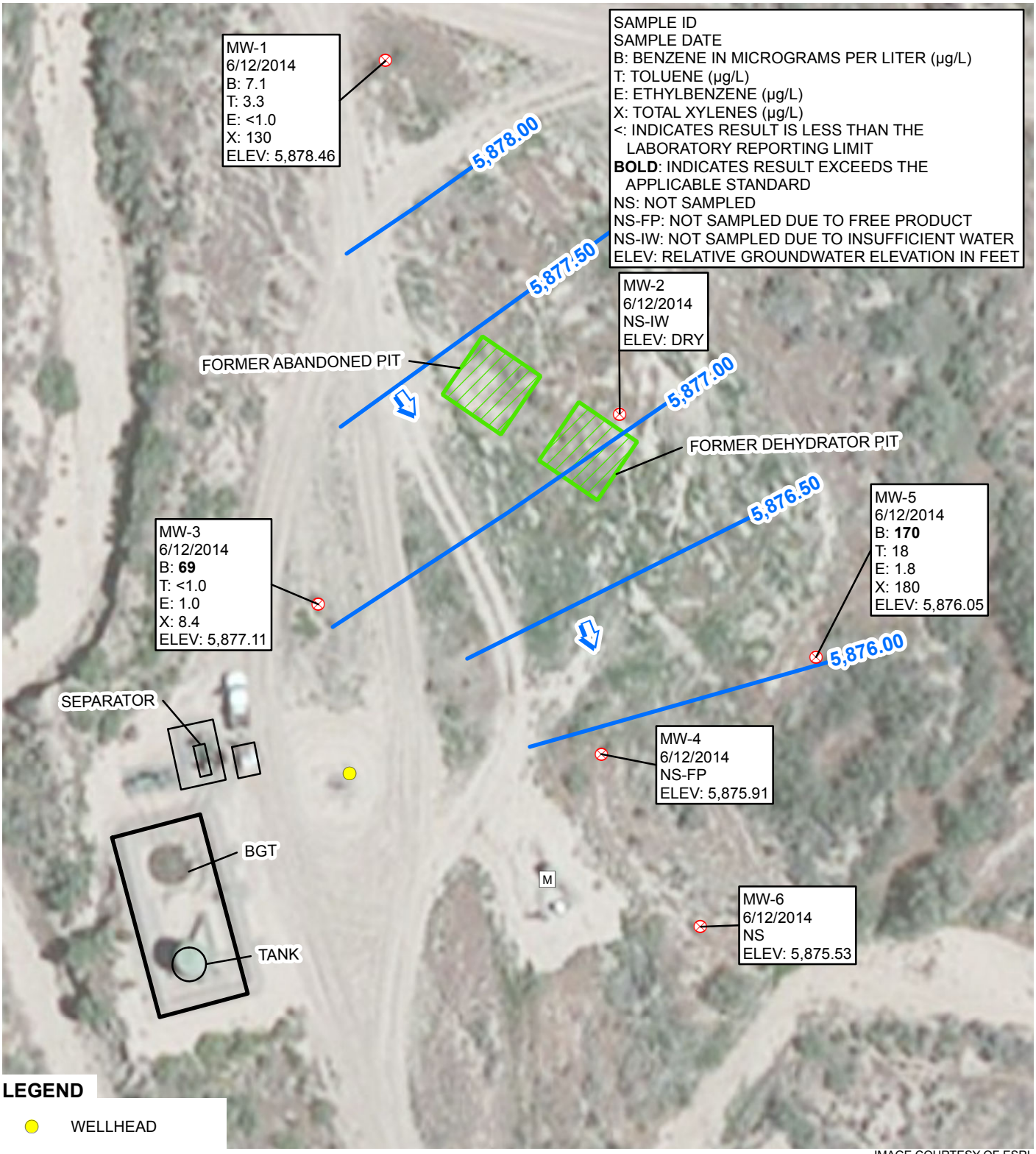


FIGURE 2
GROUNDWATER ELEVATION & ANALYTICAL RESULTS (MARCH 2014)
PRITCHARD #2A
SAN JUAN COUNTY, NEW MEXICO
WILLIAMS FIELD SERVICES, LLC

P:\Williams Field Services\GIS\MXD\034013010_PRITCHARD2\034013010_PRITCHARD_FIG02_GWE_GWA_2014_Q1.mxd



LEGEND

- WELLHEAD
- MONITORING WELL
- METER HOUSE
- ESTIMATED GROUNDWATER FLOW DIRECTION
- RELATIVE GROUNDWATER ELEVATION CONTOUR
  CONTOUR INTERVAL = 0.5 FEET
- BERM

BGT: BELOW GRADE TANK

IMAGE COURTESY OF ESRI

0 50 100
Feet

N

FIGURE 3
GROUNDWATER ELEVATION & ANALYTICAL RESULTS (JUNE 2014)
PRITCHARD #2A
SAN JUAN COUNTY, NEW MEXICO
WILLIAMS FIELD SERVICES, LLC

P:\Williams Field Services\GIS\MXD\034013010_PRITCHARD2\034015003_PRITCHARD_FIG03_GWE_GWA_2014_Q2.mxd

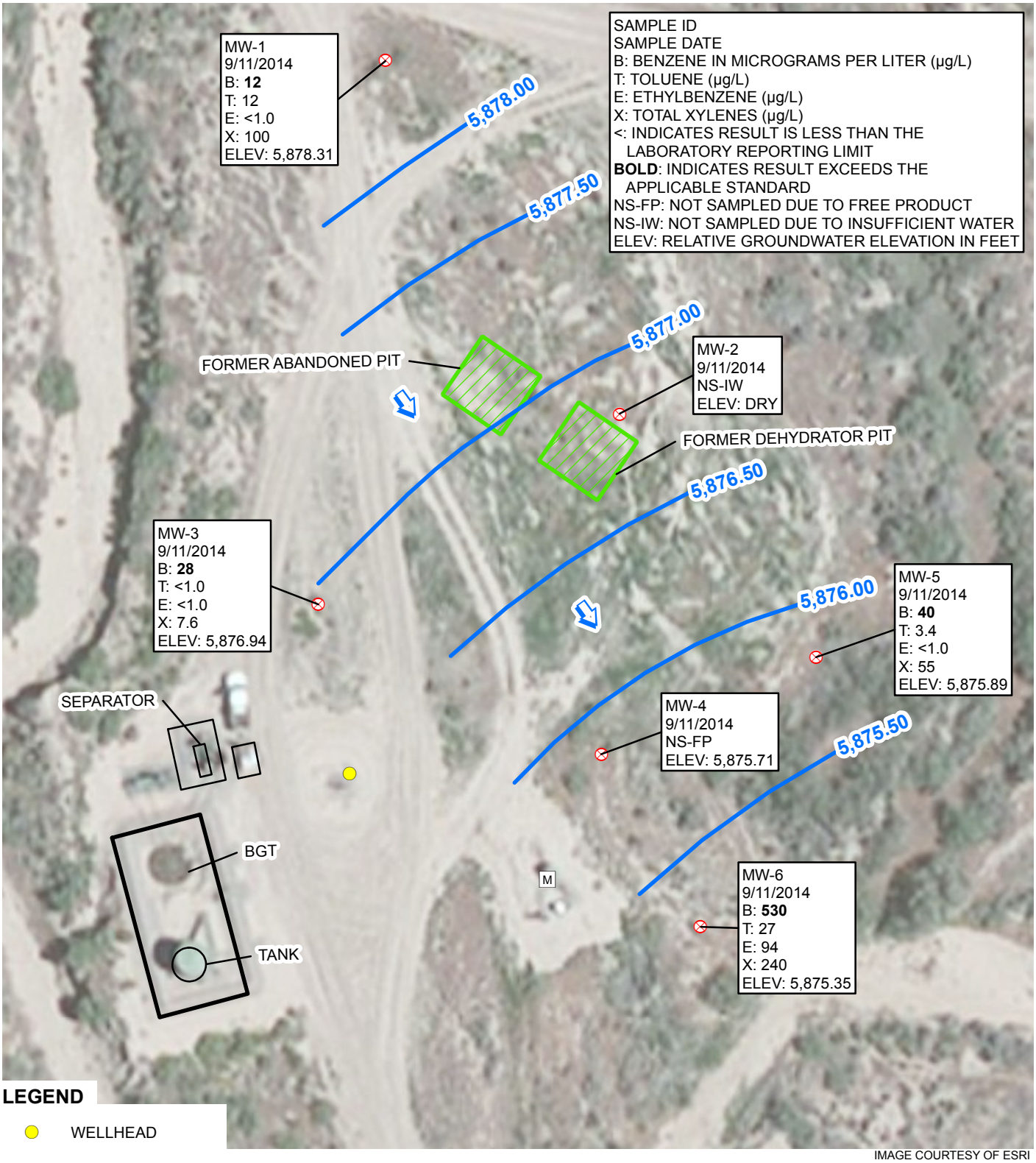


IMAGE COURTESY OF ESRI

LEGEND

- WELLHEAD
- MONITORING WELL
- M METER HOUSE
- ESTIMATED GROUNDWATER FLOW DIRECTION
- RELATIVE GROUNDWATER ELEVATION CONTOUR
  CONTOUR INTERVAL = 0.5 FOOT
- BERM

BGT: BELOW GRADE TANK

0 50 100
Feet

N

FIGURE 4
GROUNDWATER ELEVATION &
ANALYTICAL RESULTS (SEPTEMBER 2014)
PRITCHARD #2A
SAN JUAN COUNTY, NEW MEXICO
WILLIAMS FIELD SERVICES, LLC

P:\Williams Field Services\GIS\MXD\034013010_PRITCHARD2\034015003_PRITCHARD_FIG04_GWE_GWA_2014_Q3.mxd

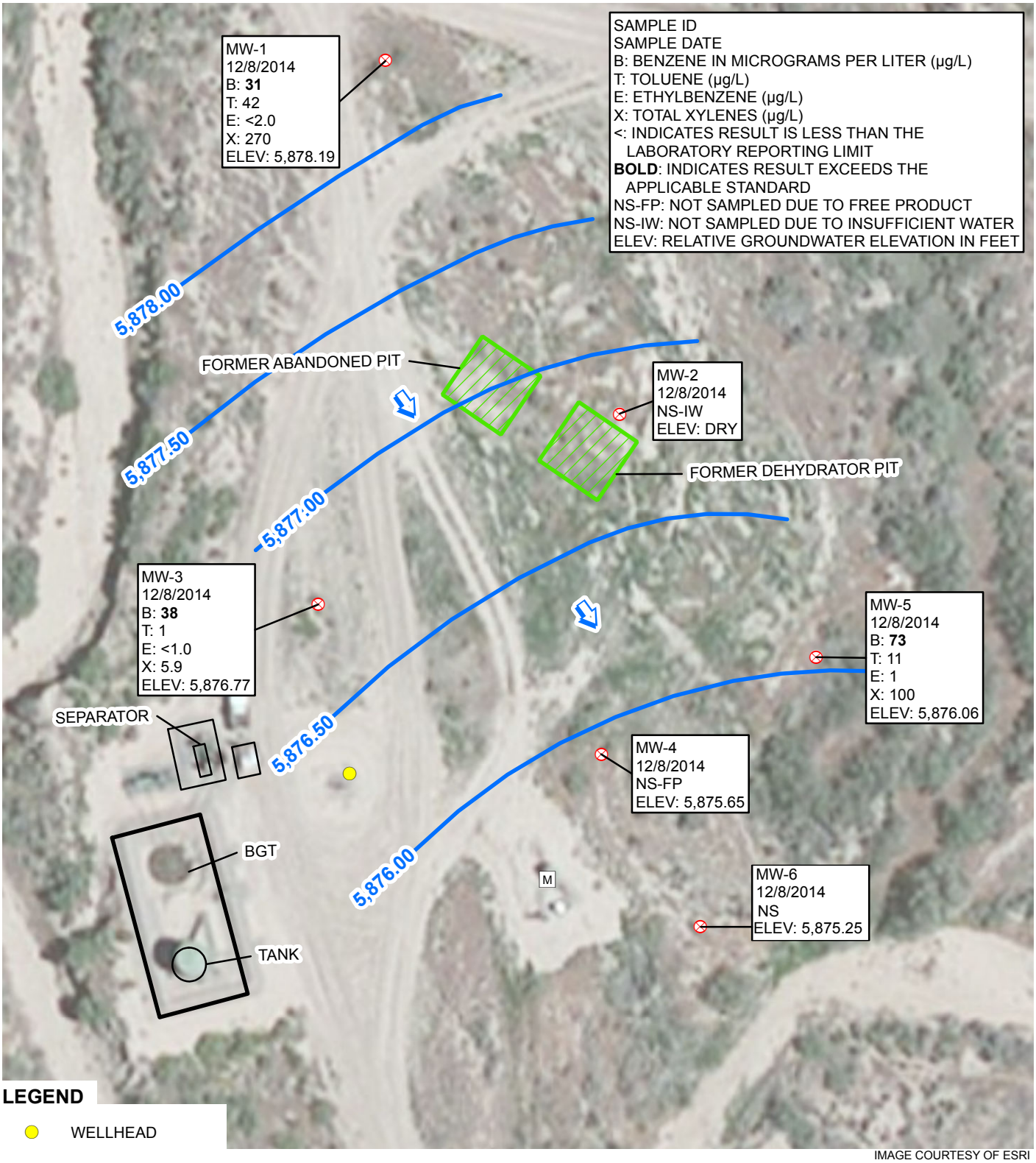


FIGURE 5
GROUNDWATER ELEVATION & ANALYTICAL RESULTS (DECEMBER 2014)
PRITCHARD #2A
SAN JUAN COUNTY, NEW MEXICO
WILLIAMS FIELD SERVICES, LLC

P:\Williams Field Services\GIS\MXD\034013010_PRITCHARD2\034015003_PRITCHARD_FIG04_GWE_GWA_2014_Q4.mxd

TABLES

TABLE 1

GROUNDWATER ELEVATION SUMMARY
PRITCHARD #2A
WILLIAMS FIELD SERVICES, LLC

Well Name	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	2/28/2013	5,966.76	82.06	NP	NP	5,884.70
MW-1*	6/24/2013	5,961.21	82.24	NP	NP	5,878.97
MW-1	9/12/2013	5,961.21	82.35	NP	NP	5,878.86
MW-1	12/6/2013	5,961.21	82.51	NP	NP	5,878.70
MW-1	3/19/2014	5,961.21	82.68	NP	NP	5,878.53
MW-1	6/12/2014	5,961.21	82.75	NP	NP	5,878.46
MW-1	9/11/2014	5,961.21	82.90	NP	NP	5,878.31
MW-1	12/8/2014	5,961.21	83.02	NP	NP	5,878.19
MW-2 **	2/28/2013	5,963.03	79.97	79.63	0.34	5,883.33
MW-2 *	6/24/2013	5,957.53	79.90	79.62	0.28	5,877.85
MW-2	9/12/2013	5,957.53	80.06	79.78	0.28	5,877.69
MW-2	12/6/2013	5,957.53	DRY	DRY	DRY	DRY
MW-2	3/19/2014	5,957.53	DRY	DRY	DRY	DRY
MW-2	6/12/2014	5,957.53	DRY	DRY	DRY	DRY
MW-2	9/11/2014	5,957.53	DRY	DRY	DRY	DRY
MW-2	12/8/2014	5,957.53	DRY	DRY	DRY	DRY
MW-3	2/28/2013	5,961.27	78.02	NP	NP	5,883.25
MW-3*	6/24/2013	5,955.95	78.22	NP	NP	5,877.73
MW-3	9/12/2013	5,955.95	78.37	NP	NP	5,877.58
MW-3	12/6/2013	5,955.95	78.51	NP	NP	5,877.44
MW-3	3/19/2014	5,955.95	78.71	NP	NP	5,877.24
MW-3	6/12/2014	5,955.95	78.84	NP	NP	5,877.11
MW-3	9/11/2014	5,955.95	79.01	NP	NP	5,876.94
MW-3	12/8/2014	5,955.95	79.18	NP	NP	5,876.77
MW-4	2/28/2013	5,960.42	79.55	77.97	1.58	5,882.13
MW-4*	6/24/2013	5,955.12	79.72	78.18	1.54	5,876.63
MW-4	9/12/2013	5,955.12	79.73	78.43	1.30	5,876.43
MW-4	12/6/2013	5,955.12	79.03	78.82	0.21	5,876.26
MW-4	3/19/2014	5,955.12	79.29	78.97	0.32	5,876.09
MW-4	6/12/2014	5,955.12	79.25	79.20	0.05	5,875.91
MW-4	9/11/2014	5,955.12	79.45	79.40	0.05	5,875.71
MW-4	12/8/2014	5,955.12	79.49	79.46	0.03	5,875.65
MW-5	2/28/2013	5,960.41	78.20	NP	NP	5,882.21
MW-5	6/24/2013	5,955.09	78.39	NP	NP	5,876.70
MW-5	9/12/2013	5,955.09	78.55	NP	NP	5,876.54
MW-5	12/6/2013	5,955.09	78.72	NP	NP	5,876.37
MW-5	3/19/2014	5,955.09	78.91	NP	NP	5,876.18
MW-5	6/12/2014	5,955.09	79.04	NP	NP	5,876.05
MW-5	9/11/2014	5,955.09	79.20	NP	NP	5,875.89
MW-5	12/8/2014	5,955.09	79.03	NP	NP	5,876.06

TABLE 1

GROUNDWATER ELEVATION SUMMARY
PRITCHARD #2A
WILLIAMS FIELD SERVICES, LLC

Well Name	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-6	2/28/2013	5,958.24	67.56	NP	NP	5,890.68
MW-6*	6/24/2013	5,952.97	76.74	NP	NP	5,876.23
MW-6	9/12/2013	5,952.97	76.93	NP	NP	5,876.04
MW-6	12/6/2013	5,952.97	77.09	NP	NP	5,875.88
MW-6	3/19/2014	5,952.97	77.30	NP	NP	5,875.67
MW-6	6/12/2014	5,952.97	77.44	NP	NP	5,875.53
MW-6	9/11/2014	5,952.97	77.62	NP	NP	5,875.35
MW-6	12/8/2014	5,952.97	77.72	NP	NP	5,875.25

Notes:
* Top of casing elevation was resurveyed on 6/19/2013
** Product recovery sock was present in well, elevation does not represent static water level
Groundwater elevation calculation in wells with product: (Top of Casing Elevation - Depth to Water) + (Product Thickness * 0.8)
AMSL - Above Mean Sea Level
BTOC - Below Top of Casing
NP - No Product

TABLE 2

GROUNDWATER LABORATORY ANALYTICAL RESULTS
PRITCHARD #2A
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	5/26/1999	**260**	**880**	86	**890**
MW-1	8/17/1999	**180**	270	25	370
MW-1	10/20/1999	**260**	720	36	420
MW-1	1/26/2000	**260**	620	26	460
MW-1	4/17/2000	**250**	580	23	340
MW-1	11/16/2000	**89.1**	69.5	11.1	39.7
MW-1	1/17/2001	**316**	418	15.1	178
MW-1	4/27/2001	**363**	316	5.75	283
MW-1	10/16/2001	**140**	7.3	<2.0	110
MW-1	3/30/2002	**120**	150	ND	270
MW-1	6/16/2002	**79**	20	ND	110
MW-1	9/20/2004	<2.0	<2.0	<2.0	12
MW-1	12/6/2004	2.6	8.6	<2.0	53
MW-1	3/7/2005	**13**	2.3	ND	53
MW-1	6/18/2005	ND	ND	ND	7.9
MW-1	9/16/2005	<2.0	<2.0	<2.0	15
MW-1	11/28/2005	ND	4.5	ND	65.7
MW-1	7/13/2006	**17.5**	6	>1.0	57.2
MW-1	3/29/2010	**18.3**	2.7	<1.0	71.1
MW-1	6/18/2010	**26.5**	19	<1.0	36.3
MW-1	9/10/2010	**20**	<1.0	<1.0	30.2
MW-1	12/4/2010	**17.9**	8.7	<1.0	91.6
MW-1	3/11/2011	5.5	2.8	<1.0	65.1
MW-1	6/14/2011	2.2	<1.0	<1.0	16.9
MW-1	9/12/2011	1.9	<1.0	<1.0	23.3
MW-1	1/3/2012	6.2	8	<1.0	78.1
MW-1	4/2/2012	**23.5**	<1.0	7.7	45.9
MW-1	6/13/2012	**19.0**	<1.0	4.4	33.6
MW-1	10/2/2012	8.0	<1.0	5.6	40.7
MW-1	12/6/2012	**22.0**	<1.0	6.4	52.2
MW-1	2/28/2013	2.3	<1.0	<1.0	93
MW-1	6/24/2013	**65**	53	<2.0	370
MW-1*	9/12/2013	**19**	25	1.5	210
MW-1	12/11/2013	5.6	3.3	<2.0	51
MW-1	3/19/2014	<2.0	<2.0	<2.0	<4.0
MW-1	6/12/2014	7.1	3.3	<1.0	130
MW-1	9/11/2014	**12**	12	<1.0	100

TABLE 2

GROUNDWATER LABORATORY ANALYTICAL RESULTS
PRITCHARD #2A
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	12/8/2014	**31**	42	<2.0	270
MW-2	5/26/1999	**98**	85	18	120
MW-2	3/7/2005	**6,100**	**8,200**	650	**8,100**
MW-2	11/29/2005	**115**	144	41	139
MW-2	7/13/2006	**6,300**	**28,500**	**2,740**	**49,500**
MW-2	9/10/2010	**4,490**	**10,600**	277	**7,700**
MW-2	3/11/2011	**3,690**	**6,380**	243	**5,440**
MW-2	1/3/2012	**721**	**1,280**	73.6	**1,060**
MW-2	4/2/2012	NS	NS	NS	NS
MW-2	6/13/2012	NS	NS	NS	NS
MW-2	10/2/2012	NS	NS	NS	NS
MW-2	12/6/2012	NS	NS	NS	NS
MW-2	2/28/2013	NS-FP	NS-FP	NS-FP	NS-FP
MW-2	6/24/2013	NS-FP	NS-FP	NS-FP	NS-FP
MW-2	9/12/2013	NS-FP	NS-FP	NS-FP	NS-FP
MW-2	12/6/2013	NS-IW	NS-IW	NS-IW	NS-IW
MW-2	3/19/2014	NS-IW	NS-IW	NS-IW	NS-IW
MW-2	6/12/2014	NS-IW	NS-IW	NS-IW	NS-IW
MW-2	9/11/2014	NS-IW	NS-IW	NS-IW	NS-IW
MW-2	12/8/2014	NS-IW	NS-IW	NS-IW	NS-IW
MW-3	8/17/1999	**170**	100	23	150
MW-3	10/20/1999	**320**	250	50	360
MW-3	1/26/2000	**460**	380	180	**1,300**
MW-3	4/17/2000	**310**	150	180	**1,100**
MW-3	11/16/2000	**100**	43.6	21.3	99
MW-3	1/17/2001	**64.8**	81.4	8.7	54.9
MW-3	4/27/2001	1.98	<1	<1	<1
MW-3	10/16/2001	<1.0	<2.0	<2.0	<2.0
MW-3	3/30/2002	3.6	ND	ND	9
MW-3	6/16/2002	**15**	2.6	ND	10
MW-3	12/6/2004	**4.3**	5.2	>2.0	5.6
MW-3	9/20/2004	>2.0	>2.0	>2.0	>5.0
MW-3	3/7/2005	5.8	6	ND	8.2
MW-3	6/18/2005	ND	ND	ND	ND
MW-3	9/16/2005	2.5	<2.0	<2.0	<5.0
MW-3	11/29/2005	4.8	4.9	ND	ND
MW-3	7/18/2006	**56.7**	6.3	>1.0	7.8

TABLE 2

GROUNDWATER LABORATORY ANALYTICAL RESULTS
PRITCHARD #2A
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	3/29/2010	6.0	<1.0	<1.0	4.32
MW-3	6/18/2010	4.4	<1.0	<1.0	5.8
MW-3	9/10/2010	**17.6**	4.3	1.9	20.2
MW-3	12/4/2010	**26.5**	<1.0	1.9	16.4
MW-3	3/11/2011	**10.6**	<1.0	<1.0	4.4
MW-3	6/14/2011	**10.1**	<1.0	1.3	12.0
MW-3	9/12/2011	**21.2**	<1.0	3.0	22.8
MW-3	1/3/2012	8.3	<1.0	<1.0	7.6
MW-3	4/2/2012	**18.2**	1.8	<1.0	7.5
MW-3	6/13/2012	**35.5**	4.5	<1.0	20.7
MW-3	10/2/2012	NS	NS	NS	NS
MW-3	12/6/2012	NS	NS	NS	NS
MW-3	2/28/2013	**18**	<1.0	<1.0	3.5
MW-3	6/24/2013	**130**	<1.0	2.1	18
MW-3	9/12/2013	**21**	3.4	<1.0	6.9
MW-3	12/11/2013	**18**	<1.0	<1.0	2.7
MW-3	3/19/2014	9.2	<1.0	<1.0	<2.0
MW-3	6/12/2014	**69**	<1.0	1.0	8.4
MW-3	9/11/2014	**28**	<1.0	<1.0	7.6
MW-3	12/8/2014	**38**	1.0	<1.0	5.9
MW-4	12/6/2004	**750**	**2,100**	250	**2,400**
MW-4	4/2/2012	NS	NS	NS	NS
MW-4	6/13/2012	NS	NS	NS	NS
MW-4	10/2/2012	NS	NS	NS	NS
MW-4	12/6/2012	NS	NS	NS	NS
MW-4	2/28/2013	NS-FP	NS-FP	NS-FP	NS-FP
MW-4	6/24/2013	NS-FP	NS-FP	NS-FP	NS-FP
MW-4	9/12/2013	NS-FP	NS-FP	NS-FP	NS-FP
MW-4	12/6/2013	NS-FP	NS-FP	NS-FP	NS-FP
MW-4	3/19/2014	NS-FP	NS-FP	NS-FP	NS-FP
MW-4	6/12/2014	NS-FP	NS-FP	NS-FP	NS-FP
MW-4	9/11/2014	NS-FP	NS-FP	NS-FP	NS-FP
MW-4	12/8/2014	NS-FP	NS-FP	NS-FP	NS-FP
MW-5	5/26/1999	**97**	82	18	110
MW-5	1/26/2000	**370**	290	160	**940**
MW-5	4/17/2000	**220**	**1,200**	220	**1,900**
MW-5	11/16/2000	**90.9**	146	23.9	153

TABLE 2

GROUNDWATER LABORATORY ANALYTICAL RESULTS
PRITCHARD #2A
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-5	1/17/2001	**199**	260	46.7	326
MW-5	4/27/2001	3.1	8.34	<1	9.27
MW-5	10/16/2001	1.8	2.3	<2.0	<2.0
MW-5	3/30/2002	**15**	19	ND	71
MW-5	6/16/2002	**23**	30	4.4	56
MW-5	9/20/2004	>2.0	>2.0	2.2	>5.0
MW-5	12/6/2004	2.4	2.2	2.2	8.5
MW-5	3/7/2005	ND	ND	2.2	ND
MW-5	6/18/2005	ND	ND	ND	6.3
MW-5	9/16/2005	<2.0	<2.0	<2.0	5.5
MW-5	11/29/2005	2.9	ND	ND	8.8
MW-5	7/18/2006	**21.7**	7.6	>1.0	44.7
MW-5	3/29/2010	**98.7**	1.4	1.3	48.4
MW-5	6/18/2010	**58.2**	1.0	<1.0	28.5
MW-5	9/10/2010	**108**	3.9	<1.0	90.1
MW-5	12/4/2010	4.6	<1.0	<1.0	8.2
MW-5	6/14/2011	**22.1**	1.4	1.0	24.0
MW-5	9/12/2011	**12.4**	<1.0	<1.0	12.6
MW-5	1/3/2012	**36.3**	5.5	<1.0	31.6
MW-5	6/13/2012	3.3	<1.0	<1.0	<3.0
MW-5	10/2/2012	**18.2**	<1.0	3.7	21.2
MW-5	12/6/2012	**35.4**	<1.0	2.7	30.6
MW-5	2/28/2013	**17**	2.4	<1.0	14
MW-5	6/24/2013	**110**	30	4.3	220
MW-5	9/12/2013	**32**	6.9	1.7	78
MW-5	12/6/2013	**49**	4.7	<1.0	140
MW-5	3/19/2014	**10**	<2.0	<2.0	<4.0
MW-5	6/12/2014	**170**	18	1.8	180
MW-5	9/11/2014	**40**	3.4	<1.0	55
MW-5	12/8/2014	**73**	11	1.0	100
MW-6	9/20/2004	**11**	40	20	110
MW-6	3/7/2005	**110**	330	48	460
MW-6	6/18/2005	**1,100**	**2,100**	280	**2,200**
MW-6	9/16/2005	**100**	140	68	420
MW-6	11/29/2005	**49.1**	100	62.6	261
MW-6	7/18/2006	**795**	**1,480**	285	**2,450**
MW-6	3/29/2010	**777**	12.2	187	**1,010**
MW-6	6/18/2010	**2,300**	<10.0	510	**2,650**

TABLE 2

GROUNDWATER LABORATORY ANALYTICAL RESULTS
PRITCHARD #2A
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-6	9/10/2010	**829**	<10.0	166	**804**
MW-6	12/4/2010	**1,700**	6.6	481	**1,530**
MW-6	3/11/2011	**1,650**	<5.0	268	**926**
MW-6	6/14/2011	**1,940**	<10.0	450	**1,340**
MW-6	9/12/2011	**811**	2.0	185	**452**
MW-6	1/3/2012	**1,280**	<20.0	357	**695**
MW-6	4/2/2012	**1,210**	259	36.2	**423**
MW-6	6/13/2012	**1,360**	501	103	**981**
MW-6	10/2/2012	**882**	375	40.8	**767**
MW-6	12/6/2012	**768**	299	8.4	427
MW-6	2/28/2013	**430**	590	210	**870**
MW-6	6/24/2013	**280**	34	110	**280**
MW-6	9/12/2013	**970**	67	460	**1,000**
MW-6	12/6/2013	**540**	76	520	**1,100**
MW-6	9/11/2014	**530**	27	94	240

Notes:
Bold - indicates sample exceeds NMWQCC standard
< - indicates result is less than laboratory reporting detection limit
* Please note when comparing to laboratory report MW-1 was mislabled as MW-7
µg/L - micrograms per liter
ND - not detected above laboratory reporting limits
NMWQCC - New Mexico Water Quality Control Commission
NS - not sampled
NS-FP - not sampled due to the presence of free phase hydrocarbons in the well
NS-IW - not sampled due to insuffiecnt water volume in the well

APPENDIX A
2014 QUARTERLY FIELD NOTES

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams
Sample Date	3/19/14	Project Name	San Juan Basin Remediation
Sample Time	1245	Project #	03401B010
Sample ID	MW-1	Sampler	Daniel Newman
Analyses	BTEX 8021		
Matrix	GW	Laboratory	~~EPA~~ Hall
Turn Around Time	Standard	Shipping Method	Christine / Hand
Trip Blank	Yes	Other QA/QC	Blanchard
Depth to Water	82.68	TD of Well	88.26
Time	1225	Depth to Product	N/A

Vol. of H2O to purge: 88.26 - 82.68 = 5.58 x 0.1631 = 0.91 x 3 = 2.73

*(height of water column * 0.1631 for 2" well or 0.6524 for 4" well) * 3 well vols*

Method of Purging: Bailer

Method of Sampling: Bailer

Time	Vol. Removed (gal.)	Total Vol H2O removed (gal.)	pH (std. units)	Temp. (C)	Conductivity (us or ms)	Comments
1225	0.25	0.25	7.09	62.1	2.66	lite Brown, cloudy, sediment
			7.08	54.7	22.9	DN
	0.25	0.50	7.04	62.1	2.61	Brown, cloudy sediment
	0.25	0.75	7.00	61.7	2.61	NO change
	0.25	1.00	7.01	61.7	2.63	NO change
	0.25	1.25	7.04	61.7	2.61	NO change
	0.50	1.75	7.04	61.9	2.58	NO change
	0.50	2.25	7.02	62.8	2.58	NO change
	0.25	2.50	7.00	62.6	2.57	NO change
1243	0.25	2.75	6.99	62.4	2.58	NO change

Comments: ~~N/A~~ DN

Sample @ 1245 3 VOA

Describe Deviations from SOP: N/A

Signature: [signature] **Date:** 3/19/14

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	3/19/14	Project Name	San Juan Basin Remediation
Sample Time	N/A	Project #	034013010
Sample ID	MW-2	Sampler	Daniel Neuman
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	DRY	TD of Well	80.03
Time	1300	Depth to Product	N/A
Vol. of H2O to purge	N A		

*(height of water column * 0.1631 for 2" well or 0.6524 for 4" well) * 3 well vols*

Method of Purging ~~PVC Bailer~~ D. NONE

Method of Sampling ~~PVC Bailer~~ D. NONE

Time	Vol. Removed (gal.)	Total Vol H2O removed (gal.)	pH (std. units)	Temp. (C)	Conductivity (us or ms)	Comments

3/19/14

Comments: DRY @ 80.03

NO Sample

Describe Deviations from SOP: N/A

Signature: **Date:** 3/19/14

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	3/19/14	Project Name	San Juan Basin Remediation
Sample Time	1157	Project #	034013010
Sample ID	MW-3	Sampler	Daniel Neuman
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	78.71	TD of Well	83.30
Time	1138	Depth to Product	N/A

Vol. of H2O to purge: 83.30 - 78.71 = 4.49 x 0.1631 = 0.732 x 3 = 2.19

*(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.)~~ oz	pH (std. units)	Temp. (°F)	Conductivity (us or ms)	Comments
1138	6.5oz	6.5oz	6.92	54.7	1922	clear, no odor, no sediment

Comments: GRAB Sample @ 1157 in 3VOA

Bailer kept losing water as it came up the well

Describe Deviations from SOP: ~~Did~~ DW was unable to completly Purge well do to obstruction/Bend in well

Signature: _____ **Date:** 3/19/14

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	3/19/14	Project Name	San Juan Basin Remediation
Sample Time	N/A FREE PRODUCT	Project #	034013010
Sample ID	MW-4	Sampler	Daniel Neuman
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	7929	TD of Well	~~8~~ DW 79.98
Time	1345	Depth to Product	78.97
~~Vol. of H2O to purge~~ Product Height in well	~~79.29 - 79.~~ DW ~~79.98~~ DW	79.29 - 78.97 = 0.32 inch	
	*(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~~ DW NO sampling FREE PRODUCT		

Time	Vol. Removed (gal.)	Total Vol H2O removed (gal.)	Product in Bailer ~~pH (std. units)~~	Temp. (C)	Conductivity (us or ms)	Comments
1945	0.20	0.20	1"			
	0.20	0.40	1"			
1350	0.15	0.55	1"			
1353	0.10	0.65	0.5"			leave Bailer in well & get
1410	0.10	0.75	0.2"			DTW @ MW-6 & sample
			3.7"			MW-5

Comments: 0.32 inch of Product on water
Put NEW 2" PR sock in well
3.7 inch = 5 oz Product Removed

Describe Deviations from SOP: N/A

Signature: _____ **Date:** 3/19/14

LT Environmental

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	3/19/14	Project Name	San Juan Basin Remediation
Sample Time	1407	Project #	034013010
Sample ID	MW-5	Sampler	Jamie Newman
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	78.91	TD of Well	83.02
Time	1314	Depth to Product	N/A

Vol. of H2O to purge: 83.02 - 78.91 = 4.11 x 0.1631 = 0.67 x 3 = 2.01

*(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
1314	0.25	0.25	6.99	62.6	2.73	Gray Brown, cloudy
	0.25	~~0.25~~ 0.50	6.98	61.9	2.77	GRAY, cloudy, sediment
	0.25	0.75	6.98	62.1	2.79	D. Gray, cloudy, sed
	0.25	1.00	7.01	61.9	2.79	No change
	0.25	1.25	6.94	62.0	2.81	No change
	0.20	1.45	6.95	61.7	2.81	No change
1327	0.15	1.60	6.93	61.9	2.78	No change. Bailing Down

Comments: Bailed DRY @ 1327
Came Back & Sampled @ 1407 3/VOA

Describe Deviations from SOP: Only Bailed 1.60 gallons Before Bailed Dry
Came Back @ 1407 to Sample

Signature: _____ **Date:** ~~3/19/14~~ DW 3/19/14

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	6/12/14	Project Name	San Juan Basin Remediation
Sample Time	1330	Project #	034013010
Sample ID	MW-1	Sampler	BHerb
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	82.75	TD of Well	88.26
Time	1300	Depth to Product	NA

Vol. of H2O to purge: 5.51 x .1631 = 0.89 x 3 = 2.696

*(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
1300	0.25	0.25	6.90	68.0	2.77	Clear no odor Minor sed
	0.25	0.50	6.85	67.5	2.65	no change
	0.25	0.75	6.87	66.2	2.68	more sediment
	0.25	1.00	6.96	67.3	2.69	no change
	1.00	2.00	6.89	69.3	2.69	Gray/Brown very silty
	0.25	2.25	6.88	67.3	2.71	no change
	0.25	2.50	6.87	67.0	2.68	"
	0.25	2.75	6.87	66.9	2.70	"
	0.25	3.00	6.87	67.0	2.69	"

Comments:

Describe Deviations from SOP: N/A

Signature: BHerb **Date:** 6/12/14

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	6/12/14	Project Name	San Juan Basin Remediation
Sample Time	14:00	Project #	034013010
Sample ID	MW-3	Sampler	Brooke Herb
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	78.84	TD of Well	83.30
Time	1350	Depth to Product	NA
Vol. of H2O to purge	NA - Grab Sample		

*(height of water column * 0.1631 for 2" well or 0.6524 for 4" well) * 3 well vols*

Method of Purging ~~PVC Bailer~~ Grab Sample

Method of Sampling PVC Bailer

Time	Vol. Removed (gal.)	Total Vol H2O removed (gal.)	pH (std. units)	Temp. (C)	Conductivity (us or ms)	Comments
						Clear, no odor, no sediment
		GRAB SAMPLE				

Comments: Damaged Well

Describe Deviations from SOP: NO Parameters were measured. Grab Sample collected in 3 HCl VOAs without purging 3 casing volumes.

Signature: BHH **Date:** 6/12/14

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	6/12/14	Project Name	San Juan Basin Remediation
Sample Time	1530	Project #	034013010
Sample ID	MW-5	Sampler	Brooke Herb
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water (BT)	15.00	TD of Well	83.02
Time	79.04	Depth to Product	NA

Vol. of H2O to purge: 3.98 x .1631 = 0.65 x 3 = 1.95

*(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
1500	0.25	0.25	6.87	68.7	2.86	clear no odor no sediment
	0.25	0.50	6.83	67.8	2.88	minor silt, slightly cloudy
	0.25	0.75	6.83	67.8	2.82	silty lt. Brown
	0.25	1.00	6.84	66.7	2.83	no change.
	0.25	1.25	6.81	67.2	2.85	"
	0.25	1.50	6.84	67.0	2.87	"
1511						Bailed dry

Comments: Bailed dry after purging 1.50 gallons. Return to Sample @ 15:30. Filled 3 HCl VOAs

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

Signature: [signature] **Date:** 6/12/14

LTE

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	9/11/14	Project Name	San Juan Basin Remediation
Sample Time	1300	Project #	034013010
Sample ID	MW-1	Sampler	Alex Crooks
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	82.90	TD of Well	88.26
Time	1228	Depth to Product	N/A

Vol. of H2O to purge: 88.26 - 82.90 = 5.96 x .1631 = .97 x 3 = 2.92

*(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
1236	.25	.25	6.89	68.2	1.21	Clear, Slight odor
1240	.75	1.00	6.87	65.3	1.17	No change
1245	.75	1.75	6.96	65.5	1.16	light brown, odor
1248	.75	2.50	6.92	65.8	1.15	No change
1255	.50	3.00	6.95	65.4	1.17	no change
1300						Took Sample

Comments: Took Sample @ 1300

Describe Deviations from SOP: N/A

Signature: Alex Crooks **Date:** 09/11/14

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	9/11/14	Project Name	San Juan Basin Remediation
Sample Time	1320	Project #	034013010
Sample ID	MW-3	Sampler	Alex Crooks
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	~~82.90~~ AC 79.01	TD of Well	83.3
Time	~~1228~~ AC	Depth to Product	N/A

Vol. of H2O to purge ~~83.30 - 82.90 = .4 x .1631 = .06 x 3 = .20~~ AC

*(height of water column * 0.1631 for 2" well or 0.6524 for 4" well) * 3 well vols*

83.3 - 79.01 = 4.29 x .1631 = .69 x 3 = 2.10

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
1320	—	—	7.02	65.5	1.08	Took Sample

Comments: Took Grab Sample @ 1 - Used empty VOA for parameters

Describe Deviations from SOP: Obstruction in well - had to take grab sample

Signature: Alex Crooks **Date:** 9/11/14

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	9/11/14	Project Name	San Juan Basin Remediation
Sample Time	N/A	Project #	034013010
Sample ID	MW-4	Sampler	Alex Crooks
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	79.45	TD of Well	78.97
Time	1050	Depth to Product	79.40

~~Vol. of H2O to purge~~ product: 79.45 - 79.40 = .05 of product

*(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
1050	.25	.25				About 1oz of product

AE 9/11/14

Comments: replaced sock

Describe Deviations from SOP: Product on water did not Sample

Signature: Alex Crooks **Date:** 9/11/14

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	9/11/13	Project Name	San Juan Basin Remediation
Sample Time	1215	Project #	034013010
Sample ID	MW-5	Sampler	Alex Crooks
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	79.20	TD of Well	83.02
Time	1132	Depth to Product	N/A

Vol. of H2O to purge: 83.02 - 79.20 = 3.82 x .1631 = .62 x 3 = 1.87

*(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
1138	.25	.25	6.92	68.4	1.28	Clear, Slight, Cloud, odor
1141	.50	.75	6.91	67.1	1.26	light gray / Slight cloud, odor
1145	.25	1.00	6.98	65.4	1.24	going dry / no change
1215						Took Sample

Comments: 1145 well almost dry -
1215 Came back + took Sample

Describe Deviations from SOP: Bailed dry then took Sample

Signature: Alex Crooks **Date:** 9/11/14

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	9/11/14	Project Name	San Juan Basin Remediation
Sample Time	1120	Project #	034013010
Sample ID	MW-2	Sampler	Alex Crooks
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	77.62	TD of Well	~~80.03~~ 82.59
Time	1100	Depth to Product	N/A

Vol. of H2O to purge: 82.59 - 77.62 = 4.97 * .1631 = .81 x 3 = 2.43

*(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
1100	.25	.25	6.76	66.0	1.30	Clear, odor, cloudy
1104	.50	.75	7.01	65.5	1.46	No Change
1111	.50	1.25	6.90	64.8	1.22	No Change
1113	.50	1.75	6.98	64.5	1.25	No Change
1115	.50	2.25	7.02	64.3	1.27	No Change
1118	.25	2.50	7.05	64.3	1.31	No Change
1120						Took Sample

Comments:

Describe Deviations from SOP: N/A

Signature: Alex Crooks **Date:** 9/11/14

LTE

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	12/8/14	Project Name	San Juan Basin Remediation
Sample Time	1145	Project #	034013010
Sample ID	MW-1	Sampler	Daniel Newman
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Christine
Depth to Water	83.02	TD of Well	88.26
Time	1105	Depth to Product	N/A

Vol. of H2O to purge: 88.26 - 83.02 = 5.24 x 0.1631 = 0.854644 x 3 = 2.56

*(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) mS	Comments
1105	0.25	0.25	6.60	63.5	1.17	clear, No sed, slight odor, No sheen
	0.25	0.50	6.61	63.3	1.15	lite brown, sed, slight odor, No sheen
	0.25	0.75	6.75	61.5	1.16	No change
	0.25	1.00	6.76	63.0	1.15	lite brown, cloudy, sed, NO odor sheen
	0.75	1.75	6.77	63.3	1.15	No change
	0.50	2.25	6.77	63.5	1.18	No change
	0.50	2.75	6.75	63.5	1.15	NO change

12/8/14

Comments: Purged 2.75 gallons
Fill 3 HCL VOA's
Decon Equipment

Describe Deviations from SOP: N/A

Signature: _____ **Date:** 12/8/14

Water Sample Collection Form

Sample Location: Pritchard #2A
Sample Date: 12/8/14
Sample Time: N/A
Sample ID: MW-2
Analyses: BTEX 8021
Matrix: Groundwater
Turn Around Time: Standard
Trip Blank: yes
Depth to Water: Dry @ 80.06
Time: 1200
Vol. of H2O to purge: Dry @ 80.06
*(height of water column * 0.1631 for 2" well or 0.6524 for 4" well) * 3 well vols*

Client: Williams Field Services
Project Name: San Juan Basin Remediation
Project #: 03401316
Sampler: Daniel Newman
Laboratory: Hall
Shipping Method: Christine
Other QA/QC: Standard
TD of Well: Dry @ 80.06
Depth to Product: N/A

Method of Purging:
Method of Sampling:

Time	Vol. Removed (gal.)	Total Vol H2O removed (gal.)	pH (std. units)	Temp. (C)	Conductivity (us or ms)	Comments
						Dry @ 80.06

12/8/14

Comments: Dry @ 80.06
Decon Equipment

Describe Deviations from SOP: N/A

Signature: _____ **Date:** 12/8/14

LTE

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	12/8/14	Project Name	San Juan Basin Remediation
Sample Time	1240	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	79.18	TD of Well	83.30
Time	1210	Depth to Product	N/A
Vol. of H2O to purge	83.30 - 79.18 = 4.12 X 0.1631 = 0.6719 x 3 = 2.05 PW 2.01		

*(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.) ~~oz~~	Total Vol H2O removed (gal.) ~~oz~~	pH (std. units)	Temp. (C) ~~F~~	Conductivity (us or ms)	Comments
1210	3.2	3.2	6.62	61.2	1.04	clear. No Sed, No odor. No Sheen
	3.2	6.4	6.63	61.3	1.04	clear, No odor, No Sed, No Sheen

12/8/14

Comments: Fill 3 HCL VOAS Sample = GRAB
Did not Purge complete amount Purged 6.4 oz then sampled
Decon Equipment

Describe Deviations from SOP: Did not Purge 3 casing volumes Bailing down. Very little recovery

Signature: _____ **Date:** 12/8/14

LTE

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	12/8/14	Project Name	San Juan Basin Remediation
Sample Time	N/A	Project #	034013010
Sample ID	MW-4	Sampler	Daniel Newman
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Christine
Depth to Water	79.49	TD of Well	79.98
Time	1255	Depth to Product	74.46

~~Vol. of H2O to purge~~ Productonwater table = 74.49-74.46 = 0.03

*(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
1255						

12/8/14

Comments: Product on water table Did not Sample
Remove 0.25 oz product From well
Put clean sock back in well
Decon Equipment

Describe Deviations from SOP: N/A

Signature: _____ **Date:** 12/8/14

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	12/8/14	Project Name	San Juan Basin Remediation
Sample Time	1355	Project #	034013010
Sample ID	MW-5	Sampler	Daniel Newman
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Christine
Depth to Water	79.03	TD of Well	83.02
Time	1320	Depth to Product	NA

Vol. of H2O to purge: 83.02 - 79.03 = 3.99 x 0.1631 = 0.6507 = 1.95

*(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
1320	0.20	0.20	6.58	63.3	1.22	clear, No sed. No odor. No sheen
	0.25	0.45	6.63	63.3	1.24	clear, Slight sed. No odor. No sheen
	0.25	0.70	6.64	63.5	1.24	lite gray, Slight sed. NO odor Sheen
	0.20	0.90	6.64	63.3	1.23	No change 3 Bailing
	0.15	1.05	6.68	63.5	1.27	No change 3 Down
	0.05	1.10	6.67	63.5	1.27	No Change Bailing Down

12/9/14

Comments: Sample @ 1.10 gallons @ 1355
Fill 3 HCL VOA
Decon Equipment
Bailing down

Describe Deviations from SOP: Did not Purge 3 casing Volumes, Bailing down

Signature: _____ **Date:** 12/9/14

LTE

APPENDIX B
LABORATORY ANALTYICAL REPORTS

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

March 27, 2014

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

RE: San Juan Basin Remediation Pritchard #2A OrderNo.: 1403910

Dear Ashley Ager:

Hall Environmental Analysis Laboratory received 4 sample(s) on 3/21/2014 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 **1403910**
Date Reported: **3/27/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Client Sample ID: MW-3
Project: San Juan Basin Remediation Pritchard #2
Collection Date: 3/19/2014 11:57:00 AM
Lab ID: 1403910-001
Matrix: AQUEOUS
Received Date: 3/21/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	9.2	1.0		µg/L	1	3/24/2014 4:19:22 PM	R17539
Toluene	ND	1.0		µg/L	1	3/24/2014 4:19:22 PM	R17539
Ethylbenzene	ND	1.0		µg/L	1	3/24/2014 4:19:22 PM	R17539
Xylenes, Total	ND	2.0		µg/L	1	3/24/2014 4:19:22 PM	R17539
Surr: 4-Bromofluorobenzene	98.9	82.9-139		%REC	1	3/24/2014 4:19:22 PM	R17539

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Client Sample ID: MW-5
Project: San Juan Basin Remediation Pritchard #2
Collection Date: 3/19/2014 2:07:00 PM
Lab ID: 1403910-002 **Matrix:** AQUEOUS **Received Date:** 3/21/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	10	2.0		µg/L	2	3/24/2014 6:19:59 PM	R17539
Toluene	ND	2.0		µg/L	2	3/24/2014 6:19:59 PM	R17539
Ethylbenzene	ND	2.0		µg/L	2	3/24/2014 6:19:59 PM	R17539
Xylenes, Total	ND	4.0		µg/L	2	3/24/2014 6:19:59 PM	R17539
Surr: 4-Bromofluorobenzene	99.8	82.9-139		%REC	2	3/24/2014 6:19:59 PM	R17539

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Client Sample ID: MW-1
Project: San Juan Basin Remediation Pritchard #2
Collection Date: 3/19/2014 12:45:00 PM
Lab ID: 1403910-003
Matrix: AQUEOUS
Received Date: 3/21/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	2.0		µg/L	2	3/24/2014 6:50:10 PM	R17539
Toluene	ND	2.0		µg/L	2	3/24/2014 6:50:10 PM	R17539
Ethylbenzene	ND	2.0		µg/L	2	3/24/2014 6:50:10 PM	R17539
Xylenes, Total	ND	4.0		µg/L	2	3/24/2014 6:50:10 PM	R17539
Surr: 4-Bromofluorobenzene	99.3	82.9-139		%REC	2	3/24/2014 6:50:10 PM	R17539

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Client Sample ID: Trip Blank
Project: San Juan Basin Remediation Pritchard #2
Collection Date:
Lab ID: 1403910-004
Matrix: AQUEOUS
Received Date: 3/21/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0	P	µg/L	1	3/24/2014 7:20:05 PM	R17539
Toluene	ND	1.0	P	µg/L	1	3/24/2014 7:20:05 PM	R17539
Ethylbenzene	ND	1.0	P	µg/L	1	3/24/2014 7:20:05 PM	R17539
Xylenes, Total	ND	2.0	P	µg/L	1	3/24/2014 7:20:05 PM	R17539
Surr: 4-Bromofluorobenzene	98.5	82.9-139	P	%REC	1	3/24/2014 7:20:05 PM	R17539

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403910**

27-Mar-14

Client: LTE

Project: San Juan Basin Remediation Pritchard #2A

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW**	Batch ID: **R17539**	RunNo: **17539**
Prep Date:	Analysis Date: **3/24/2014**	SeqNo: **505125** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	19		20.00		94.9	82.9	139			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **R17539**	RunNo: **17539**
Prep Date:	Analysis Date: **3/24/2014**	SeqNo: **505126** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	80	120			
Toluene	20	1.0	20.00	0	102	80	120			
Ethylbenzene	20	1.0	20.00	0	100	80	120			
Xylenes, Total	61	2.0	60.00	0	102	80	120			
Surr: 4-Bromofluorobenzene	20		20.00		101	82.9	139			

Sample ID **1403910-001AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **MW-3**	Batch ID: **R17539**	RunNo: **17539**
Prep Date:	Analysis Date: **3/24/2014**	SeqNo: **505129** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	30	1.0	20.00	9.192	103	71	129			
Toluene	20	1.0	20.00	0	102	68.4	135			
Ethylbenzene	21	1.0	20.00	0.3780	101	69.4	135			
Xylenes, Total	63	2.0	60.00	0	106	72.4	135			
Surr: 4-Bromofluorobenzene	20		20.00		101	82.9	139			

Sample ID **1403910-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **MW-3**	Batch ID: **R17539**	RunNo: **17539**
Prep Date:	Analysis Date: **3/24/2014**	SeqNo: **505130** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	30	1.0	20.00	9.192	103	71	129	0.0468	20	
Toluene	21	1.0	20.00	0	103	68.4	135	0.458	20	
Ethylbenzene	21	1.0	20.00	0.3780	101	69.4	135	0.409	20	
Xylenes, Total	63	2.0	60.00	0	105	72.4	135	0.183	20	
Surr: 4-Bromofluorobenzene	20		20.00		101	82.9	139	0	0	

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: LTE | Work Order Number: 1403910 | RcptNo: 1

Received by/date: MG 03/21/14

Logged By: **Michelle Garcia** 3/21/2014 10:00:00 AM Michelle Garcia

Completed By: **Michelle Garcia** 3/21/2014 10:36:26 AM Michelle Garcia

Reviewed By: CS 03/21/14

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:
Trip Blank was made and provided by Client. MG 03/21/2014

18. **Cooler Information**

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

Chain-of-Custody Record

Client: LT ENVIRONMENTAL

Mailing Address: 22B MAIN AVE
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: San Juan Basin Remediation Pritchard #2A

Project #: 03401301O

Project Manager: Ashley Ager

Sampler: Daniel Neuman

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1403910	BTEX + ~~MTBE + TMB's~~ (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
3/19/14	1157	GW	MW-3	VOA/3	HCL	-001	X															
3/19/14	1407	GW	MW-5	VOA/3	HCL	-002	X															
3/19/14	1245	GW	MW-1	VOA/3	HCL	-003	X															
3/19/14			TRIPBLANK	VOA/2	Cool	-004	X															

Date:	Time:	Relinquished by:	Received by:	Date	Time
3/20/14	1200		Christine Walters	3/20/14	1200
Date:	Time:	Relinquished by:	Received by:	Date	Time
3/20/14	1744	Christine Walters		03/21/14	1000

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

June 20, 2014

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

RE: Pritchard #2A OrderNo.: 1406676

Dear Brook Herb:

Hall Environmental Analysis Laboratory received 4 sample(s) on 6/14/2014 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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Client Sample ID: MW-5
Project: Pritchard #2A
Collection Date: 6/12/2014 3:30:00 PM
Lab ID: 1406676-001
Matrix: AQUEOUS
Received Date: 6/14/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	170	5.0		µg/L	5	6/18/2014 4:08:06 PM	R19363
Toluene	18	1.0		µg/L	1	6/16/2014 2:11:51 PM	R19307
Ethylbenzene	1.8	1.0		µg/L	1	6/16/2014 2:11:51 PM	R19307
Xylenes, Total	180	2.0		µg/L	1	6/16/2014 2:11:51 PM	R19307
Surr: 4-Bromofluorobenzene	127	82.9-139		%REC	1	6/16/2014 2:11:51 PM	R19307

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Client Sample ID: MW-3
Project: Pritchard #2A
Collection Date: 6/12/2014 2:00:00 PM
Lab ID: 1406676-002
Matrix: AQUEOUS
Received Date: 6/14/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	69	1.0		µg/L	1	6/16/2014 2:42:02 PM	R19307
Toluene	ND	1.0		µg/L	1	6/16/2014 2:42:02 PM	R19307
Ethylbenzene	1.0	1.0		µg/L	1	6/16/2014 2:42:02 PM	R19307
Xylenes, Total	8.4	2.0		µg/L	1	6/16/2014 2:42:02 PM	R19307
Surr: 4-Bromofluorobenzene	118	82.9-139		%REC	1	6/16/2014 2:42:02 PM	R19307

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-1
Project: Pritchard #2A
Collection Date: 6/12/2014 1:30:00 PM
Lab ID: 1406676-003
Matrix: AQUEOUS
Received Date: 6/14/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	7.1	1.0		µg/L	1	6/16/2014 3:12:19 PM	R19307
Toluene	3.3	1.0		µg/L	1	6/16/2014 3:12:19 PM	R19307
Ethylbenzene	ND	1.0		µg/L	1	6/16/2014 3:12:19 PM	R19307
Xylenes, Total	130	2.0		µg/L	1	6/16/2014 3:12:19 PM	R19307
Surr: 4-Bromofluorobenzene	125	82.9-139		%REC	1	6/16/2014 3:12:19 PM	R19307

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: Pritchard #2A
Collection Date: 6/12/2014
Lab ID: 1406676-004
Matrix: TRIP BLANK
Received Date: 6/14/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	6/16/2014 3:42:28 PM	R19307
Toluene	ND	1.0		µg/L	1	6/16/2014 3:42:28 PM	R19307
Ethylbenzene	ND	1.0		µg/L	1	6/16/2014 3:42:28 PM	R19307
Xylenes, Total	ND	2.0		µg/L	1	6/16/2014 3:42:28 PM	R19307
Surr: 4-Bromofluorobenzene	114	82.9-139		%REC	1	6/16/2014 3:42:28 PM	R19307

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#: **1406676**

20-Jun-14

Client: LTE

Project: Pritchard #2A

Sample ID	**5ML RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBW**	Batch ID:	**R19307**	RunNo:	**19307**					
Prep Date:		Analysis Date:	**6/16/2014**	SeqNo:	**558173**	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	23		20.00		113	82.9	139			

Sample ID	**100NG BTEX LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSW**	Batch ID:	**R19307**	RunNo:	**19307**					
Prep Date:		Analysis Date:	**6/16/2014**	SeqNo:	**558174**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	80	120			
Toluene	20	1.0	20.00	0	102	80	120			
Ethylbenzene	20	1.0	20.00	0	100	80	120			
Xylenes, Total	63	2.0	60.00	0	105	80	120			
Surr: 4-Bromofluorobenzene	24		20.00		120	82.9	139			

Sample ID	**1406676-001AMS**	SampType:	**MS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**MW-5**	Batch ID:	**R19307**	RunNo:	**19307**					
Prep Date:		Analysis Date:	**6/16/2014**	SeqNo:	**558179**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	180	1.0	20.00	117.4	321	71	129			ES
Toluene	49	1.0	20.00	18.19	154	68.4	135			S
Ethylbenzene	23	1.0	20.00	1.832	107	69.4	135			
Xylenes, Total	310	2.0	60.00	184.9	202	72.4	135			ES
Surr: 4-Bromofluorobenzene	25		20.00		124	82.9	139			

Sample ID	**1406676-001AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**MW-5**	Batch ID:	**R19307**	RunNo:	**19307**					
Prep Date:		Analysis Date:	**6/16/2014**	SeqNo:	**558180**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	180	1.0	20.00	117.4	330	71	129	0.988	20	ES
Toluene	49	1.0	20.00	18.19	154	68.4	135	0.220	20	S
Ethylbenzene	23	1.0	20.00	1.832	107	69.4	135	0.542	20	
Xylenes, Total	310	2.0	60.00	184.9	207	72.4	135	0.995	20	ES
Surr: 4-Bromofluorobenzene	26		20.00		132	82.9	139	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1406676**

20-Jun-14

Client: LTE

Project: Pritchard #2A

Sample ID	**5ML RB**	SampType: **MBLK**			TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**PBW**	Batch ID: **R19316**			RunNo: **19316**					
Prep Date:		Analysis Date: **6/17/2014**			SeqNo: **559069**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	20		20.00		102	82.9	139			

Sample ID	**100NG BTEX LCS**	SampType: **LCS**			TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**LCSW**	Batch ID: **R19316**			RunNo: **19316**					
Prep Date:		Analysis Date: **6/17/2014**			SeqNo: **559070**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	22		20.00		109	82.9	139			

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								
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			
Surr: 4-Bromofluorobenzene	22		20.00		109	82.9	139			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: LTE | Work Order Number: 1406676 | RcptNo: 1

Received by/date: 06/14/14

Logged By: Ashley Gallegos 6/14/2014 10:00:00 AM

Completed By: Ashley Gallegos 6/16/2014 8:42:49 AM

Reviewed By: 06/16/14

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	1.9	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#: bherb@ltenv.com

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: Pritchard #2A

Project #: 034013010

Project Manager: Brooke Herb

Sampler: Brooke Herb

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.9

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. 1406676	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)
12/14	1530	GW	MW-5	VOA/3	HCL	-001	X															
12/14	1400	GW	MW-3	VOA/3	HCL	-002	X															
12/14	1330	GW	MW-1	VOA/3	HCL	-003	X															
			Trip Blank	VOA/2	HCL	-004	X															

Date:	Time:	Relinquished by:	Received by:	Date	Time
12/13/14	1500	[signature]	[signature]	6/13/14	1500
12/13/14	2030	[signature]	[signature]	06/14/14	1000

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

September 18, 2014

Brooke Herb

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

RE: Pritchard #2A OrderNo.: 1409580

Dear Brooke Herb:

Hall Environmental Analysis Laboratory received 5 sample(s) on 9/12/2014 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 **1409580**
Date Reported: **9/18/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Client Sample ID: MW-6
Project: Pritchard #2A
Collection Date: 9/11/2014 11:20:00 AM
Lab ID: 1409580-001
Matrix: AQUEOUS
Received Date: 9/12/2014 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **DJF**	
Benzene	530	20		µg/L	20	9/15/2014 3:05:47 PM	R21216
Toluene	27	20		µg/L	20	9/15/2014 3:05:47 PM	R21216
Ethylbenzene	94	20		µg/L	20	9/15/2014 3:05:47 PM	R21216
Xylenes, Total	240	40		µg/L	20	9/15/2014 3:05:47 PM	R21216
Surr: 4-Bromofluorobenzene	125	66.6-167		%REC	20	9/15/2014 3:05:47 PM	R21216

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-5
Project: Pritchard #2A
Collection Date: 9/11/2014 12:15:00 PM
Lab ID: 1409580-002
Matrix: AQUEOUS
Received Date: 9/12/2014 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	40	1.0		µg/L	1	9/13/2014 12:18:59 AM	R21183
Toluene	3.4	1.0		µg/L	1	9/13/2014 12:18:59 AM	R21183
Ethylbenzene	ND	1.0		µg/L	1	9/13/2014 12:18:59 AM	R21183
Xylenes, Total	55	2.0		µg/L	1	9/13/2014 12:18:59 AM	R21183
Surr: 4-Bromofluorobenzene	111	66.6-167		%REC	1	9/13/2014 12:18:59 AM	R21183

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-1
Project: Pritchard #2A
Collection Date: 9/11/2014 1:00:00 PM
Lab ID: 1409580-003
Matrix: AQUEOUS
Received Date: 9/12/2014 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	12	1.0		µg/L	1	9/13/2014 1:19:18 AM	R21183
Toluene	12	1.0		µg/L	1	9/13/2014 1:19:18 AM	R21183
Ethylbenzene	ND	1.0		µg/L	1	9/13/2014 1:19:18 AM	R21183
Xylenes, Total	100	2.0		µg/L	1	9/13/2014 1:19:18 AM	R21183
Surr: 4-Bromofluorobenzene	107	66.6-167		%REC	1	9/13/2014 1:19:18 AM	R21183

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-3
Project: Pritchard #2A
Collection Date: 9/11/2014 1:20:00 PM
Lab ID: 1409580-004
Matrix: AQUEOUS
Received Date: 9/12/2014 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	28	1.0		µg/L	1	9/13/2014 1:49:33 AM	R21183
Toluene	ND	1.0		µg/L	1	9/13/2014 1:49:33 AM	R21183
Ethylbenzene	ND	1.0		µg/L	1	9/13/2014 1:49:33 AM	R21183
Xylenes, Total	7.6	2.0		µg/L	1	9/13/2014 1:49:33 AM	R21183
Surr: 4-Bromofluorobenzene	106	66.6-167		%REC	1	9/13/2014 1:49:33 AM	R21183

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: Pritchard #2A
Collection Date:
Lab ID: 1409580-005
Matrix: TRIP BLANK
Received Date: 9/12/2014 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	9/13/2014 2:19:53 AM	R21183
Toluene	ND	1.0		µg/L	1	9/13/2014 2:19:53 AM	R21183
Ethylbenzene	ND	1.0		µg/L	1	9/13/2014 2:19:53 AM	R21183
Xylenes, Total	ND	2.0		µg/L	1	9/13/2014 2:19:53 AM	R21183
Surr: 4-Bromofluorobenzene	103	66.6-167		%REC	1	9/13/2014 2:19:53 AM	R21183

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#: **1409580**

18-Sep-14

Client: LTE

Project: Pritchard #2A

Sample ID	**5ML RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBW**	Batch ID:	**R21183**	RunNo:	**21183**					
Prep Date:		Analysis Date:	**9/12/2014**	SeqNo:	**616442**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	19		20.00		95.3	66.6	167			

Sample ID	**100NG BTEX LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSW**	Batch ID:	**R21183**	RunNo:	**21183**					
Prep Date:		Analysis Date:	**9/12/2014**	SeqNo:	**616443**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	100	80	120			
Toluene	20	1.0	20.00	0	100	80	120			
Ethylbenzene	20	1.0	20.00	0	100	80	120			
Xylenes, Total	62	2.0	60.00	0	104	80	120			
Surr: 4-Bromofluorobenzene	18		20.00		89.9	66.6	167			

Sample ID	**5ML RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBW**	Batch ID:	**R21216**	RunNo:	**21216**					
Prep Date:		Analysis Date:	**9/15/2014**	SeqNo:	**617973**	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		105	66.6	167			

Sample ID	**100NG BTEX LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSW**	Batch ID:	**R21216**	RunNo:	**21216**					
Prep Date:		Analysis Date:	**9/15/2014**	SeqNo:	**617974**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	94.7	80	120			
Toluene	19	1.0	20.00	0	96.3	80	120			
Ethylbenzene	19	1.0	20.00	0	96.7	80	120			
Xylenes, Total	60	2.0	60.00	0	100	80	120			
Surr: 4-Bromofluorobenzene	22		20.00		112	66.6	167			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: LTE | Work Order Number: 1409580 | RcptNo: 1

Received by/date: 09/12/14

Logged By: **Lindsay Mangin** 9/12/2014 6:30:00 AM

Completed By: **Lindsay Mangin** 9/12/2014 8:27:29 AM

Reviewed By: 09/12/14

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	2.1	Good	Yes			

Chain-of-Custody Record

Client: LT environmental

Mailing Address: 2243 main Ave
Durango Co 81301

Phone #: 970-385-1096

email or Fax#: BherbG Henv.com

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name:
Pritchard #2A

Project #:
034013010

Project Manager:
Brooke Herb

Sampler:

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.1

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. 1409580	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)
9/11/14	1120	gw	MW-6	3 x 40	HCl	-001	X														
	1215		MW-5			-002	X														
	1300		MW-1			-003	X														
	1320		MW-3			-004	X														
			TripBlank			-005	X														

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/11	1450	Colleen Crooks	Christie Walker	9/11/14	1450
9/11/14	1850	Christie Walker		09/12/14	0630

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

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

December 11, 2014

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

RE: Pritchard #2A OrderNo.: 1412393

Dear Ashley Ager:

Hall Environmental Analysis Laboratory received 4 sample(s) on 12/9/2014 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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Project: Pritchard #2A
Lab Order: 1412393

Lab ID: 1412393-001 **Collection Date:** 12/8/2014 11:45:00 AM
Client Sample ID: MW-1 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	31	2.0		µg/L	2	12/9/2014 11:00:15 PM	R23036
Toluene	42	2.0		µg/L	2	12/9/2014 11:00:15 PM	R23036
Ethylbenzene	ND	2.0		µg/L	2	12/9/2014 11:00:15 PM	R23036
Xylenes, Total	270	4.0		µg/L	2	12/9/2014 11:00:15 PM	R23036
Surr: 4-Bromofluorobenzene	113	66.6-167		%REC	2	12/9/2014 11:00:15 PM	R23036

Lab ID: 1412393-002 **Collection Date:** 12/8/2014 12:40:00 PM
Client Sample ID: MW-3 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	38	1.0		µg/L	1	12/9/2014 11:27:29 PM	R23036
Toluene	1.0	1.0		µg/L	1	12/9/2014 11:27:29 PM	R23036
Ethylbenzene	ND	1.0		µg/L	1	12/9/2014 11:27:29 PM	R23036
Xylenes, Total	5.9	2.0		µg/L	1	12/9/2014 11:27:29 PM	R23036
Surr: 4-Bromofluorobenzene	114	66.6-167		%REC	1	12/9/2014 11:27:29 PM	R23036

Lab ID: 1412393-003 **Collection Date:** 12/8/2014 1:55:00 PM
Client Sample ID: MW-5 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	73	1.0		µg/L	1	12/9/2014 11:54:51 PM	R23036
Toluene	11	1.0		µg/L	1	12/9/2014 11:54:51 PM	R23036
Ethylbenzene	1.0	1.0		µg/L	1	12/9/2014 11:54:51 PM	R23036
Xylenes, Total	100	2.0		µg/L	1	12/9/2014 11:54:51 PM	R23036
Surr: 4-Bromofluorobenzene	114	66.6-167		%REC	1	12/9/2014 11:54:51 PM	R23036

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Project: Pritchard #2A
Lab Order: 1412393

Lab ID: 1412393-004
Collection Date:
Client Sample ID: Trip Blank
Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	12/10/2014 12:49:02 AM	R23036
Toluene	ND	1.0		µg/L	1	12/10/2014 12:49:02 AM	R23036
Ethylbenzene	ND	1.0		µg/L	1	12/10/2014 12:49:02 AM	R23036
Xylenes, Total	ND	2.0		µg/L	1	12/10/2014 12:49:02 AM	R23036
Surr: 4-Bromofluorobenzene	111	66.6-167		%REC	1	12/10/2014 12:49:02 AM	R23036

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1412393**

11-Dec-14

Client: LTE

Project: Pritchard #2A

Sample ID	**5ML RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBW**	Batch ID:	**R23036**	RunNo:	**23036**					
Prep Date:		Analysis Date:	**12/9/2014**	SeqNo:	**680522**	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		107	66.6	167			

Sample ID	**100NG BTEX LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSW**	Batch ID:	**R23036**	RunNo:	**23036**					
Prep Date:		Analysis Date:	**12/9/2014**	SeqNo:	**680523**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.4	80	120			
Toluene	20	1.0	20.00	0	101	80	120			
Ethylbenzene	21	1.0	20.00	0	103	80	120			
Xylenes, Total	63	2.0	60.00	0	105	80	120			
Surr: 4-Bromofluorobenzene	22		20.00		110	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 es 12/09/14 Work Order Number: 1412393 RcptNo: 1

Received by/date: AGS 12/09/14

Logged By: **Celina Sessa** 12/9/2014 7:45:00 AM Celina Sessa

Completed By: **Celina Sessa** 12/9/2014 9:14:20 AM Celina Sessa

Reviewed By: 12/09/14

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	1.6	Good	Not Present			

Chain-of-Custody Record

Client: LT Environmental

Mailing Address: 22B MAIN Ave #3

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: 03401 3010

Project #: Pritchard #2A

Project Manager: Ashley Ager

Sampler: Daniel Newman

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1412393	BTEX + ~~MTBE + TMD'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)
2/8/14	1145	GW	MW-1	VOA/3	HCl	-001	X														
2/8/14	1240	GW	MW-3	VOA/3	HCl	-002	X														
2/8/14	1355	GW	MW-5	VOA/3	HCl	-003	X														
			TRIPBLANK	VOA/2	COOL	-004	X														

Date	Time	Relinquished by:	Received by:	Date	Time
2/8/14	1605		Christie Walls	2/8/14	1605
2/8/14	1747	Christie Walls		12/09/14	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.

2014 ANNUAL GROUNDWATER REPORT

PRITCHARD #2A
ADMINISTRATIVE/ENVIRONMENTAL ORDER NUMBER 3RP-339-0

APRIL 2015

Prepared for:

WILLIAMS FIELD SERVICES, LLC
Tulsa, Oklahoma

2014 ANNUAL GROUNDWATER REPORT

PRITCHARD #2A
ADMINISTRATIVE/ENVIRONMENTAL ORDER NUMBER 3RP-339-0

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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APPENDICES

EXECUTIVE SUMMARY

Groundwater at the Pritchard #2A (Administrative/Environmental Order Number 3RP-339-0) (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 two former pits: the former dehydrator pit and the former abandoned pit formerly operated by Gas Company of New Mexico (GCNM).

Impacted soil was excavated in 1997 and one monitoring well (MW-2) was installed in 1999 to assess groundwater quality. Additional groundwater monitoring wells were installed upgradient (MW-1) and downgradient (MW-3, MW-4, MW-5, and MW-6) of the former pits. 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 and conducted free product removal. During 2014, Williams retained LT Environmental Inc. (LTE) to complete annual sampling requirements. Between January 2014 and December 2014, LTE conducted four groundwater monitoring events (March 2014, June 2014, September 2014, and December 2014).

LTE sampled groundwater from monitoring wells MW-1, MW-3, MW-5, and MW-6 during 2014 and laboratory analytical results indicated all samples contained BTEX concentrations exceeding NMWQCC standards. Monitoring well MW-2 was dry and monitoring well MW-4 contained phase-separated hydrocarbons (PSH). Approximately 57 ounces of PSH were recovered from MW-4 during 2014 with oil adsorbent socks and manual recovery.

Williams will continue to monitor groundwater elevations and presence of PSH in the existing monitoring wells quarterly during 2015. Williams will collect groundwater samples annually for analysis of BTEX to monitor natural attenuation in monitoring wells MW-1, MW-2, MW-3, MW-5, and MW-6. Williams will manually recover PSH from monitoring well MW-4 when present and install oil absorbent socks for passive PSH recovery between site visits. If PSH is not present, the monitoring well MW-4 will be sampled annually for BTEX analysis.

Williams intends to install two additional monitoring wells to delineate the downgradient extent of impacted groundwater once a surface agreement can be negotiated with the Bureau of Land Management (BLM). The new wells will be developed and sampled to reassess the Site for plume delineation and PSH recovery options.

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 Pritchard #2A (Site) (Administrative/Environmental Order Number 3RP-339-0) (Site). The scope of work for this project was continued monitoring of petroleum hydrocarbon impacts to groundwater as a result of a release from two former pits: the former dehydrator pit and the former abandoned pit.

1.1 LOCATION

The Site is located at latitude 36.837444 and longitude -107.713236 in Unit J, Section 6, Township 30 North, Range 8 West (Figure 1). The Site is at the confluence of an unnamed tributary to La Manga Canyon, which drains into Pump Canyon, in the San Juan Basin in San Juan County, New Mexico.

1.2 HISTORY

The source is two former pits: the former dehydrator pit and the former abandoned pit, which are considered a single source due to their proximity to each other. In December 1997, approximately 800 cubic yards of impacted soil were excavated from the Site. Soil samples from the floors of the two excavations revealed total petroleum hydrocarbons-diesel range organics and benzene, toluene, ethylbenzene, and total xylenes (BTEX) in excess of the New Mexico Water Quality Control Commission (NMWQCC) standards. A groundwater sample collected from a monitoring well drilled in the east pit at approximately 76.5 feet below ground surface (bgs) contained 8,600 micrograms per liter (µg/L) benzene. Sometime prior to April 2000, groundwater monitoring wells MW-2, MW-3, and MW-4 were installed, and in April 2000, MW-5 and MW-6 were installed at the Site. Between April 2000 (or earlier) and December 2012, Williams monitored groundwater at the Site. Records regarding these activities can be found in previous groundwater reports submitted to the New Mexico Oil Conservation Division (NMOCD).

On November 5, 2013, LTE performed a product bail down test at groundwater monitoring well MW-4 to assess potential product recovery options. Phase-separated hydrocarbons (PSH) recovery was minimal and only 12 percent of the original PSH thickness was recovered within 6 days. On September 12, 2013, LTE collected a sample of PSH from groundwater monitoring wells MW-2 and MW-4 for analysis of paraffins, isoparaffins, aromatics, naphthenes, and olefins (PIANO) to attempt to differentiate the chemical composition of the PSH and identify potential additional sources at the Site. The PSH samples collected indicated a natural gas condensate source, however results were inconclusive for differentiating two sources based on age or chemical composition.

2.0 METHODOLOGY

Groundwater monitoring activities were conducted at the Site in March 2014, June 2014, September 2014, and December 2014. Groundwater monitoring consisted of measuring groundwater elevations and sampling groundwater in monitoring wells MW-1, MW-3, MW-5, and MW-6. LTE recovered PSH from monitoring well MW-4.

2.1 WATER AND PRODUCT 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. Groundwater monitoring wells containing measurable PSH 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 dedicated polyvinyl chloride (PVC) bailer. As water was removed from the monitoring well, pH, electric conductivity, and temperature were monitored. 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 groundwater 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 benzene, toluene, ethylbenzene, and total xylenes (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 March, June, September, and December 2014 quarterly monitoring events (Figures 2 through 5). Contours were inferred based on groundwater elevations obtained and observations of physical characteristics at the Site (topography, proximity to irrigation ditches, etc.).

2.4 PSH RECOVERY

Oil absorbent socks and manual bailing were used to passively recover PSH in monitoring well MW-4. Oil absorbent socks were removed from the well at least seven days prior to sampling to allow groundwater to equilibrate. LTE estimated the volume of recovered PSH in the socks based on percent saturation observed in the socks. Once the oil absorbent socks were removed, LTE manually bailed as much PSH from the monitoring well as possible. After sampling, new oil absorbent socks were installed.

3.0 RESULTS

Depth to groundwater and depth to PSH data collected during the 2014 quarterly monitoring events are summarized in Table 1. Groundwater flow direction is to the southeast as depicted on Figures 3 through 5.

Laboratory analytical results indicated concentrations of benzene in groundwater sampled from monitoring well MW-1, which is upgradient of the original source, exceeded NMWQCC groundwater standards in September and December 2014. Benzene concentrations in groundwater sampled from monitoring well MW-3 exceeded the NMWQCC groundwater standard every quarter except March 2014. Benzene concentrations in groundwater sampled from downgradient monitoring wells MW-5 and MW-6 exceeded the NMWQCC groundwater standard during all 2014 quarterly monitoring events. Additionally, groundwater from monitoring well MW-6 contained concentrations of total xylenes exceeding the NMWQCC standard during three of four 2014 monitoring events. Monitoring well MW-2 was not sampled due to insufficient water volume in the monitoring well. Table 2 summarizes the groundwater analytical results and copies of the laboratory reports can be found in Appendix B.

Groundwater monitoring well MW-4 was not sampled during the 2014 quarterly monitoring events due to measurable PSH in the monitoring well. Measurable PSH ranged in thickness from 0.03 feet on December 8, 2014 to 0.32 feet on March 19, 2014, in monitoring well MW-4. A total of approximately 57 ounces of PSH was recovered from MW-4 during 2014 through passive oil adsorbent socks and manual recovery.

4.0 CONCLUSIONS

Impacts to groundwater in the source area at groundwater monitoring well MW-2 are currently unknown due to insufficient water in the monitoring well. The presence of PSH persists in groundwater monitoring well MW-4, downgradient of the source area. Surrounding monitoring wells MW-1, MW-3, MW-5, and MW-6 contained one or more BTEX constituents exceeding the NMWQCC groundwater standards in 2014.

5.0 RECOMMENDATIONS

Williams will continue quarterly monitoring groundwater elevations and presence of PSH in designated monitoring wells. Williams will collect groundwater samples from MW-1, MW-2, MW-3, MW-5, and MW-6 annually. Williams will use oil absorbent socks and manual bailing to recover PSH from groundwater monitoring well MW-4 as necessary. If PSH is not present, monitoring well MW-4 will be sampled for BTEX analysis annually. Williams intends to install two additional monitoring wells (MW-7 and MW-8) to delineate impacted groundwater once a surface agreement can be negotiated with the Bureau of Land Management (BLM). The new monitoring wells will be developed and sampled to reassess the Site for plume delineation and PSH recovery options.

FIGURES

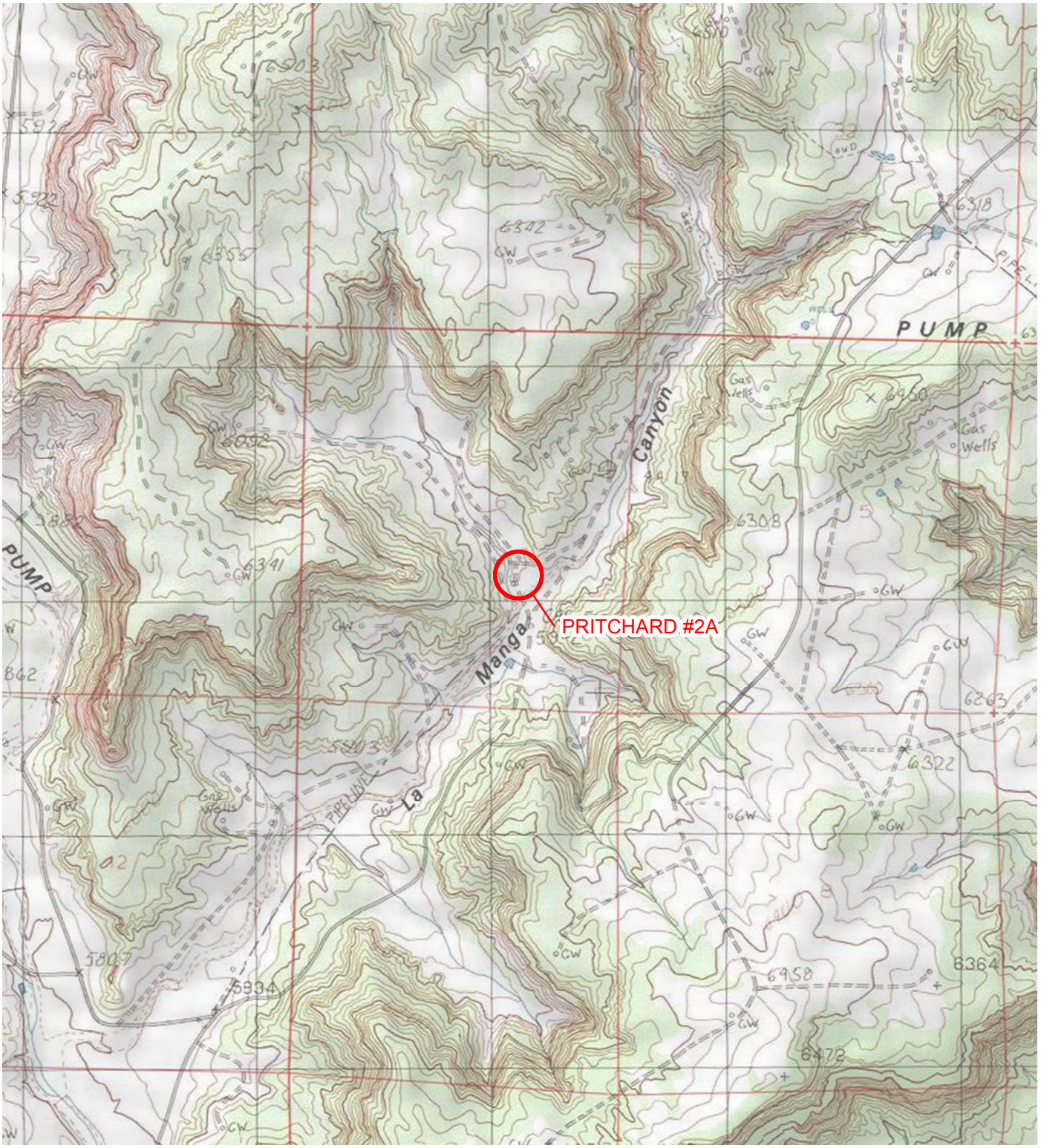


IMAGE COURTESY OF ESRI/BING MAPS

LEGEND

SITE LOCATION

0 2,000 4,000

Feet

N

FIGURE 1
SITE LOCATION MAP
PRITCHARD #2A
SAN JUAN COUNTY, NEW MEXICO

WILLIAMS FIELD SERVICES, LLC

P:\Williams Four Corners\GIS\MXD\034013001_PRITCHARD2\034013001_PRITCHARD_FIG01_SL.mxd

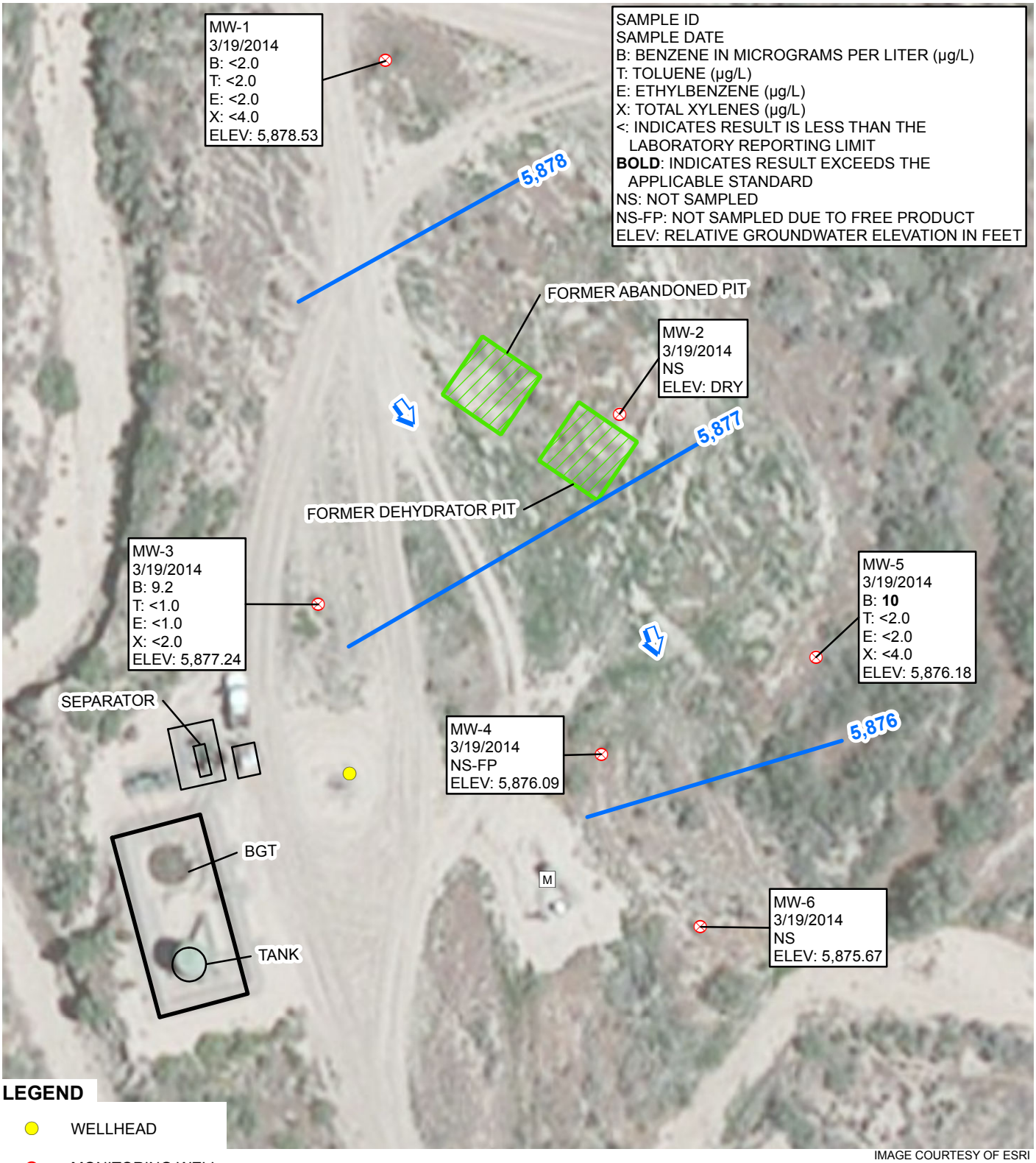
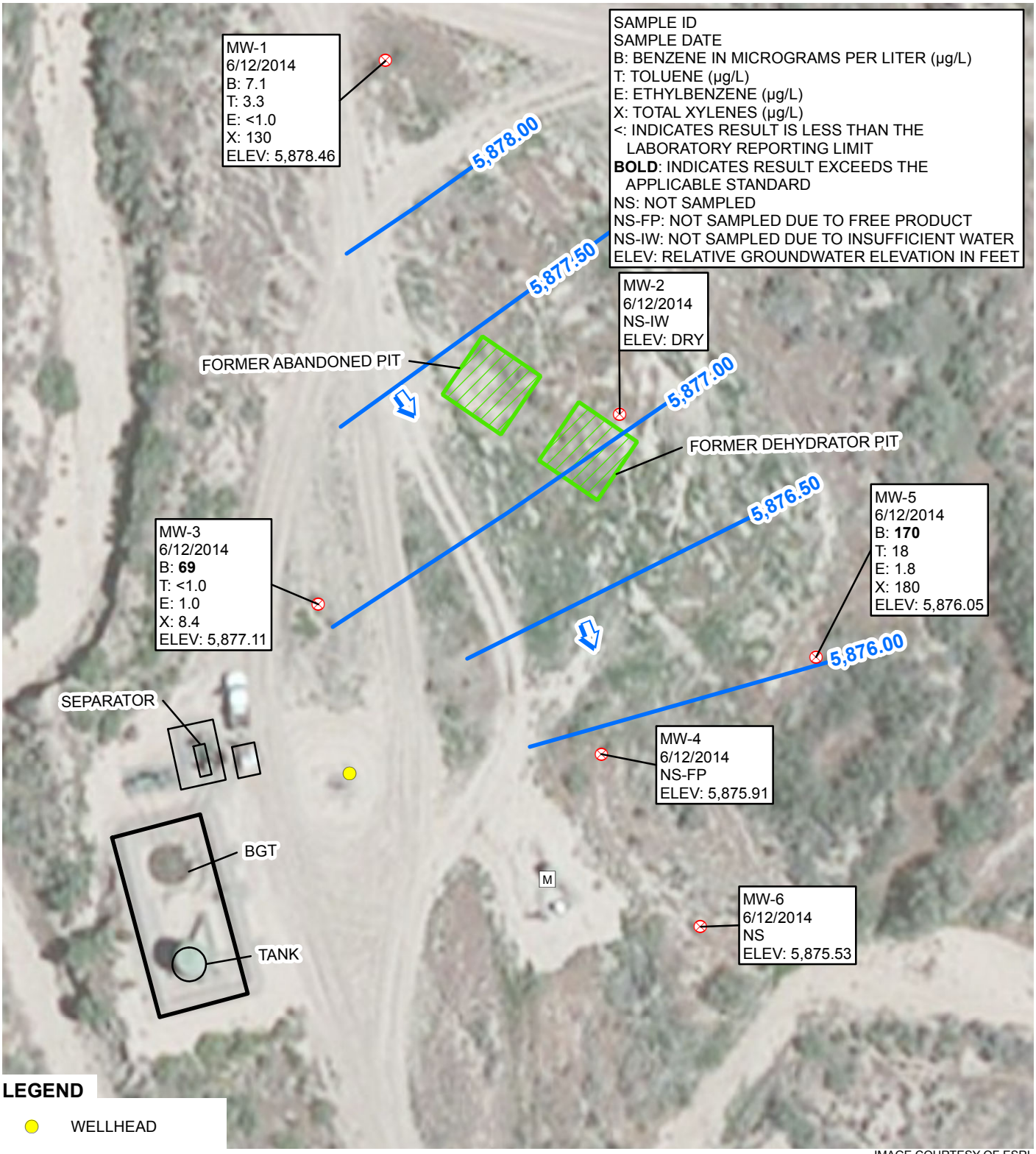


FIGURE 2
GROUNDWATER ELEVATION & ANALYTICAL RESULTS (MARCH 2014)
PRITCHARD #2A
SAN JUAN COUNTY, NEW MEXICO
WILLIAMS FIELD SERVICES, LLC

P:\Williams Field Services\GIS\MXD\034013010_PRITCHARD2\034013010_PRITCHARD_FIG02_GWE_GWA_2014_Q1.mxd



LEGEND

- WELLHEAD
- MONITORING WELL
- METER HOUSE
- ESTIMATED GROUNDWATER FLOW DIRECTION
- RELATIVE GROUNDWATER ELEVATION CONTOUR
  CONTOUR INTERVAL = 0.5 FEET
- BERM

BGT: BELOW GRADE TANK

IMAGE COURTESY OF ESRI

0 50 100
Feet

N

FIGURE 3
GROUNDWATER ELEVATION & ANALYTICAL RESULTS (JUNE 2014)
PRITCHARD #2A
SAN JUAN COUNTY, NEW MEXICO
WILLIAMS FIELD SERVICES, LLC

P:\Williams Field Services\GIS\MXD\034013010_PRITCHARD2\034015003_PRITCHARD_FIG03_GWE_GWA_2014_Q2.mxd

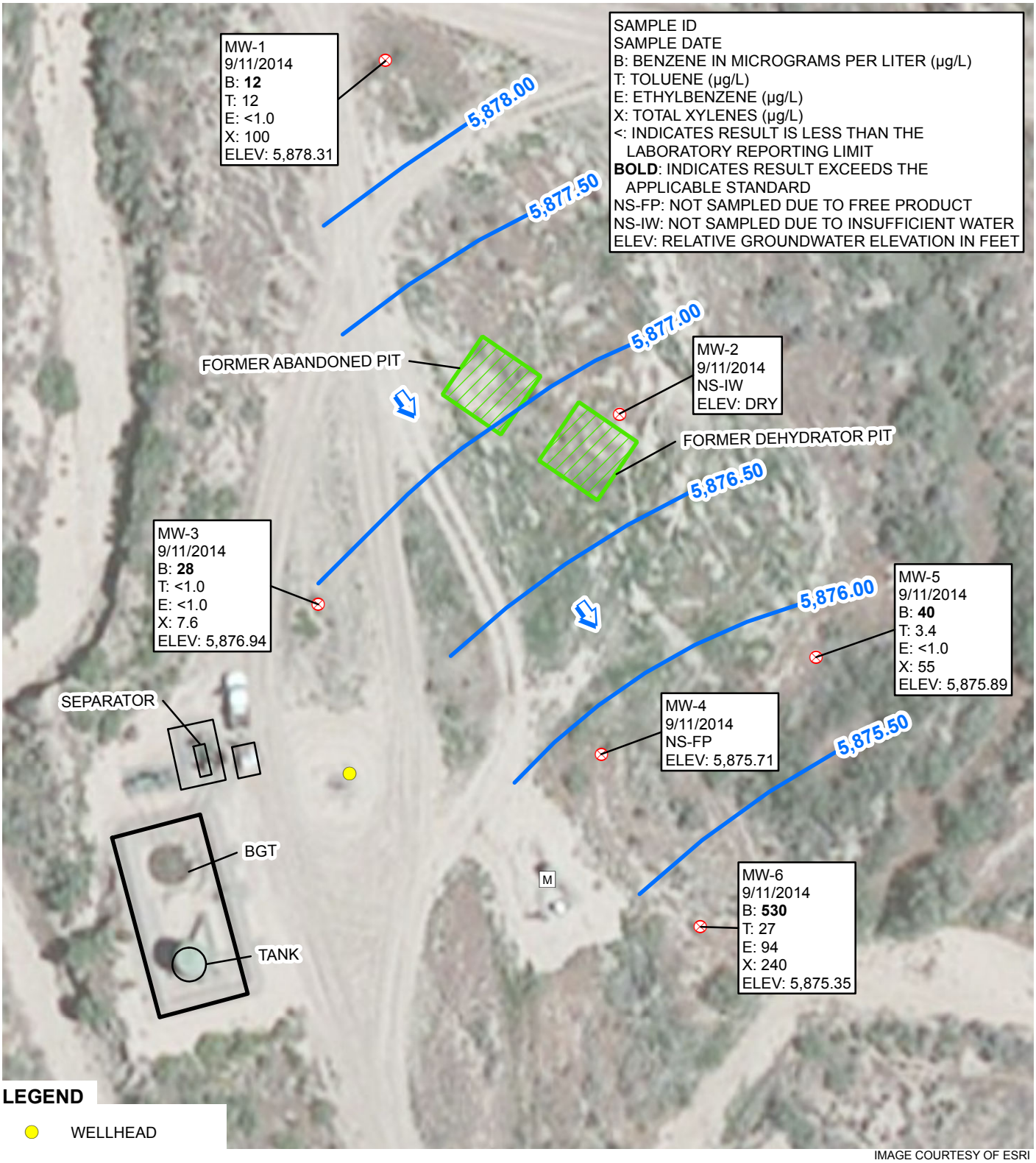


IMAGE COURTESY OF ESRI

LEGEND

- WELLHEAD
- MONITORING WELL
- M METER HOUSE
- ESTIMATED GROUNDWATER FLOW DIRECTION
- RELATIVE GROUNDWATER ELEVATION CONTOUR
  CONTOUR INTERVAL = 0.5 FOOT
- BERM

BGT: BELOW GRADE TANK

0 50 100
Feet

N

FIGURE 4
GROUNDWATER ELEVATION &
ANALYTICAL RESULTS (SEPTEMBER 2014)
PRITCHARD #2A
SAN JUAN COUNTY, NEW MEXICO
WILLIAMS FIELD SERVICES, LLC

P:\Williams Field Services\GIS\MXD\034013010_PRITCHARD2\034015003_PRITCHARD_FIG04_GWE_GWA_2014_Q3.mxd

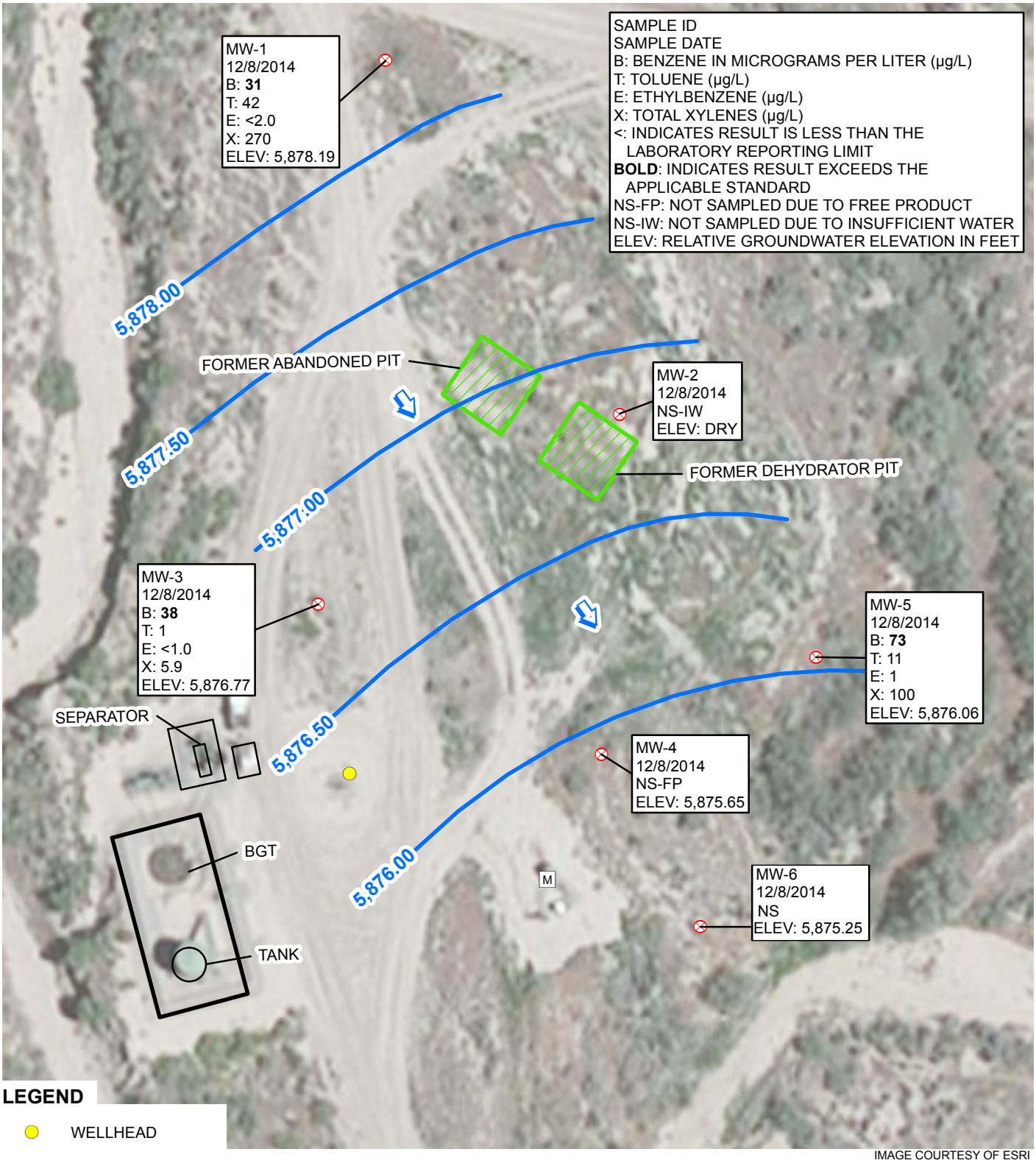


FIGURE 5
GROUNDWATER ELEVATION & ANALYTICAL RESULTS (DECEMBER 2014)
PRITCHARD #2A
SAN JUAN COUNTY, NEW MEXICO
WILLIAMS FIELD SERVICES, LLC

P:\Williams Field Services\GIS\MXD\034013010_PRITCHARD2\034015003_PRITCHARD_FIG04_GWE_GWA_2014_Q4.mxd

TABLES

TABLE 1

GROUNDWATER ELEVATION SUMMARY
PRITCHARD #2A
WILLIAMS FIELD SERVICES, LLC

Well Name	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	2/28/2013	5,966.76	82.06	NP	NP	5,884.70
MW-1*	6/24/2013	5,961.21	82.24	NP	NP	5,878.97
MW-1	9/12/2013	5,961.21	82.35	NP	NP	5,878.86
MW-1	12/6/2013	5,961.21	82.51	NP	NP	5,878.70
MW-1	3/19/2014	5,961.21	82.68	NP	NP	5,878.53
MW-1	6/12/2014	5,961.21	82.75	NP	NP	5,878.46
MW-1	9/11/2014	5,961.21	82.90	NP	NP	5,878.31
MW-1	12/8/2014	5,961.21	83.02	NP	NP	5,878.19
MW-2 **	2/28/2013	5,963.03	79.97	79.63	0.34	5,883.33
MW-2 *	6/24/2013	5,957.53	79.90	79.62	0.28	5,877.85
MW-2	9/12/2013	5,957.53	80.06	79.78	0.28	5,877.69
MW-2	12/6/2013	5,957.53	DRY	DRY	DRY	DRY
MW-2	3/19/2014	5,957.53	DRY	DRY	DRY	DRY
MW-2	6/12/2014	5,957.53	DRY	DRY	DRY	DRY
MW-2	9/11/2014	5,957.53	DRY	DRY	DRY	DRY
MW-2	12/8/2014	5,957.53	DRY	DRY	DRY	DRY
MW-3	2/28/2013	5,961.27	78.02	NP	NP	5,883.25
MW-3*	6/24/2013	5,955.95	78.22	NP	NP	5,877.73
MW-3	9/12/2013	5,955.95	78.37	NP	NP	5,877.58
MW-3	12/6/2013	5,955.95	78.51	NP	NP	5,877.44
MW-3	3/19/2014	5,955.95	78.71	NP	NP	5,877.24
MW-3	6/12/2014	5,955.95	78.84	NP	NP	5,877.11
MW-3	9/11/2014	5,955.95	79.01	NP	NP	5,876.94
MW-3	12/8/2014	5,955.95	79.18	NP	NP	5,876.77
MW-4	2/28/2013	5,960.42	79.55	77.97	1.58	5,882.13
MW-4*	6/24/2013	5,955.12	79.72	78.18	1.54	5,876.63
MW-4	9/12/2013	5,955.12	79.73	78.43	1.30	5,876.43
MW-4	12/6/2013	5,955.12	79.03	78.82	0.21	5,876.26
MW-4	3/19/2014	5,955.12	79.29	78.97	0.32	5,876.09
MW-4	6/12/2014	5,955.12	79.25	79.20	0.05	5,875.91
MW-4	9/11/2014	5,955.12	79.45	79.40	0.05	5,875.71
MW-4	12/8/2014	5,955.12	79.49	79.46	0.03	5,875.65
MW-5	2/28/2013	5,960.41	78.20	NP	NP	5,882.21
MW-5	6/24/2013	5,955.09	78.39	NP	NP	5,876.70
MW-5	9/12/2013	5,955.09	78.55	NP	NP	5,876.54
MW-5	12/6/2013	5,955.09	78.72	NP	NP	5,876.37
MW-5	3/19/2014	5,955.09	78.91	NP	NP	5,876.18
MW-5	6/12/2014	5,955.09	79.04	NP	NP	5,876.05
MW-5	9/11/2014	5,955.09	79.20	NP	NP	5,875.89
MW-5	12/8/2014	5,955.09	79.03	NP	NP	5,876.06

TABLE 1

GROUNDWATER ELEVATION SUMMARY
PRITCHARD #2A
WILLIAMS FIELD SERVICES, LLC

Well Name	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-6	2/28/2013	5,958.24	67.56	NP	NP	5,890.68
MW-6*	6/24/2013	5,952.97	76.74	NP	NP	5,876.23
MW-6	9/12/2013	5,952.97	76.93	NP	NP	5,876.04
MW-6	12/6/2013	5,952.97	77.09	NP	NP	5,875.88
MW-6	3/19/2014	5,952.97	77.30	NP	NP	5,875.67
MW-6	6/12/2014	5,952.97	77.44	NP	NP	5,875.53
MW-6	9/11/2014	5,952.97	77.62	NP	NP	5,875.35
MW-6	12/8/2014	5,952.97	77.72	NP	NP	5,875.25

Notes:
* Top of casing elevation was resurveyed on 6/19/2013
** Product recovery sock was present in well, elevation does not represent static water level
Groundwater elevation calculation in wells with product: (Top of Casing Elevation - Depth to Water) + (Product Thickness * 0.8)
AMSL - Above Mean Sea Level
BTOC - Below Top of Casing
NP - No Product

TABLE 2

GROUNDWATER LABORATORY ANALYTICAL RESULTS
PRITCHARD #2A
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	5/26/1999	**260**	**880**	86	**890**
MW-1	8/17/1999	**180**	270	25	370
MW-1	10/20/1999	**260**	720	36	420
MW-1	1/26/2000	**260**	620	26	460
MW-1	4/17/2000	**250**	580	23	340
MW-1	11/16/2000	**89.1**	69.5	11.1	39.7
MW-1	1/17/2001	**316**	418	15.1	178
MW-1	4/27/2001	**363**	316	5.75	283
MW-1	10/16/2001	**140**	7.3	<2.0	110
MW-1	3/30/2002	**120**	150	ND	270
MW-1	6/16/2002	**79**	20	ND	110
MW-1	9/20/2004	<2.0	<2.0	<2.0	12
MW-1	12/6/2004	2.6	8.6	<2.0	53
MW-1	3/7/2005	**13**	2.3	ND	53
MW-1	6/18/2005	ND	ND	ND	7.9
MW-1	9/16/2005	<2.0	<2.0	<2.0	15
MW-1	11/28/2005	ND	4.5	ND	65.7
MW-1	7/13/2006	**17.5**	6	>1.0	57.2
MW-1	3/29/2010	**18.3**	2.7	<1.0	71.1
MW-1	6/18/2010	**26.5**	19	<1.0	36.3
MW-1	9/10/2010	**20**	<1.0	<1.0	30.2
MW-1	12/4/2010	**17.9**	8.7	<1.0	91.6
MW-1	3/11/2011	5.5	2.8	<1.0	65.1
MW-1	6/14/2011	2.2	<1.0	<1.0	16.9
MW-1	9/12/2011	1.9	<1.0	<1.0	23.3
MW-1	1/3/2012	6.2	8	<1.0	78.1
MW-1	4/2/2012	**23.5**	<1.0	7.7	45.9
MW-1	6/13/2012	**19.0**	<1.0	4.4	33.6
MW-1	10/2/2012	8.0	<1.0	5.6	40.7
MW-1	12/6/2012	**22.0**	<1.0	6.4	52.2
MW-1	2/28/2013	2.3	<1.0	<1.0	93
MW-1	6/24/2013	**65**	53	<2.0	370
MW-1*	9/12/2013	**19**	25	1.5	210
MW-1	12/11/2013	5.6	3.3	<2.0	51
MW-1	3/19/2014	<2.0	<2.0	<2.0	<4.0
MW-1	6/12/2014	7.1	3.3	<1.0	130
MW-1	9/11/2014	**12**	12	<1.0	100

TABLE 2

GROUNDWATER LABORATORY ANALYTICAL RESULTS
PRITCHARD #2A
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	12/8/2014	**31**	42	<2.0	270
MW-2	5/26/1999	**98**	85	18	120
MW-2	3/7/2005	**6,100**	**8,200**	650	**8,100**
MW-2	11/29/2005	**115**	144	41	139
MW-2	7/13/2006	**6,300**	**28,500**	**2,740**	**49,500**
MW-2	9/10/2010	**4,490**	**10,600**	277	**7,700**
MW-2	3/11/2011	**3,690**	**6,380**	243	**5,440**
MW-2	1/3/2012	**721**	**1,280**	73.6	**1,060**
MW-2	4/2/2012	NS	NS	NS	NS
MW-2	6/13/2012	NS	NS	NS	NS
MW-2	10/2/2012	NS	NS	NS	NS
MW-2	12/6/2012	NS	NS	NS	NS
MW-2	2/28/2013	NS-FP	NS-FP	NS-FP	NS-FP
MW-2	6/24/2013	NS-FP	NS-FP	NS-FP	NS-FP
MW-2	9/12/2013	NS-FP	NS-FP	NS-FP	NS-FP
MW-2	12/6/2013	NS-IW	NS-IW	NS-IW	NS-IW
MW-2	3/19/2014	NS-IW	NS-IW	NS-IW	NS-IW
MW-2	6/12/2014	NS-IW	NS-IW	NS-IW	NS-IW
MW-2	9/11/2014	NS-IW	NS-IW	NS-IW	NS-IW
MW-2	12/8/2014	NS-IW	NS-IW	NS-IW	NS-IW
MW-3	8/17/1999	**170**	100	23	150
MW-3	10/20/1999	**320**	250	50	360
MW-3	1/26/2000	**460**	380	180	**1,300**
MW-3	4/17/2000	**310**	150	180	**1,100**
MW-3	11/16/2000	**100**	43.6	21.3	99
MW-3	1/17/2001	**64.8**	81.4	8.7	54.9
MW-3	4/27/2001	1.98	<1	<1	<1
MW-3	10/16/2001	<1.0	<2.0	<2.0	<2.0
MW-3	3/30/2002	3.6	ND	ND	9
MW-3	6/16/2002	**15**	2.6	ND	10
MW-3	12/6/2004	**4.3**	5.2	>2.0	5.6
MW-3	9/20/2004	>2.0	>2.0	>2.0	>5.0
MW-3	3/7/2005	5.8	6	ND	8.2
MW-3	6/18/2005	ND	ND	ND	ND
MW-3	9/16/2005	2.5	<2.0	<2.0	<5.0
MW-3	11/29/2005	4.8	4.9	ND	ND
MW-3	7/18/2006	**56.7**	6.3	>1.0	7.8

TABLE 2

GROUNDWATER LABORATORY ANALYTICAL RESULTS
PRITCHARD #2A
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	3/29/2010	6.0	<1.0	<1.0	4.32
MW-3	6/18/2010	4.4	<1.0	<1.0	5.8
MW-3	9/10/2010	**17.6**	4.3	1.9	20.2
MW-3	12/4/2010	**26.5**	<1.0	1.9	16.4
MW-3	3/11/2011	**10.6**	<1.0	<1.0	4.4
MW-3	6/14/2011	**10.1**	<1.0	1.3	12.0
MW-3	9/12/2011	**21.2**	<1.0	3.0	22.8
MW-3	1/3/2012	8.3	<1.0	<1.0	7.6
MW-3	4/2/2012	**18.2**	1.8	<1.0	7.5
MW-3	6/13/2012	**35.5**	4.5	<1.0	20.7
MW-3	10/2/2012	NS	NS	NS	NS
MW-3	12/6/2012	NS	NS	NS	NS
MW-3	2/28/2013	**18**	<1.0	<1.0	3.5
MW-3	6/24/2013	**130**	<1.0	2.1	18
MW-3	9/12/2013	**21**	3.4	<1.0	6.9
MW-3	12/11/2013	**18**	<1.0	<1.0	2.7
MW-3	3/19/2014	9.2	<1.0	<1.0	<2.0
MW-3	6/12/2014	**69**	<1.0	1.0	8.4
MW-3	9/11/2014	**28**	<1.0	<1.0	7.6
MW-3	12/8/2014	**38**	1.0	<1.0	5.9
MW-4	12/6/2004	**750**	**2,100**	250	**2,400**
MW-4	4/2/2012	NS	NS	NS	NS
MW-4	6/13/2012	NS	NS	NS	NS
MW-4	10/2/2012	NS	NS	NS	NS
MW-4	12/6/2012	NS	NS	NS	NS
MW-4	2/28/2013	NS-FP	NS-FP	NS-FP	NS-FP
MW-4	6/24/2013	NS-FP	NS-FP	NS-FP	NS-FP
MW-4	9/12/2013	NS-FP	NS-FP	NS-FP	NS-FP
MW-4	12/6/2013	NS-FP	NS-FP	NS-FP	NS-FP
MW-4	3/19/2014	NS-FP	NS-FP	NS-FP	NS-FP
MW-4	6/12/2014	NS-FP	NS-FP	NS-FP	NS-FP
MW-4	9/11/2014	NS-FP	NS-FP	NS-FP	NS-FP
MW-4	12/8/2014	NS-FP	NS-FP	NS-FP	NS-FP
MW-5	5/26/1999	**97**	82	18	110
MW-5	1/26/2000	**370**	290	160	**940**
MW-5	4/17/2000	**220**	**1,200**	220	**1,900**
MW-5	11/16/2000	**90.9**	146	23.9	153

TABLE 2

GROUNDWATER LABORATORY ANALYTICAL RESULTS
PRITCHARD #2A
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-5	1/17/2001	**199**	260	46.7	326
MW-5	4/27/2001	3.1	8.34	<1	9.27
MW-5	10/16/2001	1.8	2.3	<2.0	<2.0
MW-5	3/30/2002	**15**	19	ND	71
MW-5	6/16/2002	**23**	30	4.4	56
MW-5	9/20/2004	>2.0	>2.0	2.2	>5.0
MW-5	12/6/2004	2.4	2.2	2.2	8.5
MW-5	3/7/2005	ND	ND	2.2	ND
MW-5	6/18/2005	ND	ND	ND	6.3
MW-5	9/16/2005	<2.0	<2.0	<2.0	5.5
MW-5	11/29/2005	2.9	ND	ND	8.8
MW-5	7/18/2006	**21.7**	7.6	>1.0	44.7
MW-5	3/29/2010	**98.7**	1.4	1.3	48.4
MW-5	6/18/2010	**58.2**	1.0	<1.0	28.5
MW-5	9/10/2010	**108**	3.9	<1.0	90.1
MW-5	12/4/2010	4.6	<1.0	<1.0	8.2
MW-5	6/14/2011	**22.1**	1.4	1.0	24.0
MW-5	9/12/2011	**12.4**	<1.0	<1.0	12.6
MW-5	1/3/2012	**36.3**	5.5	<1.0	31.6
MW-5	6/13/2012	3.3	<1.0	<1.0	<3.0
MW-5	10/2/2012	**18.2**	<1.0	3.7	21.2
MW-5	12/6/2012	**35.4**	<1.0	2.7	30.6
MW-5	2/28/2013	**17**	2.4	<1.0	14
MW-5	6/24/2013	**110**	30	4.3	220
MW-5	9/12/2013	**32**	6.9	1.7	78
MW-5	12/6/2013	**49**	4.7	<1.0	140
MW-5	3/19/2014	**10**	<2.0	<2.0	<4.0
MW-5	6/12/2014	**170**	18	1.8	180
MW-5	9/11/2014	**40**	3.4	<1.0	55
MW-5	12/8/2014	**73**	11	1.0	100
MW-6	9/20/2004	**11**	40	20	110
MW-6	3/7/2005	**110**	330	48	460
MW-6	6/18/2005	**1,100**	**2,100**	280	**2,200**
MW-6	9/16/2005	**100**	140	68	420
MW-6	11/29/2005	**49.1**	100	62.6	261
MW-6	7/18/2006	**795**	**1,480**	285	**2,450**
MW-6	3/29/2010	**777**	12.2	187	**1,010**
MW-6	6/18/2010	**2,300**	<10.0	510	**2,650**

TABLE 2

GROUNDWATER LABORATORY ANALYTICAL RESULTS
PRITCHARD #2A
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-6	9/10/2010	**829**	<10.0	166	**804**
MW-6	12/4/2010	**1,700**	6.6	481	**1,530**
MW-6	3/11/2011	**1,650**	<5.0	268	**926**
MW-6	6/14/2011	**1,940**	<10.0	450	**1,340**
MW-6	9/12/2011	**811**	2.0	185	**452**
MW-6	1/3/2012	**1,280**	<20.0	357	**695**
MW-6	4/2/2012	**1,210**	259	36.2	**423**
MW-6	6/13/2012	**1,360**	501	103	**981**
MW-6	10/2/2012	**882**	375	40.8	**767**
MW-6	12/6/2012	**768**	299	8.4	427
MW-6	2/28/2013	**430**	590	210	**870**
MW-6	6/24/2013	**280**	34	110	**280**
MW-6	9/12/2013	**970**	67	460	**1,000**
MW-6	12/6/2013	**540**	76	520	**1,100**
MW-6	9/11/2014	**530**	27	94	240

Notes:
Bold - indicates sample exceeds NMWQCC standard
< - indicates result is less than laboratory reporting detection limit
* Please note when comparing to laboratory report MW-1 was mislabled as MW-7
µg/L - micrograms per liter
ND - not detected above laboratory reporting limits
NMWQCC - New Mexico Water Quality Control Commission
NS - not sampled
NS-FP - not sampled due to the presence of free phase hydrocarbons in the well
NS-IW - not sampled due to insuffiecnt water volume in the well

APPENDIX A
2014 QUARTERLY FIELD NOTES

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams
Sample Date	3/19/14	Project Name	San Juan Basin Remediation
Sample Time	1245	Project #	03401B010
Sample ID	MW-1	Sampler	Daniel Newman
Analyses	BTEX 8021		
Matrix	GW	Laboratory	~~EPA~~ Hall
Turn Around Time	Standard	Shipping Method	Christine / Hand
Trip Blank	Yes	Other QA/QC	Blanchard
Depth to Water	82.68	TD of Well	88.26
Time	1225	Depth to Product	N/A

Vol. of H2O to purge: 88.26 - 82.68 = 5.58 x 0.1631 = 0.91 x 3 = 2.73

*(height of water column * 0.1631 for 2" well or 0.6524 for 4" well) * 3 well vols*

Method of Purging: Bailer

Method of Sampling: Bailer

Time	Vol. Removed (gal.)	Total Vol H2O removed (gal.)	pH (std. units)	Temp. (C)	Conductivity (us or ms)	Comments
1225	0.25	0.25	7.09	62.1	2.66	lite Brown, cloudy, sediment
			7.08	54.7	22.9	DN
	0.25	0.50	7.04	62.1	2.61	Brown, cloudy sediment
	0.25	0.75	7.00	61.7	2.61	NO change
	0.25	1.00	7.01	61.7	2.63	NO change
	0.25	1.25	7.04	61.7	2.61	NO change
	0.50	1.75	7.04	61.9	2.58	NO change
	0.50	2.25	7.02	62.8	2.58	NO change
	0.25	2.50	7.00	62.6	2.57	NO change
1243	0.25	2.75	6.99	62.4	2.58	NO change

Comments: ~~N/A~~ DN

Sample @ 1245 3 VOA

Describe Deviations from SOP: N/A

Signature: [signature] **Date:** 3/19/14

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	3/19/14	Project Name	San Juan Basin Remediation
Sample Time	N/A	Project #	034013010
Sample ID	MW-2	Sampler	Daniel Neuman
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	DRY	TD of Well	80.03
Time	1300	Depth to Product	N/A
Vol. of H2O to purge	N A		

*(height of water column * 0.1631 for 2" well or 0.6524 for 4" well) * 3 well vols*

Method of Purging ~~PVC Bailer~~ D. NONE

Method of Sampling ~~PVC Bailer~~ D. NONE

Time	Vol. Removed (gal.)	Total Vol H2O removed (gal.)	pH (std. units)	Temp. (C)	Conductivity (us or ms)	Comments

3/19/14

Comments: DRY @ 80.03

NO Sample

Describe Deviations from SOP: N/A

Signature: **Date:** 3/19/14

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	3/19/14	Project Name	San Juan Basin Remediation
Sample Time	1157	Project #	034013010
Sample ID	MW-3	Sampler	Daniel Neuman
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	78.71	TD of Well	83.30
Time	1138	Depth to Product	N/A

Vol. of H2O to purge: 83.30 - 78.71 = 4.49 x 0.1631 = 0.732 x 3 = 2.19

*(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.)~~ oz	pH (std. units)	Temp. (°F)	Conductivity (us or ms)	Comments
1138	6.5oz	6.5oz	6.92	54.7	1922	clear, no odor, no sediment

Comments: GRAB Sample @ 1157 in 3VOA

Bailer kept losing water as it came up the well

Describe Deviations from SOP: ~~Did~~ DW was unable to completly Purge well do to obstruction/Bend in well

Signature: _____ **Date:** 3/19/14

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	3/19/14	Project Name	San Juan Basin Remediation
Sample Time	N/A FREE PRODUCT	Project #	034013010
Sample ID	MW-4	Sampler	Daniel Neuman
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	7929	TD of Well	~~8~~ DW 79.98
Time	1345	Depth to Product	78.97
~~Vol. of H2O to purge~~ Product Height in well	~~79.29 - 79.~~ DW ~~79.98~~ DW	79.29 - 78.97 = 0.32 inch	
	*(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~~ DW NO sampling FREE PRODUCT		

Time	Vol. Removed (gal.)	Total Vol H2O removed (gal.)	Product in Bailer ~~pH (std. units)~~	Temp. (C)	Conductivity (us or ms)	Comments
1945	0.20	0.20	1"			
	0.20	0.40	1"			
1350	0.15	0.55	1"			
1353	0.10	0.65	0.5"			leave Bailer in well & get
1410	0.10	0.75	0.2"			DTW @ MW-6 & sample
			3.7"			MW-5

Comments: 0.32 inch of Product on water
Put NEW 2" PR sock in well
3.7 inch = 5 oz Product Removed

Describe Deviations from SOP: N/A

Signature: _____ **Date:** 3/19/14

LT Environmental

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	3/19/14	Project Name	San Juan Basin Remediation
Sample Time	1407	Project #	034013010
Sample ID	MW-5	Sampler	Jamie Newman
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	78.91	TD of Well	83.02
Time	1314	Depth to Product	N/A

Vol. of H2O to purge: 83.02 - 78.91 = 4.11 x 0.1631 = 0.67 x 3 = 2.01

*(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
1314	0.25	0.25	6.99	62.6	2.73	Gray Brown, cloudy
	0.25	~~0.25~~ 0.50	6.98	61.9	2.77	GRAY, cloudy, sediment
	0.25	0.75	6.98	62.1	2.79	D. Gray, cloudy, sed
	0.25	1.00	7.01	61.9	2.79	No change
	0.25	1.25	6.94	62.0	2.81	No change
	0.20	1.45	6.95	61.7	2.81	No change
1327	0.15	1.60	6.93	61.9	2.78	No change. Bailing Down

Comments: Bailed DRY @ 1327
Came Back & Sampled @ 1407 3/VOA

Describe Deviations from SOP: Only Bailed 1.60 gallons Before Bailed Dry
Came Back @ 1407 to Sample

Signature: _____ **Date:** ~~3/19/14~~ DW 3/19/14

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	6/12/14	Project Name	San Juan Basin Remediation
Sample Time	1330	Project #	034013010
Sample ID	MW-1	Sampler	BHerb
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	82.75	TD of Well	88.26
Time	1300	Depth to Product	NA

Vol. of H2O to purge: 5.51 x .1631 = 0.89 x 3 = 2.696

*(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
1300	0.25	0.25	6.90	68.0	2.77	Clear no odor Minor sed
	0.25	0.50	6.85	67.5	2.65	no change
	0.25	0.75	6.87	66.2	2.68	more sediment
	0.25	1.00	6.96	67.3	2.69	no change
	1.00	2.00	6.89	69.3	2.69	Gray/Brown very silty
	0.25	2.25	6.88	67.3	2.71	no change
	0.25	2.50	6.87	67.0	2.68	"
	0.25	2.75	6.87	66.9	2.70	"
	0.25	3.00	6.87	67.0	2.69	"

Comments:

Describe Deviations from SOP: N/A

Signature: BHerb **Date:** 6/12/14

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	6/12/14	Project Name	San Juan Basin Remediation
Sample Time	14:00	Project #	034013010
Sample ID	MW-3	Sampler	Brooke Herb
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	78.84	TD of Well	83.30
Time	1350	Depth to Product	NA
Vol. of H2O to purge	NA - Grab Sample		

*(height of water column * 0.1631 for 2" well or 0.6524 for 4" well) * 3 well vols*

Method of Purging ~~PVC Bailer~~ Grab Sample

Method of Sampling PVC Bailer

Time	Vol. Removed (gal.)	Total Vol H2O removed (gal.)	pH (std. units)	Temp. (C)	Conductivity (us or ms)	Comments
						Clear, no odor, no sediment
		GRAB SAMPLE				

Comments: Damaged Well

Describe Deviations from SOP: NO Parameters were measured. Grab Sample collected in 3 HCl VOAs without purging 3 casing volumes.

Signature: BHH **Date:** 6/12/14

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	6/12/14	Project Name	San Juan Basin Remediation
Sample Time	1530	Project #	034013010
Sample ID	MW-5	Sampler	Brooke Herb
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water (BT)	15.00	TD of Well	83.02
Time	79.04	Depth to Product	NA

Vol. of H2O to purge: 3.98 x .1631 = 0.65 x 3 = 1.95

*(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
1500	0.25	0.25	6.87	68.7	2.86	clear no odor no sediment
	0.25	0.50	6.83	67.8	2.88	minor silt, slightly cloudy
	0.25	0.75	6.83	67.8	2.82	silty lt. Brown
	0.25	1.00	6.84	66.7	2.83	no change.
	0.25	1.25	6.81	67.2	2.85	"
	0.25	1.50	6.84	67.0	2.87	"
1511						Bailed dry

Comments: Bailed dry after purging 1.50 gallons. Return to Sample @ 15:30. Filled 3 HCl VOAs

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

Signature: [signature] **Date:** 6/12/14

LTE

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	9/11/14	Project Name	San Juan Basin Remediation
Sample Time	1300	Project #	034013010
Sample ID	MW-1	Sampler	Alex Crooks
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	82.90	TD of Well	88.26
Time	1228	Depth to Product	N/A

Vol. of H2O to purge: 88.26 - 82.90 = 5.96 x .1631 = .97 x 3 = 2.92

*(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
1236	.25	.25	6.89	68.2	1.21	Clear, Slight odor
1240	.75	1.00	6.87	65.3	1.17	No change
1245	.75	1.75	6.96	65.5	1.16	light brown, odor
1248	.75	2.50	6.92	65.8	1.15	No change
1255	.50	3.00	6.95	65.4	1.17	no change
1300						Took Sample

Comments: Took Sample @ 1300

Describe Deviations from SOP: N/A

Signature: Alex Crooks **Date:** 09/11/14

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	9/11/14	Project Name	San Juan Basin Remediation
Sample Time	1320	Project #	034013010
Sample ID	MW-3	Sampler	Alex Crooks
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	~~82.90~~ AC 79.01	TD of Well	83.3
Time	~~1228~~ AC	Depth to Product	N/A

Vol. of H2O to purge ~~83.30 - 82.90 = .4 x .1631 = .06 x 3 = .20~~ AC

*(height of water column * 0.1631 for 2" well or 0.6524 for 4" well) * 3 well vols*

83.3 - 79.01 = 4.29 x .1631 = .69 x 3 = 2.10

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
1320	—	—	7.02	65.5	1.08	Took Sample

Comments: Took Grab Sample @ 1 - Used empty VOA for parameters

Describe Deviations from SOP: Obstruction in well - had to take grab sample

Signature: Alex Crooks **Date:** 9/11/14

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	9/11/14	Project Name	San Juan Basin Remediation
Sample Time	N/A	Project #	034013010
Sample ID	MW-4	Sampler	Alex Crooks
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	79.45	TD of Well	78.97
Time	1050	Depth to Product	79.40

~~Vol. of H2O to purge~~ product: 79.45 - 79.40 = .05 of product

*(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
1050	.25	.25				About 1oz of product

AE 9/11/14

Comments: replaced sock

Describe Deviations from SOP: Product on water did not Sample

Signature: Alex Crooks **Date:** 9/11/14

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	9/11/13	Project Name	San Juan Basin Remediation
Sample Time	1215	Project #	034013010
Sample ID	MW-5	Sampler	Alex Crooks
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	79.20	TD of Well	83.02
Time	1132	Depth to Product	N/A

Vol. of H2O to purge: 83.02 - 79.20 = 3.82 x .1631 = .62 x 3 = 1.87

*(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
1138	.25	.25	6.92	68.4	1.28	Clear, Slight, Cloud, odor
1141	.50	.75	6.91	67.1	1.26	light gray / Slight cloud, odor
1145	.25	1.00	6.98	65.4	1.24	going dry / no change
1215						Took Sample

Comments: 1145 well almost dry -
1215 Came back + took Sample

Describe Deviations from SOP: Bailed dry then took Sample

Signature: Alex Crooks **Date:** 9/11/14

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	9/11/14	Project Name	San Juan Basin Remediation
Sample Time	1120	Project #	034013010
Sample ID	MW-2	Sampler	Alex Crooks
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	77.62	TD of Well	~~80.03~~ 82.59
Time	1100	Depth to Product	N/A

Vol. of H2O to purge: 82.59 - 77.62 = 4.97 * .1631 = .81 x 3 = 2.43

*(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
1100	.25	.25	6.76	66.0	1.30	Clear, odor, cloudy
1104	.50	.75	7.01	65.5	1.46	No Change
1111	.50	1.25	6.90	64.8	1.22	No Change
1113	.50	1.75	6.98	64.5	1.25	No Change
1115	.50	2.25	7.02	64.3	1.27	No Change
1118	.25	2.50	7.05	64.3	1.31	No Change
1120						Took Sample

Comments:

Describe Deviations from SOP: N/A

Signature: Alex Crooks **Date:** 9/11/14

LTE

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	12/8/14	Project Name	San Juan Basin Remediation
Sample Time	1145	Project #	034013010
Sample ID	MW-1	Sampler	Daniel Newman
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Christine
Depth to Water	83.02	TD of Well	88.26
Time	1105	Depth to Product	N/A

Vol. of H2O to purge: 88.26 - 83.02 = 5.24 x 0.1631 = 0.854644 x 3 = 2.56

*(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) mS	Comments
1105	0.25	0.25	6.60	63.5	1.17	clear, No sed, slight odor, No sheen
	0.25	0.50	6.61	63.3	1.15	lite brown, sed, slight odor, No sheen
	0.25	0.75	6.75	61.5	1.16	No change
	0.25	1.00	6.76	63.0	1.15	lite brown, cloudy, sed, NO odor sheen
	0.75	1.75	6.77	63.3	1.15	No change
	0.50	2.25	6.77	63.5	1.18	No change
	0.50	2.75	6.75	63.5	1.15	NO change

12/8/14

Comments: Purged 2.75 gallons
Fill 3 HCL VOA's
Decon Equipment

Describe Deviations from SOP: N/A

Signature: _____ **Date:** 12/8/14

Water Sample Collection Form

Sample Location: Pritchard #2A
Sample Date: 12/8/14
Sample Time: N/A
Sample ID: MW-2
Analyses: BTEX 8021
Matrix: Groundwater
Turn Around Time: Standard
Trip Blank: yes
Depth to Water: Dry @ 80.06
Time: 1200
Vol. of H2O to purge: Dry @ 80.06
*(height of water column * 0.1631 for 2" well or 0.6524 for 4" well) * 3 well vols*

Client: Williams Field Services
Project Name: San Juan Basin Remediation
Project #: 03401316
Sampler: Daniel Newman
Laboratory: Hall
Shipping Method: Christine
Other QA/QC: Standard
TD of Well: Dry @ 80.06
Depth to Product: N/A

Method of Purging:
Method of Sampling:

Time	Vol. Removed (gal.)	Total Vol H2O removed (gal.)	pH (std. units)	Temp. (C)	Conductivity (us or ms)	Comments
						Dry @ 80.06

12/8/14

Comments: Dry @ 80.06
Decon Equipment

Describe Deviations from SOP: N/A

Signature: _____ **Date:** 12/8/14

LTE

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	12/8/14	Project Name	San Juan Basin Remediation
Sample Time	1240	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	79.18	TD of Well	83.30
Time	1210	Depth to Product	N/A
Vol. of H2O to purge	83.30 - 79.18 = 4.12 X 0.1631 = 0.6719 x 3 = 2.05 PW 2.01		

*(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.) ~~oz~~	Total Vol H2O removed (gal.) ~~oz~~	pH (std. units)	Temp. (C) ~~F~~	Conductivity (us or ms)	Comments
1210	3.2	3.2	6.62	61.2	1.04	clear. No Sed, No odor. No Sheen
	3.2	6.4	6.63	61.3	1.04	clear, No odor, No Sed, No Sheen

12/8/14

Comments: Fill 3 HCL VOAS Sample = GRAB
Did not Purge complete amount Purged 6.4 oz then sampled
Decon Equipment

Describe Deviations from SOP: Did not Purge 3 casing volumes Bailing down. Very little recovery

Signature: _____ **Date:** 12/8/14

LTE

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	12/8/14	Project Name	San Juan Basin Remediation
Sample Time	N/A	Project #	034013010
Sample ID	MW-4	Sampler	Daniel Newman
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Christine
Depth to Water	79.49	TD of Well	79.98
Time	1255	Depth to Product	74.46

~~Vol. of H2O to purge~~ Productonwater table = 74.49-74.46 = 0.03

*(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
1255						

12/8/14

Comments: Product on water table Did not Sample
Remove 0.25 oz product From well
Put clean sock back in well
Decon Equipment

Describe Deviations from SOP: N/A

Signature: _____ **Date:** 12/8/14

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	12/8/14	Project Name	San Juan Basin Remediation
Sample Time	1355	Project #	034013010
Sample ID	MW-5	Sampler	Daniel Newman
Analyses	BTEX 8021		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Christine
Depth to Water	79.03	TD of Well	83.02
Time	1320	Depth to Product	NA

Vol. of H2O to purge: 83.02 - 79.03 = 3.99 x 0.1631 = 0.6507 = 1.95

*(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
1320	0.20	0.20	6.58	63.3	1.22	clear, No sed. No odor. No sheen
	0.25	0.45	6.63	63.3	1.24	clear, Slight sed. No odor. No sheen
	0.25	0.70	6.64	63.5	1.24	lite gray, Slight sed. NO odor Sheen
	0.20	0.90	6.64	63.3	1.23	No change 3 Bailing
	0.15	1.05	6.68	63.5	1.27	No change 3 Down
	0.05	1.10	6.67	63.5	1.27	No Change Bailing Down

12/9/14

Comments: Sample @ 1.10 gallons @ 1355
Fill 3 HCL VOA
Decon Equipment
Bailing down

Describe Deviations from SOP: Did not Purge 3 casing Volumes, Bailing down

Signature: _____ **Date:** 12/9/14

LTE

APPENDIX B
LABORATORY ANALTYICAL REPORTS

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

March 27, 2014

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

RE: San Juan Basin Remediation Pritchard #2A OrderNo.: 1403910

Dear Ashley Ager:

Hall Environmental Analysis Laboratory received 4 sample(s) on 3/21/2014 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 **1403910**
Date Reported: **3/27/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Client Sample ID: MW-3
Project: San Juan Basin Remediation Pritchard #2
Collection Date: 3/19/2014 11:57:00 AM
Lab ID: 1403910-001
Matrix: AQUEOUS
Received Date: 3/21/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	9.2	1.0		µg/L	1	3/24/2014 4:19:22 PM	R17539
Toluene	ND	1.0		µg/L	1	3/24/2014 4:19:22 PM	R17539
Ethylbenzene	ND	1.0		µg/L	1	3/24/2014 4:19:22 PM	R17539
Xylenes, Total	ND	2.0		µg/L	1	3/24/2014 4:19:22 PM	R17539
Surr: 4-Bromofluorobenzene	98.9	82.9-139		%REC	1	3/24/2014 4:19:22 PM	R17539

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Client Sample ID: MW-5
Project: San Juan Basin Remediation Pritchard #2
Collection Date: 3/19/2014 2:07:00 PM
Lab ID: 1403910-002 **Matrix:** AQUEOUS **Received Date:** 3/21/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	10	2.0		µg/L	2	3/24/2014 6:19:59 PM	R17539
Toluene	ND	2.0		µg/L	2	3/24/2014 6:19:59 PM	R17539
Ethylbenzene	ND	2.0		µg/L	2	3/24/2014 6:19:59 PM	R17539
Xylenes, Total	ND	4.0		µg/L	2	3/24/2014 6:19:59 PM	R17539
Surr: 4-Bromofluorobenzene	99.8	82.9-139		%REC	2	3/24/2014 6:19:59 PM	R17539

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Client Sample ID: MW-1
Project: San Juan Basin Remediation Pritchard #2
Collection Date: 3/19/2014 12:45:00 PM
Lab ID: 1403910-003
Matrix: AQUEOUS
Received Date: 3/21/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	2.0		µg/L	2	3/24/2014 6:50:10 PM	R17539
Toluene	ND	2.0		µg/L	2	3/24/2014 6:50:10 PM	R17539
Ethylbenzene	ND	2.0		µg/L	2	3/24/2014 6:50:10 PM	R17539
Xylenes, Total	ND	4.0		µg/L	2	3/24/2014 6:50:10 PM	R17539
Surr: 4-Bromofluorobenzene	99.3	82.9-139		%REC	2	3/24/2014 6:50:10 PM	R17539

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Client Sample ID: Trip Blank
Project: San Juan Basin Remediation Pritchard #2
Collection Date:
Lab ID: 1403910-004
Matrix: AQUEOUS
Received Date: 3/21/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0	P	µg/L	1	3/24/2014 7:20:05 PM	R17539
Toluene	ND	1.0	P	µg/L	1	3/24/2014 7:20:05 PM	R17539
Ethylbenzene	ND	1.0	P	µg/L	1	3/24/2014 7:20:05 PM	R17539
Xylenes, Total	ND	2.0	P	µg/L	1	3/24/2014 7:20:05 PM	R17539
Surr: 4-Bromofluorobenzene	98.5	82.9-139	P	%REC	1	3/24/2014 7:20:05 PM	R17539

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403910**

27-Mar-14

Client: LTE

Project: San Juan Basin Remediation Pritchard #2A

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW**	Batch ID: **R17539**	RunNo: **17539**
Prep Date:	Analysis Date: **3/24/2014**	SeqNo: **505125** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	19		20.00		94.9	82.9	139			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **R17539**	RunNo: **17539**
Prep Date:	Analysis Date: **3/24/2014**	SeqNo: **505126** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	80	120			
Toluene	20	1.0	20.00	0	102	80	120			
Ethylbenzene	20	1.0	20.00	0	100	80	120			
Xylenes, Total	61	2.0	60.00	0	102	80	120			
Surr: 4-Bromofluorobenzene	20		20.00		101	82.9	139			

Sample ID **1403910-001AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **MW-3**	Batch ID: **R17539**	RunNo: **17539**
Prep Date:	Analysis Date: **3/24/2014**	SeqNo: **505129** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	30	1.0	20.00	9.192	103	71	129			
Toluene	20	1.0	20.00	0	102	68.4	135			
Ethylbenzene	21	1.0	20.00	0.3780	101	69.4	135			
Xylenes, Total	63	2.0	60.00	0	106	72.4	135			
Surr: 4-Bromofluorobenzene	20		20.00		101	82.9	139			

Sample ID **1403910-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **MW-3**	Batch ID: **R17539**	RunNo: **17539**
Prep Date:	Analysis Date: **3/24/2014**	SeqNo: **505130** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	30	1.0	20.00	9.192	103	71	129	0.0468	20	
Toluene	21	1.0	20.00	0	103	68.4	135	0.458	20	
Ethylbenzene	21	1.0	20.00	0.3780	101	69.4	135	0.409	20	
Xylenes, Total	63	2.0	60.00	0	105	72.4	135	0.183	20	
Surr: 4-Bromofluorobenzene	20		20.00		101	82.9	139	0	0	

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: LTE | Work Order Number: 1403910 | RcptNo: 1

Received by/date: MG 03/21/14

Logged By: **Michelle Garcia** 3/21/2014 10:00:00 AM Michelle Garcia

Completed By: **Michelle Garcia** 3/21/2014 10:36:26 AM Michelle Garcia

Reviewed By: CS 03/21/14

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:
Trip Blank was made and provided by Client. MG 03/21/2014

18. **Cooler Information**

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

Chain-of-Custody Record

Client: LT ENVIRONMENTAL

Mailing Address: 22B MAIN AVE
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: San Juan Basin Remediation Pritchard #2A

Project #: 03401301O

Project Manager: Ashley Ager

Sampler: Daniel Neuman

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1403910	BTEX + ~~MTBE + TMB's~~ (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
3/19/14	1157	GW	MW-3	VOA/3	HCL	-001	X															
3/19/14	1407	GW	MW-5	VOA/3	HCL	-002	X															
3/19/14	1245	GW	MW-1	VOA/3	HCL	-003	X															
3/19/14			TRIPBLANK	VOA/2	Cool	-004	X															

Date:	Time:	Relinquished by:	Received by:	Date	Time
3/20/14	1200		Christine Walters	3/20/14	1200
Date:	Time:	Relinquished by:	Received by:	Date	Time
3/20/14	1744	Christine Walters		03/21/14	1000

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

June 20, 2014

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

RE: Pritchard #2A OrderNo.: 1406676

Dear Brook Herb:

Hall Environmental Analysis Laboratory received 4 sample(s) on 6/14/2014 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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Client Sample ID: MW-5
Project: Pritchard #2A
Collection Date: 6/12/2014 3:30:00 PM
Lab ID: 1406676-001
Matrix: AQUEOUS
Received Date: 6/14/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	170	5.0		µg/L	5	6/18/2014 4:08:06 PM	R19363
Toluene	18	1.0		µg/L	1	6/16/2014 2:11:51 PM	R19307
Ethylbenzene	1.8	1.0		µg/L	1	6/16/2014 2:11:51 PM	R19307
Xylenes, Total	180	2.0		µg/L	1	6/16/2014 2:11:51 PM	R19307
Surr: 4-Bromofluorobenzene	127	82.9-139		%REC	1	6/16/2014 2:11:51 PM	R19307

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Client Sample ID: MW-3
Project: Pritchard #2A
Collection Date: 6/12/2014 2:00:00 PM
Lab ID: 1406676-002
Matrix: AQUEOUS
Received Date: 6/14/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	69	1.0		µg/L	1	6/16/2014 2:42:02 PM	R19307
Toluene	ND	1.0		µg/L	1	6/16/2014 2:42:02 PM	R19307
Ethylbenzene	1.0	1.0		µg/L	1	6/16/2014 2:42:02 PM	R19307
Xylenes, Total	8.4	2.0		µg/L	1	6/16/2014 2:42:02 PM	R19307
Surr: 4-Bromofluorobenzene	118	82.9-139		%REC	1	6/16/2014 2:42:02 PM	R19307

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-1
Project: Pritchard #2A
Collection Date: 6/12/2014 1:30:00 PM
Lab ID: 1406676-003
Matrix: AQUEOUS
Received Date: 6/14/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	7.1	1.0		µg/L	1	6/16/2014 3:12:19 PM	R19307
Toluene	3.3	1.0		µg/L	1	6/16/2014 3:12:19 PM	R19307
Ethylbenzene	ND	1.0		µg/L	1	6/16/2014 3:12:19 PM	R19307
Xylenes, Total	130	2.0		µg/L	1	6/16/2014 3:12:19 PM	R19307
Surr: 4-Bromofluorobenzene	125	82.9-139		%REC	1	6/16/2014 3:12:19 PM	R19307

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: Pritchard #2A
Collection Date: 6/12/2014
Lab ID: 1406676-004
Matrix: TRIP BLANK
Received Date: 6/14/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	6/16/2014 3:42:28 PM	R19307
Toluene	ND	1.0		µg/L	1	6/16/2014 3:42:28 PM	R19307
Ethylbenzene	ND	1.0		µg/L	1	6/16/2014 3:42:28 PM	R19307
Xylenes, Total	ND	2.0		µg/L	1	6/16/2014 3:42:28 PM	R19307
Surr: 4-Bromofluorobenzene	114	82.9-139		%REC	1	6/16/2014 3:42:28 PM	R19307

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#: **1406676**

20-Jun-14

Client: LTE

Project: Pritchard #2A

Sample ID	**5ML RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBW**	Batch ID:	**R19307**	RunNo:	**19307**					
Prep Date:		Analysis Date:	**6/16/2014**	SeqNo:	**558173**	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	23		20.00		113	82.9	139			

Sample ID	**100NG BTEX LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSW**	Batch ID:	**R19307**	RunNo:	**19307**					
Prep Date:		Analysis Date:	**6/16/2014**	SeqNo:	**558174**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	80	120			
Toluene	20	1.0	20.00	0	102	80	120			
Ethylbenzene	20	1.0	20.00	0	100	80	120			
Xylenes, Total	63	2.0	60.00	0	105	80	120			
Surr: 4-Bromofluorobenzene	24		20.00		120	82.9	139			

Sample ID	**1406676-001AMS**	SampType:	**MS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**MW-5**	Batch ID:	**R19307**	RunNo:	**19307**					
Prep Date:		Analysis Date:	**6/16/2014**	SeqNo:	**558179**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	180	1.0	20.00	117.4	321	71	129			ES
Toluene	49	1.0	20.00	18.19	154	68.4	135			S
Ethylbenzene	23	1.0	20.00	1.832	107	69.4	135			
Xylenes, Total	310	2.0	60.00	184.9	202	72.4	135			ES
Surr: 4-Bromofluorobenzene	25		20.00		124	82.9	139			

Sample ID	**1406676-001AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**MW-5**	Batch ID:	**R19307**	RunNo:	**19307**					
Prep Date:		Analysis Date:	**6/16/2014**	SeqNo:	**558180**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	180	1.0	20.00	117.4	330	71	129	0.988	20	ES
Toluene	49	1.0	20.00	18.19	154	68.4	135	0.220	20	S
Ethylbenzene	23	1.0	20.00	1.832	107	69.4	135	0.542	20	
Xylenes, Total	310	2.0	60.00	184.9	207	72.4	135	0.995	20	ES
Surr: 4-Bromofluorobenzene	26		20.00		132	82.9	139	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1406676**

20-Jun-14

Client: LTE

Project: Pritchard #2A

Sample ID	**5ML RB**	SampType: **MBLK**			TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**PBW**	Batch ID: **R19316**			RunNo: **19316**					
Prep Date:		Analysis Date: **6/17/2014**			SeqNo: **559069**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	20		20.00		102	82.9	139			

Sample ID	**100NG BTEX LCS**	SampType: **LCS**			TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**LCSW**	Batch ID: **R19316**			RunNo: **19316**					
Prep Date:		Analysis Date: **6/17/2014**			SeqNo: **559070**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	22		20.00		109	82.9	139			

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								
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			
Surr: 4-Bromofluorobenzene	22		20.00		109	82.9	139			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: LTE | Work Order Number: 1406676 | RcptNo: 1

Received by/date: 06/14/14

Logged By: Ashley Gallegos 6/14/2014 10:00:00 AM

Completed By: Ashley Gallegos 6/16/2014 8:42:49 AM

Reviewed By: 06/16/14

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	1.9	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#: bherb@ltenv.com

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: Pritchard #2A

Project #: 034013010

Project Manager: Brooke Herb

Sampler: Brooke Herb

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.9

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. 1406676	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)
12/14	1530	GW	MW-5	VOA/3	HCL	-001	X															
12/14	1400	GW	MW-3	VOA/3	HCL	-002	X															
12/14	1330	GW	MW-1	VOA/3	HCL	-003	X															
			Trip Blank	VOA/2	HCL	-004	X															

Date:	Time:	Relinquished by:	Received by:	Date	Time
12/13/14	1500	[signature]	[signature]	6/13/14	1500
12/13/14	2030	[signature]	[signature]	06/14/14	1000

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

September 18, 2014

Brooke Herb

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

RE: Pritchard #2A OrderNo.: 1409580

Dear Brooke Herb:

Hall Environmental Analysis Laboratory received 5 sample(s) on 9/12/2014 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 **1409580**
Date Reported: **9/18/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Client Sample ID: MW-6
Project: Pritchard #2A
Collection Date: 9/11/2014 11:20:00 AM
Lab ID: 1409580-001
Matrix: AQUEOUS
Received Date: 9/12/2014 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **DJF**	
Benzene	530	20		µg/L	20	9/15/2014 3:05:47 PM	R21216
Toluene	27	20		µg/L	20	9/15/2014 3:05:47 PM	R21216
Ethylbenzene	94	20		µg/L	20	9/15/2014 3:05:47 PM	R21216
Xylenes, Total	240	40		µg/L	20	9/15/2014 3:05:47 PM	R21216
Surr: 4-Bromofluorobenzene	125	66.6-167		%REC	20	9/15/2014 3:05:47 PM	R21216

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-5
Project: Pritchard #2A
Collection Date: 9/11/2014 12:15:00 PM
Lab ID: 1409580-002
Matrix: AQUEOUS
Received Date: 9/12/2014 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	40	1.0		µg/L	1	9/13/2014 12:18:59 AM	R21183
Toluene	3.4	1.0		µg/L	1	9/13/2014 12:18:59 AM	R21183
Ethylbenzene	ND	1.0		µg/L	1	9/13/2014 12:18:59 AM	R21183
Xylenes, Total	55	2.0		µg/L	1	9/13/2014 12:18:59 AM	R21183
Surr: 4-Bromofluorobenzene	111	66.6-167		%REC	1	9/13/2014 12:18:59 AM	R21183

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-1
Project: Pritchard #2A
Collection Date: 9/11/2014 1:00:00 PM
Lab ID: 1409580-003
Matrix: AQUEOUS
Received Date: 9/12/2014 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	12	1.0		µg/L	1	9/13/2014 1:19:18 AM	R21183
Toluene	12	1.0		µg/L	1	9/13/2014 1:19:18 AM	R21183
Ethylbenzene	ND	1.0		µg/L	1	9/13/2014 1:19:18 AM	R21183
Xylenes, Total	100	2.0		µg/L	1	9/13/2014 1:19:18 AM	R21183
Surr: 4-Bromofluorobenzene	107	66.6-167		%REC	1	9/13/2014 1:19:18 AM	R21183

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-3
Project: Pritchard #2A
Collection Date: 9/11/2014 1:20:00 PM
Lab ID: 1409580-004
Matrix: AQUEOUS
Received Date: 9/12/2014 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	28	1.0		µg/L	1	9/13/2014 1:49:33 AM	R21183
Toluene	ND	1.0		µg/L	1	9/13/2014 1:49:33 AM	R21183
Ethylbenzene	ND	1.0		µg/L	1	9/13/2014 1:49:33 AM	R21183
Xylenes, Total	7.6	2.0		µg/L	1	9/13/2014 1:49:33 AM	R21183
Surr: 4-Bromofluorobenzene	106	66.6-167		%REC	1	9/13/2014 1:49:33 AM	R21183

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: Pritchard #2A
Collection Date:
Lab ID: 1409580-005
Matrix: TRIP BLANK
Received Date: 9/12/2014 6:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	9/13/2014 2:19:53 AM	R21183
Toluene	ND	1.0		µg/L	1	9/13/2014 2:19:53 AM	R21183
Ethylbenzene	ND	1.0		µg/L	1	9/13/2014 2:19:53 AM	R21183
Xylenes, Total	ND	2.0		µg/L	1	9/13/2014 2:19:53 AM	R21183
Surr: 4-Bromofluorobenzene	103	66.6-167		%REC	1	9/13/2014 2:19:53 AM	R21183

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#: **1409580**

18-Sep-14

Client: LTE

Project: Pritchard #2A

Sample ID	**5ML RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBW**	Batch ID:	**R21183**	RunNo:	**21183**					
Prep Date:		Analysis Date:	**9/12/2014**	SeqNo:	**616442**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	19		20.00		95.3	66.6	167			

Sample ID	**100NG BTEX LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSW**	Batch ID:	**R21183**	RunNo:	**21183**					
Prep Date:		Analysis Date:	**9/12/2014**	SeqNo:	**616443**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	100	80	120			
Toluene	20	1.0	20.00	0	100	80	120			
Ethylbenzene	20	1.0	20.00	0	100	80	120			
Xylenes, Total	62	2.0	60.00	0	104	80	120			
Surr: 4-Bromofluorobenzene	18		20.00		89.9	66.6	167			

Sample ID	**5ML RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBW**	Batch ID:	**R21216**	RunNo:	**21216**					
Prep Date:		Analysis Date:	**9/15/2014**	SeqNo:	**617973**	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		105	66.6	167			

Sample ID	**100NG BTEX LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSW**	Batch ID:	**R21216**	RunNo:	**21216**					
Prep Date:		Analysis Date:	**9/15/2014**	SeqNo:	**617974**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	94.7	80	120			
Toluene	19	1.0	20.00	0	96.3	80	120			
Ethylbenzene	19	1.0	20.00	0	96.7	80	120			
Xylenes, Total	60	2.0	60.00	0	100	80	120			
Surr: 4-Bromofluorobenzene	22		20.00		112	66.6	167			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: LTE | Work Order Number: 1409580 | RcptNo: 1

Received by/date: 09/12/14

Logged By: **Lindsay Mangin** 9/12/2014 6:30:00 AM

Completed By: **Lindsay Mangin** 9/12/2014 8:27:29 AM

Reviewed By: 09/12/14

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	2.1	Good	Yes			

Chain-of-Custody Record

Client: LT environmental

Mailing Address: 2243 main Ave
Durango Co 81301

Phone #: 970-385-1096

email or Fax#: BherbG Henv.com

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name:
Pritchard #2A

Project #:
034013010

Project Manager:
Brooke Herb

Sampler:

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.1

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. 1409580	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)
9/11/14	1120	gw	MW-6	3 x 40	HCl	-001	X														
	1215		MW-5			-002	X														
	1300		MW-1			-003	X														
	1320		MW-3			-004	X														
			TripBlank			-005	X														

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/11	1450	Colleen Crooks	Christie Walker	9/11/14	1450
9/11/14	1850	Christie Walker		09/12/14	0630

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

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Website: www.hallenvironmental.com

December 11, 2014

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

RE: Pritchard #2A OrderNo.: 1412393

Dear Ashley Ager:

Hall Environmental Analysis Laboratory received 4 sample(s) on 12/9/2014 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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Project: Pritchard #2A
Lab Order: 1412393

Lab ID: 1412393-001 **Collection Date:** 12/8/2014 11:45:00 AM
Client Sample ID: MW-1 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	31	2.0		µg/L	2	12/9/2014 11:00:15 PM	R23036
Toluene	42	2.0		µg/L	2	12/9/2014 11:00:15 PM	R23036
Ethylbenzene	ND	2.0		µg/L	2	12/9/2014 11:00:15 PM	R23036
Xylenes, Total	270	4.0		µg/L	2	12/9/2014 11:00:15 PM	R23036
Surr: 4-Bromofluorobenzene	113	66.6-167		%REC	2	12/9/2014 11:00:15 PM	R23036

Lab ID: 1412393-002 **Collection Date:** 12/8/2014 12:40:00 PM
Client Sample ID: MW-3 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	38	1.0		µg/L	1	12/9/2014 11:27:29 PM	R23036
Toluene	1.0	1.0		µg/L	1	12/9/2014 11:27:29 PM	R23036
Ethylbenzene	ND	1.0		µg/L	1	12/9/2014 11:27:29 PM	R23036
Xylenes, Total	5.9	2.0		µg/L	1	12/9/2014 11:27:29 PM	R23036
Surr: 4-Bromofluorobenzene	114	66.6-167		%REC	1	12/9/2014 11:27:29 PM	R23036

Lab ID: 1412393-003 **Collection Date:** 12/8/2014 1:55:00 PM
Client Sample ID: MW-5 **Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	73	1.0		µg/L	1	12/9/2014 11:54:51 PM	R23036
Toluene	11	1.0		µg/L	1	12/9/2014 11:54:51 PM	R23036
Ethylbenzene	1.0	1.0		µg/L	1	12/9/2014 11:54:51 PM	R23036
Xylenes, Total	100	2.0		µg/L	1	12/9/2014 11:54:51 PM	R23036
Surr: 4-Bromofluorobenzene	114	66.6-167		%REC	1	12/9/2014 11:54:51 PM	R23036

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Project: Pritchard #2A
Lab Order: 1412393

Lab ID: 1412393-004
Collection Date:
Client Sample ID: Trip Blank
Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	12/10/2014 12:49:02 AM	R23036
Toluene	ND	1.0		µg/L	1	12/10/2014 12:49:02 AM	R23036
Ethylbenzene	ND	1.0		µg/L	1	12/10/2014 12:49:02 AM	R23036
Xylenes, Total	ND	2.0		µg/L	1	12/10/2014 12:49:02 AM	R23036
Surr: 4-Bromofluorobenzene	111	66.6-167		%REC	1	12/10/2014 12:49:02 AM	R23036

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1412393**

11-Dec-14

Client: LTE

Project: Pritchard #2A

Sample ID	**5ML RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBW**	Batch ID:	**R23036**	RunNo:	**23036**					
Prep Date:		Analysis Date:	**12/9/2014**	SeqNo:	**680522**	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		107	66.6	167			

Sample ID	**100NG BTEX LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSW**	Batch ID:	**R23036**	RunNo:	**23036**					
Prep Date:		Analysis Date:	**12/9/2014**	SeqNo:	**680523**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.4	80	120			
Toluene	20	1.0	20.00	0	101	80	120			
Ethylbenzene	21	1.0	20.00	0	103	80	120			
Xylenes, Total	63	2.0	60.00	0	105	80	120			
Surr: 4-Bromofluorobenzene	22		20.00		110	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 es 12/09/14 Work Order Number: 1412393 RcptNo: 1

Received by/date: AGS 12/09/14

Logged By: **Celina Sessa** 12/9/2014 7:45:00 AM Celina Sessa

Completed By: **Celina Sessa** 12/9/2014 9:14:20 AM Celina Sessa

Reviewed By: 12/09/14

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	1.6	Good	Not Present			

Chain-of-Custody Record

Client: LT Environmental

Mailing Address: 22B MAIN Ave #3

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: 03401 3010

Project #: Pritchard #2A

Project Manager: Ashley Ager

Sampler: Daniel Newman

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1412393	BTEX + ~~MTBE + TMD'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)
2/8/14	1145	GW	MW-1	VOA/3	HCl	-001	X														
2/8/14	1240	GW	MW-3	VOA/3	HCl	-002	X														
2/8/14	1355	GW	MW-5	VOA/3	HCl	-003	X														
			TRIPBLANK	VOA/2	COOL	-004	X														

Date	Time	Relinquished by:	Received by:	Date	Time
2/8/14	1605		Christie Walls	2/8/14	1605
2/8/14	1747	Christie Walls		12/09/14	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.