P.O. Box 3483, MD 48-6
Tulsa, OK 74101

April 14, 2016

Randolph Bayliss
Hydrologist, Districts III and IV
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Online Submission of 2016 Annual Groundwater Reports

Dear Mr. Bayliss,

LT Environmental (LTE), Inc., on behalf of Williams Four Corners LLC (Williams), is electronically submitting the attached 2016 annual groundwater monitoring reports covering the period from January 1, 2016 to December 31, 2016 for the following sites:

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

If you have any questions regarding these reports please contact Brooke Herb with LTE at 970-385-1096 or BHerb@LTEnv.com or Aaron Galer with Williams at 801-584-6746 or Aaron.Galer@Williams.com.

Sincerely,

Aaron Galer

Aaron Galer
Environmental Specialist IV
Williams Companies

cc:
Attachments (6)

2016 ANNUAL GROUNDWATER REPORT

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

APRIL 2017

Prepared for:

WILLIAMS FOUR CORNERS LLC
Salt Lake City, Utah

2016 ANNUAL GROUNDWATER REPORT

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

APRIL 2017

Prepared for:

WILLIAMS FOUR CORNERS LLC
295 Chipeta Way
Salt Lake City, Utah 84108

Prepared by:

LT ENVIRONMENTAL, INC.
848 East Second Avenue
Durango, Colorado 81301
(970) 385-1096

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EXECUTIVE SUMMARY

Groundwater at the Pritchard #2A (Site), Administrative/Environmental Order Number 3RP-339-0, is impacted by petroleum hydrocarbons exceeding the New Mexico Water Quality Control Commission (NMWQCC) groundwater standards for benzene due to releases involving two former pits: a former dehydrator pit and a 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 monitoring wells were installed upgradient (MW-1) and downgradient (MW-3, MW-4, MW-5, and MW-6) of the former pits. Williams Four Corners 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.

In 2016, Williams retained LT Environmental, Inc. (LTE) to complete the annual groundwater monitoring requirements. During 2016, LTE conducted one groundwater monitoring event in September 2016, in which LTE sampled groundwater from monitoring wells MW-1, MW-3, and MW-5. Laboratory analytical results indicated samples MW-3 and MW-5 contained benzene concentrations exceeding NMWQCC standards. Monitoring well MW-2 was dry and monitoring wells MW-4 and MW-6 contained phase-separated hydrocarbons (PSH). Approximately 2 ounces of PSH were recovered from monitoring well MW-4 and approximately 12 ounces of PSH were recovered from monitoring well MW-6 during 2016, using oil absorbent socks and manual recovery.

Williams will monitor groundwater elevations and for the presence of PSH in the existing monitoring wells on a quarterly basis in 2017. Williams will manually recover PSH from monitoring wells MW-4 and MW-6 when present and install oil absorbent socks for passive PSH recovery between monitoring events. Additionally, Williams will collect groundwater samples from monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, and MW-6 annually to be analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX).

1.0 INTRODUCTION

LT Environmental, Inc. (LTE) on behalf of Williams Four Corners LLC (Williams) has prepared this report detailing annual groundwater monitoring activities completed from January 2016 through December 2016 at the Pritchard #2A (Site), Administrative/Environmental Order Number 3RP-339-0. The scope of work for this project was continued monitoring of petroleum hydrocarbon impacts to groundwater as a result of a release involving two former pits: a former dehydrator pit and a 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 soil and groundwater impacts at the Site originated from two former pits: a former dehydrator pit and a 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. Laboratory analytical results for soil samples from the bases of the two excavations indicated total petroleum hydrocarbons (TPH)-diesel range organics (DRO) and benzene, toluene, ethylbenzene, and total xylenes (BTEX) concentrations exceeded the New Mexico Oil Conservation Division (NMOCD) standards. A groundwater sample collected from a monitoring well installed in the east pit at approximately 76.5 feet below ground surface (bgs) contained 8,600 micrograms per liter (µg/L) of benzene. Sometime prior to April 2000, 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 are in previous groundwater reports submitted to the NMOCD.

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

2.0 METHODOLOGY

2.1 SCOPE OF WORK

Groundwater monitoring activities were conducted at the Site in September 2016. The groundwater monitoring activities consisted of monitoring for PSH, measuring groundwater elevations in the six monitoring wells, and sampling groundwater in monitoring wells MW-1, MW-3, and MW-5 annually. MW-2 was not sampled due to insufficient water volume and monitoring wells MW-4 and MW-6 were not sampled due to the presence of PSH.

2.2 WATER AND PRODUCT LEVEL MEASUREMENTS

LTE measured depth to groundwater in six monitoring wells and investigated the presence of PSH using 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.

2.3 GROUNDWATER SAMPLING

Prior to sampling groundwater, LTE measured depth to groundwater and total depth of monitoring wells with a Keck oil/water interface probe. 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 monitoring well using a dedicated polyvinyl chloride (PVC) bailer. As water was removed from the monitoring well, pH, electrical conductivity, and temperature were monitored. Monitoring wells were purged until these properties stabilized, indicating the purge water was representative of aquifer conditions, or until the well was purged dry. Stabilization was defined as three consecutive stable readings for each water property (plus or minus (±) 0.4 units for pH, ±10 percent for electric conductivity, and ±2 degrees (º) Celsius for temperature). Purge water was containerized and disposed of at a facility designated by Williams. The 2016 field notes are presented in Appendix A.

Once each monitoring well was properly purged, groundwater samples were collected by filling three 40-milliliter (ml) glass vials. The laboratory-supplied vials were filled and capped with no air inside to prevent degradation of the sample. Samples were labeled with the date and time of collection, monitoring well designation, project name, collector's name, and parameters to be analyzed, and then immediately sealed, packed on ice, and transferred to Hall Environmental Analysis Laboratory (HEAL) under chain-of-custody (COC) procedures for analysis of BTEX using United States Environmental Protection Agency Method 8021. COC forms were completed documenting the date and time sampled, sample number, type of sample, sampler's name, preservative used (if any), analyses required, and sampler's signature. The COC form is included in the laboratory analytical report in Appendix B.

2.4 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 September 2016 annual monitoring event (Figure 2). Contours were inferred based on groundwater elevations obtained

and observations of physical characteristics at the Site, including topography and proximity to irrigation ditches.

2.5 PSH RECOVERY

LTE used absorbent socks and manual bailing to passively and actively recover PSH in monitoring wells MW-4 and MW-6. The oil absorbent socks were removed from monitoring wells at least seven days prior to collecting depth to groundwater measurements to allow groundwater to equilibrate. LTE estimated the volume of recovered PSH in the socks based on the percent saturation observed. Once the oil absorbent socks were removed, LTE manually bailed as much PSH from the monitoring wells as possible. After collecting depth to groundwater measurements, new oil absorbent socks were installed in monitoring wells MW-4 and MW-6.

3.0 RESULTS

Depth to groundwater and depth to PSH data collected during the 2016 annual monitoring event are summarized in Table 1. Groundwater flow direction is to the southeast as depicted on Figure 2.

Laboratory analytical results indicated concentrations of benzene in groundwater sampled from monitoring well MW-1 (upgradient of the original source) was in-compliance with the NMWQCC groundwater standards in September 2016. Benzene concentrations in groundwater sampled from monitoring wells MW-3 and MW-5 exceeded the NMWQCC groundwater standard during the annual monitoring event in September 2016. Monitoring well MW-2 was not sampled due to insufficient water volume in the monitoring well. Table 2 summarizes the groundwater analytical results, and a copy of the laboratory report are presented in Appendix B.

MW-4 and MW-6 were not sampled in 2016 due to the presence of free product. Measurable PSH in MW-4 had a thickness of 0.13 feet and measurable PSH in MW-6 had a thickness of 0.92 feet on September 8, 2016. Approximately 2 ounces of PSH were recovered from MW-4, and approximately 12 ounces of PSH were recovered from MW-6 during 2016, through passive oil absorbent socks and manual recovery.

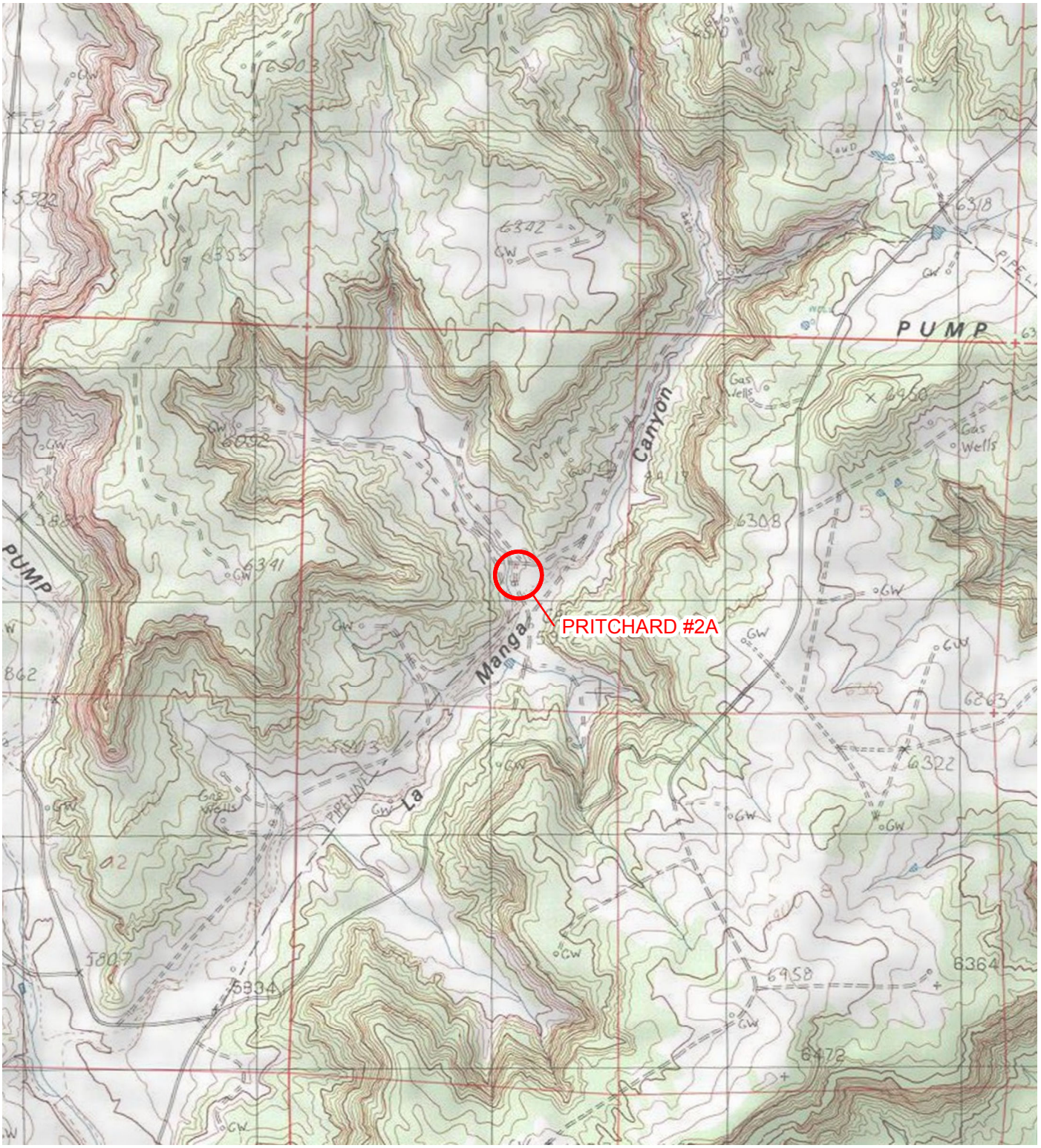
4.0 CONCLUSIONS

Impacts to groundwater in the source area at monitoring well MW-2 are currently unknown due to insufficient water in the monitoring well. The presence of PSH persists in downgradient monitoring wells MW-4 and MW-6, downgradient of the source area. Monitoring wells MW-3 and MW-5 contained benzene concentrations exceeding the NMWQCC groundwater standards in 2016.

5.0 MONITORING PLAN

Williams will monitor groundwater elevations and for the presence of PSH in the existing monitoring wells on a quarterly basis in 2017. Williams will manually recover PSH from monitoring wells MW-4 and MW-6 when present and install oil absorbent socks for passive PSH recovery between monitoring events. Additionally, Williams will collect groundwater samples from monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, and MW-6 annually to be analyzed for BTEX.

FIGURES



LEGEND

SITE LOCATION

IMAGE COURTESY OF ESRI/BING MAPS

0 2,000 4,000

Feet

N

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

WILLIAMS FOUR CORNERS LLC

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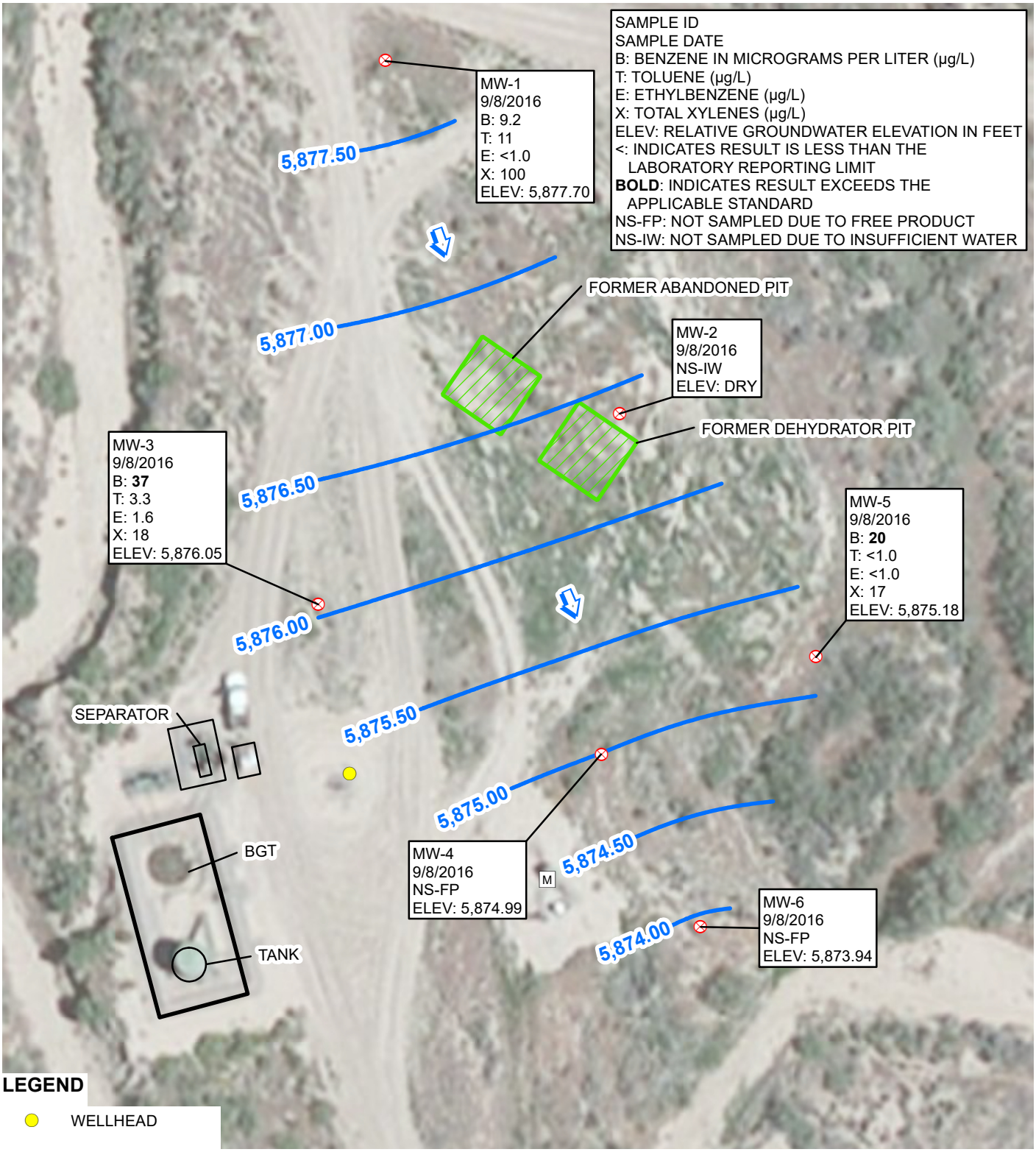

FIGURE 2
GROUNDWATER ELEVATION MAP
(SEPTEMBER 2016)
PRITCHARD #2A
SAN JUAN COUNTY, NEW MEXICO
WILLIAMS FOUR CORNERS LLC

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TABLES

TABLE 1
GROUNDWATER ELEVATION SUMMARY

PRITCHARD #2A
SAN JUAN COUNTY, NEW MEXICO
WILLIAMS FOUR CORNERS 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-1	3/10/2015	5,961.21	83.12	NP	NP	5,878.09
MW-1	6/15/2015	5,961.21	83.15	NP	NP	5,878.06
MW-1	9/24/2015	5,961.21	83.31	NP	NP	5,877.90
MW-1	12/19/2015	5,961.21	83.39	NP	NP	5,877.82
MW-1	9/8/2016	5,961.21	83.51	NP	NP	5,877.70
MW-1	3/21/2017	5,961.21	83.65	NP	NP	5,877.56
MW-1	3/28/2017	5,961.21	83.62	NP	NP	5,877.59
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-2	3/10/2015	5,957.53	DRY	DRY	DRY	DRY
MW-2	6/15/2015	5,957.53	DRY	DRY	DRY	DRY
MW-2	9/24/2015	5,957.53	DRY	DRY	DRY	DRY
MW-2	12/19/2015	5,957.53	DRY	DRY	DRY	DRY
MW-2	9/8/2016	5,957.53	DRY	DRY	DRY	DRY
MW-2	3/21/2017	5,957.53	DRY	DRY	DRY	DRY
MW-2	3/28/2017	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-3	3/10/2015	5,955.95	79.29	NP	NP	5,876.66
MW-3	6/15/2015	5,955.95	79.40	NP	NP	5,876.55
MW-3	9/24/2015	5,955.95	79.55	NP	NP	5,876.40
MW-3	12/19/2015	5,955.95	79.63	NP	NP	5,876.32
MW-3	9/8/2016	5,955.95	79.90	NP	NP	5,876.05
MW-3	3/21/2017	5,955.95	80.20	NP	NP	5,875.75
MW-3	3/28/2017	5,955.95	80.17	NP	NP	5,875.78
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-4	3/10/2015	5,955.12	79.59	79.58	0.01	5,875.54
MW-4	6/15/2015	5,955.12	79.73	79.70	0.03	5,875.41
MW-4	9/24/2015	5,955.12	79.87	79.83	0.04	5,875.28
MW-4	12/19/2015	5,955.12	79.88	79.86	0.02	5,875.26

TABLE 1
GROUNDWATER ELEVATION SUMMARY

PRITCHARD #2A
SAN JUAN COUNTY, NEW MEXICO
WILLIAMS FOUR CORNERS 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-4	9/8/2016	5,955.12	80.23	80.10	0.13	5,874.99
MW-4	3/21/2017	5,955.12	80.27	0.00	0.00	5,874.85
MW-4	3/28/2017	5,955.12	80.27	0.00	0.00	5,874.85
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
MW-5	3/10/2015	5,955.09	79.41	NP	NP	5,875.68
MW-5	6/15/2015	5,955.09	79.53	NP	NP	5,875.56
MW-5	9/24/2015	5,955.09	79.63	NP	NP	5,875.46
MW-5	12/19/2015	5,955.09	79.70	NP	NP	5,875.39
MW-5	9/8/2016	5,955.09	79.91	NP	NP	5,875.18
MW-5	3/21/2017	5,955.09	80.12	NP	NP	5,874.97
MW-5	3/28/2017	5,955.09	80.14	NP	NP	5,874.95
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
MW-6	3/10/2015	5,952.97	77.84	NP	NP	5,875.13
MW-6	6/15/2015	5,952.97	77.94	NP	NP	5,875.03
MW-6	9/24/2015	5,952.97	78.09	78.09†	<0.01	5,874.88
MW-6	12/19/2015	5,952.97	78.26	78.08	0.18	5,874.72
MW-6	9/8/2016	5,952.97	79.10	78.18	0.92	5,873.94
MW-6	3/21/2017	5,952.97	79.75	78.43	1.32	5,873.33
MW-6	3/28/2017	5,952.97	79.80	78.45	1.35	5,873.28

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

† Oil-water interface probe did not detect phase separated hydrocarbons. LTE visually observed phase separated hydrocarbons using a bailer.

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
SAN JUAN COUNTY, NEW MEXICO
WILLIAMS FOUR CORNERS 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

TABLE 2
GROUNDWATER LABORATORY ANALYTICAL RESULTS

PRITCHARD #2A
SAN JUAN COUNTY, NEW MEXICO
WILLIAMS FOUR CORNERS 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	12/11/2013	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
MW-1	12/8/2014	**31**	42	<2.0	270
MW-1	3/10/2015	**17**	15	<2.0	230
MW-1	9/24/2015	**11**	5.7	<1.0	110
MW-1	9/8/2016	9.2	11	<1.0	100
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-2	3/10/2015	NS-IW	NS-IW	NS-IW	NS-IW
MW-2	9/8/2016	NS-IW	NS-IW	NS-IW	NS-IW

TABLE 2
GROUNDWATER LABORATORY ANALYTICAL RESULTS

PRITCHARD #2A
SAN JUAN COUNTY, NEW MEXICO
WILLIAMS FOUR CORNERS 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	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
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

TABLE 2
GROUNDWATER LABORATORY ANALYTICAL RESULTS

PRITCHARD #2A
SAN JUAN COUNTY, NEW MEXICO
WILLIAMS FOUR CORNERS 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	3/19/2014	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-3	3/10/2015	**33**	<1.0	<1.0	8.00
MW-3	9/24/2015	**31**	<1.0	1.1	6.90
MW-3	9/8/2016	**37**	3.3	1.6	18
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-4	3/10/2015	NS-FP	NS-FP	NS-FP	NS-FP
MW-4	9/8/2015	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
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

TABLE 2
GROUNDWATER LABORATORY ANALYTICAL RESULTS

PRITCHARD #2A
SAN JUAN COUNTY, NEW MEXICO
WILLIAMS FOUR CORNERS 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	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-5	3/10/2015	**100**	2.2	<2.0	110
MW-5	9/24/2015	**19**	1.4	<1.0	41
MW-5	9/8/2016	**20**	<1.0	<1.0	17
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

TABLE 2
GROUNDWATER LABORATORY ANALYTICAL RESULTS

PRITCHARD #2A
SAN JUAN COUNTY, NEW MEXICO
WILLIAMS FOUR CORNERS 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	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**
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
MW-6	9/24/2015	NS-FP	NS-FP	NS-FP	NS-FP

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
2016 FIELD NOTES

Location Prichard #2A Date ~~8~~ 9/1/16 43

Project / Client Williams

JA, T68, OWIP

1130 → JA onsite to bail product & pull socks

	DTW	DTP	Sock
MW-4	80.20	NA	≈10%
MW-6	78.52	78.4	≈15%

- seems like something is stuck in MW-4 or casing is broke @ ≈80'
- removed PBS from MW-4 10% saturated, slight grey and yellow staining
- no product (visible) recovered from MW-4 but bailed water had strong HC odor
- removed PBS from MW-6 15% saturated black on bottom ≈.01' of product measured
- no visible product recovered from MW-6 but bailed water had a strong HC odor

1300 → JA offsite

9-1-16

Location Pritchard #2A Date 9/8/16

Project / Client Quarterly Sampling

JSA / HASP / Sunny / Warm / TS 9

0950 AC onsite

	DTW	DTP	TD	Sample Time	Purge Volume
MW-1	83.51	NA	88.34	1200	2.50
MW-2	Dry	NA	83.08	-	-
MW-3	79.90	NA	83.09	1220	grab sample
MW-4	80.23	80.10	82.92	NA	-
MW-5	79.91	NA	83.08	1100	1.85
MW-6	79.10	78.18	83.71	NA	-

- MW-4 : Has an obstruction at 80.05 ft. measurable product = .13ft. purged 1-2 oz of product
- MW-6 : measurable product = 0.92ft purged 10-12 oz of product
- MW-2 : Dry
- MW-5 : purged 1.55 gal, actual 1.75 gal Sampled at 1100
- MW-1 : purged 2.36 gal, actual 2.50 gal. Sampled at 1200
- MW-3 : purged only 30z - ~~Obstruc~~ Obstruction in well - took grab Sample at 1220.

1230 Began conducting Veg Survey

1330 Dropped Samples with Hall

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	9/8/16	Project Name	Pritchard #2A
Sample Time	1200	Project #	034016002
Sample ID	MW-01	Sampler	Alexandria Crooks
Analyses	BTEX (8021)		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	83.51	TD of Well	88.34
Time	1135	Depth to Product	NA

Purge Volume: 88.34 - 83.51 = 4.83 x .1631 = .78 x 3 = 2.36

*(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 H_2O removed (gal)	pH (std. units)	Temp. (°C or °F)	Conductivity (µS or mS)	Comments
1138	.25	.25	6.75	69.3	2.49	clear/No odor/NO Cloud
1139	.25	.50	6.68	66.6	2.56	NO change
1142	.25	.75	6.65	65.7	2.53	~~Clear~~ Cloudy/NO odor/light brown
1145	.25	1.00	6.70	65.7	2.55	NO change
1148	.50	1.50	6.72	65.8	2.57	NO change
1149	.50	2.00	6.69	65.5	2.58	NO Change
1150	.50	2.50	6.68	66.0	2.59	NO change
1200						Took Sample

Comments: purged 2.50 gallons. Took Sample at 1200

Describe Deviations from SOP: NO Deviations

Signature: Alex Crooks **Date:** 9/8/16

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	9/8/17	Project Name	Pritchard #2A
Sample Time	NA	Project #	034016002
Sample ID	MW-02	Sampler	Alexandria Crooks
Analyses	BTEX (8021)		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	DRY	TD of Well	83.06
Time	1032	Depth to Product	
Purge Volume	NA		

*(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 H_2O removed (gal)	pH (std. units)	Temp. (°C or °F)	Conductivity (µS or mS)	Comments

Comments: Well was dry at 83.06. No Sample was Taken

Describe Deviations from SOP: No Sample Taken

Signature: Alex Crooks **Date:** 9/8/16

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	9/8/16	Project Name	Pritchard #2A
Sample Time	1220	Project #	034016002
Sample ID	MW-03	Sampler	Alexandria Crooks
Analyses	BTEX (8021)		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	79.90	TD of Well	83.09
Time	1210	Depth to Product	NA

Purge Volume

*(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 H_2O removed (gal)	pH (std. units)	Temp. (°C or °F)	Conductivity (µS or mS)	Comments
1220	30 oz	30 oz				Clear / no odor / no color
						Took grab sample

Comments: Did not purge 3 volumes due to well obstruction. Took sample at 1220

Describe Deviations from SOP: Did not purge 3 volumes

Signature: Alex Crooks **Date:** 9/8/17

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	9/8/16	Project Name	Pritchard #2A
Sample Time	NA	Project #	034016002
Sample ID	MW-04	Sampler	Alexandria Crooks
Analyses	BTEX (8021)		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	80.23	TD of Well	82.92
Time	1000	Depth to Product	80.10
Purge Volume	NA		

*(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 H_2O removed (gal)	pH (std. units)	Temp. (°C or °F)	Conductivity (µS or mS)	Comments

Comments: Obstruction at 80.05 ft. Measurable PSH = .13 ft Did not sample well due to PSH. Replaced absorbant sock. purged ~ 1-2 oz of product.

Describe Deviations from SOP: Did not sample due to PSH

Signature: Alex Crooks **Date:** 9/8/16

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	9/8/16	Project Name	Pritchard #2A
Sample Time	1100	Project #	034016002
Sample ID	MW-05	Sampler	Alexandria Crooks
Analyses	BTEX (8021)		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	79.91	TD of Well	83.08
Time	1044	Depth to Product	NA

Purge Volume: 83.08 - 79.91 = 3.71 x .1431 = 0.51 x 3 = 1.55

*(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 H_2O removed (gal)	pH (std. units)	Temp. (°C or °F)	Conductivity (µS or mS)	Comments
1048	.25	.25	6.70	67.8	2.79	Clear / No odor / No Color
1050	.25	.50	6.65	65.3	2.76	No change
1051	.25	.75	6.69	64.8	2.75	Cloudy / No odor / light brown
1053	.25	1.00	6.71	64.5	2.79	No change
1056	.50	1.50	6.67	64.0	2.80	no change
1058	.25	1.75	6.69	64.3	2.81	No change
1100	—	—	—	—	—	Took sample

Comments: Took Sample at 11:00. purged 1.75 gallons

Describe Deviations from SOP: No Deviations

Signature: Alex Crooks **Date:** 9/8/16

Water Sample Collection Form

Sample Location	Pritchard #2A	Client	Williams Field Services
Sample Date	9/8/16	Project Name	Pritchard #2A
Sample Time	NA	Project #	034016002
Sample ID	MW-06	Sampler	Alexandria Crooks
Analyses	BTEX (8021)		
Matrix	Groundwater	Laboratory	Hall Environmental
Turn Around Time	Standard	Shipping Method	Hand delivery
Depth to Water	79.10	TD of Well	83.71
Time	1009	Depth to Product	78.18
Purge Volume	NA		

*(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 H_2O removed (gal)	pH (std. units)	Temp. (°C or °F)	Conductivity (µS or mS)	Comments

Comments: Measurable PSH = 0.92 ft
Did not sample due to PSH. Replaced absorbant Sock
purged ~10-12 oz

Describe Deviations from SOP: Did not Sample due to PSH

Signature: Alex Crook **Date:** 9/8/16

APPENDIX B
LABORATORY 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 16, 2016

Brook Herb

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

RE: Pritchard #2A OrderNo.: 1609505

Dear Brook Herb:

Hall Environmental Analysis Laboratory received 3 sample(s) on 9/9/2016 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 **1609505**
Date Reported: **9/16/2016**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Client Sample ID: MW-05
Project: Pritchard #2A
Collection Date: 9/8/2016 11:00:00 AM
Lab ID: 1609505-001
Matrix: AQUEOUS
Received Date: 9/9/2016 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	20	1.0		µg/L	1	9/15/2016 1:22:59 PM	B37234
Toluene	ND	1.0		µg/L	1	9/15/2016 1:22:59 PM	B37234
Ethylbenzene	ND	1.0		µg/L	1	9/15/2016 1:22:59 PM	B37234
Xylenes, Total	17	2.0		µg/L	1	9/15/2016 1:22:59 PM	B37234
Surr: 4-Bromofluorobenzene	104	87.9-146		%Rec	1	9/15/2016 1:22:59 PM	B37234

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
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Client Sample ID: MW-01
Project: Pritchard #2A
Collection Date: 9/8/2016 12:00:00 PM
Lab ID: 1609505-002
Matrix: AQUEOUS
Received Date: 9/9/2016 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	9.2	1.0		µg/L	1	9/15/2016 2:35:43 PM	B37234
Toluene	11	1.0		µg/L	1	9/15/2016 2:35:43 PM	B37234
Ethylbenzene	ND	1.0		µg/L	1	9/15/2016 2:35:43 PM	B37234
Xylenes, Total	100	2.0		µg/L	1	9/15/2016 2:35:43 PM	B37234
Surr: 4-Bromofluorobenzene	108	87.9-146		%Rec	1	9/15/2016 2:35:43 PM	B37234

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
D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Client Sample ID: MW-03
Project: Pritchard #2A
Collection Date: 9/8/2016 12:20:00 PM
Lab ID: 1609505-003
Matrix: AQUEOUS
Received Date: 9/9/2016 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	37	1.0		µg/L	1	9/15/2016 2:59:55 PM	B37234
Toluene	3.3	1.0		µg/L	1	9/15/2016 2:59:55 PM	B37234
Ethylbenzene	1.6	1.0		µg/L	1	9/15/2016 2:59:55 PM	B37234
Xylenes, Total	18	2.0		µg/L	1	9/15/2016 2:59:55 PM	B37234
Surr: 4-Bromofluorobenzene	103	87.9-146		%Rec	1	9/15/2016 2:59:55 PM	B37234

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
D	Sample Diluted Due to Matrix	E	Value above quantitation range
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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1609505**

16-Sep-16

Client: LTE

Project: Pritchard #2A

Sample ID	**RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBW**	Batch ID:	**B37234**	RunNo:	**37234**					
Prep Date:		Analysis Date:	**9/15/2016**	SeqNo:	**1155659**	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	20		20.00		102	87.9	146			

Sample ID	**100NG BTEX LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSW**	Batch ID:	**B37234**	RunNo:	**37234**					
Prep Date:		Analysis Date:	**9/15/2016**	SeqNo:	**1155660**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.4	80	120			
Toluene	19	1.0	20.00	0	95.6	80	120			
Ethylbenzene	18	1.0	20.00	0	92.1	80	120			
Xylenes, Total	56	2.0	60.00	0	93.3	80	120			
Surr: 4-Bromofluorobenzene	21		20.00		106	87.9	146			

Sample ID	**1609505-001A MS**	SampType:	**MS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**MW-05**	Batch ID:	**B37234**	RunNo:	**37234**					
Prep Date:		Analysis Date:	**9/15/2016**	SeqNo:	**1155662**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	40	1.0	20.00	19.56	101	78	119			
Toluene	19	1.0	20.00	0.8880	93.0	80	120			
Ethylbenzene	20	1.0	20.00	0.3100	97.7	80	120			
Xylenes, Total	83	2.0	60.00	17.30	110	75.3	120			
Surr: 4-Bromofluorobenzene	22		20.00		109	87.9	146			

Sample ID	**1609505-001A MSD**	SampType:	**MSD**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**MW-05**	Batch ID:	**B37234**	RunNo:	**37234**					
Prep Date:		Analysis Date:	**9/15/2016**	SeqNo:	**1155663**	Units:	**µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	40	1.0	20.00	19.56	100	78	119	0.558	20	
Toluene	20	1.0	20.00	0.8880	93.3	80	120	0.379	20	
Ethylbenzene	19	1.0	20.00	0.3100	95.4	80	120	2.38	20	
Xylenes, Total	83	2.0	60.00	17.30	109	75.3	120	0.455	20	
Surr: 4-Bromofluorobenzene	22		20.00		109	87.9	146	0	0	

Qualifiers:

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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: 1609505 | RcptNo: 1

Received by/date: AG 09/09/16
Logged By: Lindsay Mangin 9/9/2016 7:30:00 AM
Completed By: Lindsay Mangin 9/12/2016 10:12:12 AM
Reviewed By: JC 09/12/16

Chain of Custody

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

Log In

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

Special Handling (if applicable)

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

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.9	Good	Yes			

Chain-of-Custody Record

Client: Brooke Herb
LT Environmental, Inc
Mailing Address: 848 E 2nd Ave
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 #: 034016002
Project Manager: Brooke Herb
Sampler: Alex Crooks
On Ice: ☒ Yes ☐ No
Sample Temperature: 0.9 - 2.7

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. 1609506	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)
9/8/16	1100	AQ	MW-05	3-VOA	HCl	-001	X											
	1200		MW-01			-002												
	1220		MW-03			-003												

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/8/16	1330	Alex Crooks	Chris Watts	9/8/16	1330
9/8/16	2100	Chris Watts		09/09/16	0730

Remarks: Please CC: ACrooks@LTEnv.com

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.