April 5, 2017

Randy Bayliss
New Mexico Oil Conservation Division
1220 South Street Francis Drive
Santa Fe, New Mexico 87505

RE: Online Submission of 2016 Annual Groundwater Reports

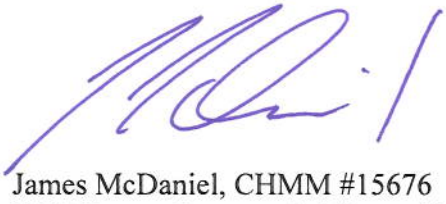
Dear Mr. Randy Bayliss:

LT Environmental (LTE), Inc., on behalf of XTO Energy, Inc. (XTO), 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:

- Sullivan Gas Com D #1E (3RP-1035);
- Bruington Gas Com #1 (3RP-106);
- Federal Gas Com H #1 (3RP-110);
- McCoy Gas Com D #1E (3RP-414);
- OH Randel #007 (3RP-386); and
- Valdez A #1E (3RP-134).

If you have any questions regarding these reports please contact Ashley Ager with LTE at (970) 385-1096 or aager@ltenv.com or James McDaniel with XTO at (505) 333-3701 or James_McDaniel@xtoenergy.com.

Sincerely,



James McDaniel, CHMM #15676
XTO Energy Inc., a subsidiary of ExxonMobil
EH&S Supervisor

cc: Attachments (6)

2016 ANNUAL GROUNDWATER REPORT

OH Randel #007

3RP-386

NWNW, Section 15, Township 26N, Range 11W
San Juan County, New Mexico

PREPARED FOR:

Mr. Steve Austin
Navajo Nation Environmental Protection Agency
Post Office Box 1999
Shiprock, New Mexico 87420

April 2017

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FIGURES

TABLES

ATTACHMENTS

OH RANDEL #007
3RP-386

SITE DETAILS

LEGALS – **TWN**: 26N **RNG**: 11W **SEC**: 15 **UNIT**: NWNW
OCD HAZARD RANKING: 20 **LAND TYPE**: NAVAJO
LATITUDE: 36.49194 **LONGITUDE**: -107.99572

INTRODUCTION

XTO Energy, Inc. (XTO) acquired the OH Randel #007 natural gas production well from Amoco Production Company (Amoco) in January 1998. The site produced natural gas from the Dakota Sandstone and was plugged and abandoned in 2014. An irrigated field owned and operated by Navajo Agricultural Products, Inc. is located immediately north of the site. A topographic map is depicted on ***Figure 1***.

HISTORY

In March 2002, XTO encountered petroleum hydrocarbon impacted soil, which appeared to be the result of an abandoned earthen separator pit, while upgrading production equipment. A Blagg Engineering, Inc. *Pit Closure Report* documenting subsequent soil sampling and installation of groundwater monitoring well MW-1 to investigate potential impact to groundwater is included as ***Attachment 1***. Groundwater was encountered at approximately 16 feet below ground surface (bgs) and phase-separated hydrocarbons (PSH) were detected.

In April 2002, monitoring wells MW-2, MW-3, MW-4, MW-5, and MW-6 were installed upgradient, downgradient, and cross-gradient of the source area. Completion diagrams and borehole logs are included as ***Attachment 2***.

From 2002 through 2004, PSH was regularly detected in monitoring wells MW-1 and MW-2 and PSH was detected in monitoring well MW-6 from 2002 through 2006. XTO recovered approximately 22 gallons of PSH by manually bailing monitoring wells MW-1, MW-2, and MW-6 from 2004 through January 2006.

XTO submitted the *2005 Annual Groundwater Report* to the New Mexico Oil Conservation Division (NMOCD) and proposed excavation of soil impacted near the former separator pit and installation of additional groundwater monitoring wells to further delineate petroleum hydrocarbon impact to groundwater.

In August 2006, XTO submitted a remediation *Work Plan* (***Attachment 3***) developed by Lodestar Services, Inc. (Lodestar) to Mr. Steve Austin of the Navajo Nation Environmental Protection Agency (NNEPA) and the United States Environmental Protection Agency (EPA) Region 9. The Work Plan was approved by the NNEPA in October 2006.

In November 2006, the first phase of the Work Plan was completed, which included excavation of the earthen separator pit to a depth beneath the water table and backfilling with clean soil. Approximately 9,000 cubic yards of petroleum hydrocarbon impacted soil were removed and transported offsite to an NMOCD permitted landfarm. No PSH was observed on the water table during the excavation. Monitoring wells MW-1, MW-2, and MW-6 were removed during the excavation. The NNEPA and EPA Region 9 approved the closure of the excavation as described in the *Report of Excavation and Sampling* by Lodestar dated January 29, 2007 ***(Attachment 4)***. Groundwater analytical results indicated monitoring wells MW-3, MW-4, and MW-5 exhibited concentrations below the laboratory reporting limits for benzene, toluene, ethylbenzene, and total xylenes (BTEX).

XTO submitted the *2006 Annual Groundwater Report* to the NMOCD proposing the installation of monitoring wells MW-7 and MW-8 to the north and east of the former source area and quarterly monitoring of BTEX concentrations.

In May 2007, monitoring wells MW-7 and MW-8 were installed. Completion diagrams and borehole logs are presented as ***Attachment 2***. Groundwater analytical results indicated monitoring well MW-7 contained BTEX concentrations exceeding New Mexico Water Quality Control Commission (NMWQCC) standards. Downgradient monitoring well MW-8 did not contain detectable concentrations of BTEX. XTO proposed to evaluate additional potential sources of groundwater impact in the area of monitoring well MW-7 and evaluate appropriate remediation methods.

XTO submitted the *2007 Annual Groundwater Report* to the NMOCD proposing to discontinue sampling of monitoring wells MW-3, MW-4, and MW-5 and semi-annual sampling of monitoring wells MW-7 and MW-8.

XTO submitted the *2008 Annual Groundwater Report* to the NMOCD proposing installation of monitoring wells MW-9 and MW-10 to delineate impacted groundwater near existing monitoring well MW-7. Additionally, XTO proposed adding chemical oxygenate to monitoring well MW-7 to enhance bioremediation and quarterly sampling of monitoring wells.

In July 2009, monitoring wells MW-9 and MW-10 were installed. The water bearing unit supplying the existing groundwater monitoring wells was observed to be a low hydraulic conducting clay that was mostly dry. Monitoring wells MW-9 and MW-10 were completed in the same clay bed at similar depths to the existing monitoring wells despite the fact that no saturated sediment was identified in soil samples. XTO did not attempt to penetrate the clay to avoid creating a conduit to deeper aquifers. After allowing 24 hours for the new monitoring wells to fill with groundwater, monitoring well MW-9 contained only 1.5 feet of groundwater and did not recharge after being purged dry. Monitoring well MW-10 never filled with groundwater and was ultimately plugged and abandoned. The Completion diagrams and borehole logs for monitoring wells MW-9 and MW-10 are included in ***Attachment 2***. Monitoring well MW-9 was sampled after well development and contained benzene concentrations exceeding NMWQCC standards.

In March 2010, XTO submitted the *2009 Annual Groundwater Report* to the NMOCD recommending continued use of chemical oxygenate in monitoring well MW-7 and quarterly sampling of monitoring wells MW-7 and MW-9. XTO proposed to discontinue sampling of monitoring well MW-8 as four consecutive sampling events indicated BTEX concentrations were in compliance with the NMWQCC standards.

XTO submitted the *2010 Annual Groundwater Report* to the NMOCD and NNEPA recommending continued quarterly sampling of groundwater for BTEX constituents in monitoring well MW-7. Laboratory analytical results from four consecutive quarters of groundwater sampling from monitoring well MW-9 indicated BTEX concentrations were compliant with NMWQCC standards; therefore, XTO recommended discontinuing sampling of monitoring well MW-9. Additionally, XTO proposed applying hydrogen peroxide to groundwater at the site using monitoring well MW-7 as an injection point to oxygenate the aquifer and enhance bioremediation at the site.

In October 2011, XTO met with Mr. Glenn Von Gonten at the NMOCD offices to present a brief history of the site and the hydrogen peroxide applications in person. NMOCD did not provide comments for the 2006 Work Plan and XTO did not proceed with the action.

XTO submitted the *2011 Annual Groundwater Report* to the NMOCD and NNEPA. The report included an analysis by LT Environmental, Inc. (LTE) of the beneficial use of groundwater at the site. The analysis concluded the groundwater is not a current source of beneficial use and based on the poor background water quality of the aquifer, low productivity, and legal restrictions on its source for uses other than irrigation, the aquifer is not viable for beneficial use in the future. Attenuation of residual BTEX in groundwater at the site will continue through natural processes, and migration of any BTEX will be restricted by the subsurface lithology and hydrologic properties of the aquifer. As such, XTO requested site closure from the NNEPA and NMOCD based on the lack of present and reasonably foreseeable beneficial use of the impacted groundwater. Following NNEPA and NMOCD approval for closure, XTO planned to abandon all monitoring well locations in accordance with the monitoring well abandonment plan. XTO was awaiting approval or comments from the NNEPA or NMOCD regarding the closure request and did not conduct monitoring at the site during 2012.

In March 2013, following the NMOCD and NNEPA verbal request that XTO pursue additional remediation before requesting site closure, XTO resumed applying chemical oxygenate by installing ten Oxygen Release Compound® (ORC) socks in monitoring well MW-7. The ORC socks were removed from monitoring well MW-7 in December 2013 to assess equilibrium conditions.

XTO submitted the *2014 Annual Groundwater Report* to the NMOCD recommending continued semi-annual gauging of depth to groundwater and sampling of groundwater for BTEX in monitoring well MW-7. XTO also investigated the application of a chemical amendment to enhance natural attenuation, but based on the historical sampling results and the groundwater flow direction, XTO opted not to pursue further active remediation as the elevated benzene concentrations appeared to be confined to a small area surrounding monitoring well MW-7 and are not likely to migrate offsite.

A summary of groundwater elevation data and laboratory analytical results from historical and current groundwater monitoring are presented in ***Table 1*** and ***Table 2***, respectively.

METHODOLOGY

In 2016, depth to groundwater was measured semi-annually in monitoring wells MW-3, MW-4, MW-5, MW-7, MW-8, and MW-9. Semi-annual groundwater samples were collected from groundwater monitoring well MW-7 and submitted to Environmental Science Corporation (ESC) of Mount Juliet, Tennessee, for laboratory analysis of BTEX by EPA Method 8021B.

Water Level Measurements

Static groundwater level monitoring included recording depth to groundwater measurements with a Keck oil/water interface probe. Presence of any free-phase petroleum hydrocarbon was also investigated using the interface probe. The interface probe was decontaminated with Alconox™ soap and rinsed with de-ionized water prior to each measurement. A summary of groundwater elevations is presented in ***Table 1***.

Groundwater Sampling

The volume of water in the well was calculated, and a minimum of three well casing volumes of water was purged (unless the well purged dry) utilizing a new disposable polyvinyl chloride (PVC) bailer or a dedicated PVC bailer. All purge water was disposed of into on-site tanks.

Once the monitoring well was purged, groundwater samples were collected by filling a minimum of two 40-milliliter (mL) glass vials. The laboratory-supplied vials were filled and capped with zero headspace to prevent degradation of the sample. Samples were labeled with the date and time of collection, well designation, project name, sample collector's name, and parameters to be analyzed. They were immediately sealed, packed on ice, and shipped to ESC via Fed-Ex overnight delivery. Proper chain-of-custody (COC) procedures were followed documenting the date and time sampled, sample number, type of sample, sample collector's name, preservative used, analyses required, and sample collector's signature. Laboratory analytical reports for 2016 are included as ***Attachment 5*** and field notes from the 2016 semi-annual monitoring are included as ***Attachment 6***.

Groundwater Contour Maps

Groundwater elevations obtained from monitoring wells during site visits were used to develop groundwater contour maps. Contours were inferred based on groundwater elevations measured and observation of physical characteristics at the site (topography, proximity to irrigation ditches, etc.).

RESULTS

During 2016, benzene and total xylenes concentrations in monitoring well MW-7 exceeded the NMWQCC standard during both semi-annual sampling events. Benzene concentrations ranged from 9,160 µg/L in June to 8,400 micrograms per liter (µg/L) in December. Total xylenes concentrations ranged from 8,750 µg/L in June to 6,950 µg/L in December. The toluene and ethylbenzene

concentrations were in compliance with the NMWQCC standards for both 2016 semi-annual sampling events. Laboratory analytical results are summarized in ***Table 2***.

Groundwater elevations measured during site monitoring activities indicate the groundwater continues to flow to the north, which is consistent with historical monitoring events. ***Figures 2*** and ***3*** depict the inferred groundwater potentiometric surface and groundwater analytical results for the June and December 2016 semi-annual monitoring events. Groundwater elevation data are summarized in ***Table 1.***

CONCLUSIONS

Laboratory analytical results from groundwater monitoring in 2016 indicate benzene and total xylene concentrations in monitoring well MW-7 exceeded NMWQCC standards during both semi-annual sampling events. Toluene and ethylbenzene concentrations were in compliance with the NMWQCC standards in monitoring well MW-7 during both 2016 semi-annual sampling events. These results are consistent with historical concentrations detected in monitoring well MW-7. Based on historical sampling results and the groundwater flow direction, elevated benzene concentrations appear confined to a small area surrounding monitoring well MW-7 and are not likely to migrate offsite.

RECOMMENDATIONS

XTO will continue to conduct semi-annual groundwater sampling of monitoring well MW-7 to monitor BTEX concentrations in 2017. XTO will investigate application of a chemical amendment at the site to enhance natural attenuation. Should XTO proceed with active remediation, details will be provided to NMOCD under a separate letter.

FIGURE 1

SITE LOCATION MAP

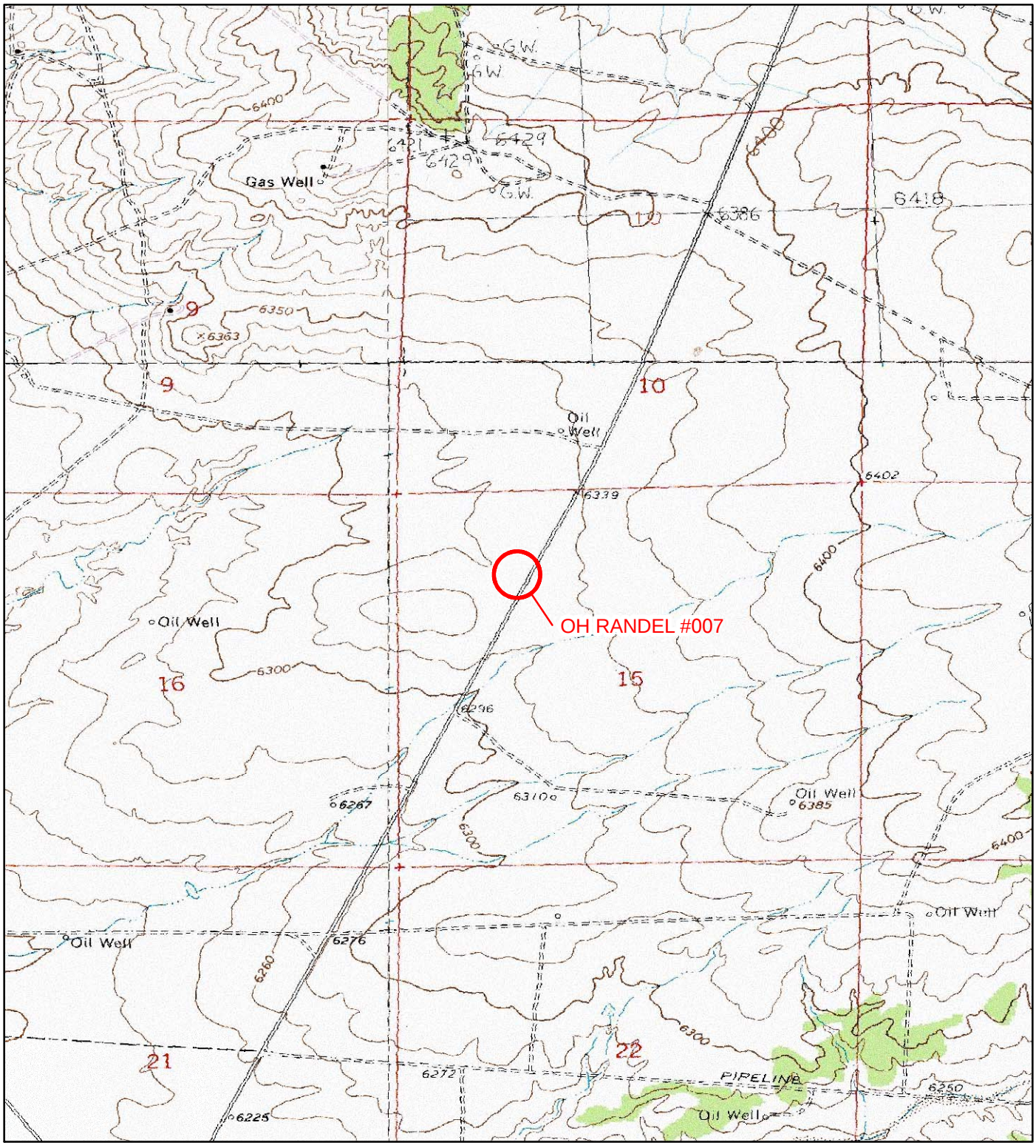

IMAGE COURTESY OF USDA/NRCS, VARIOUS DATES

LEGEND

SITE LOCATION

0 2,000 4,000

Feet

N

FIGURE 1
SITE LOCATION MAP
OH RANDEL #007
NWNW SEC 15 T26N R11W
SAN JUAN COUNTY, NEW MEXICO
XTO ENERGY, INC.

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FIGURE 2

GROUNDWATER ELEVATIONS AND ANALYTICAL RESULTS

(JUNE 2016)

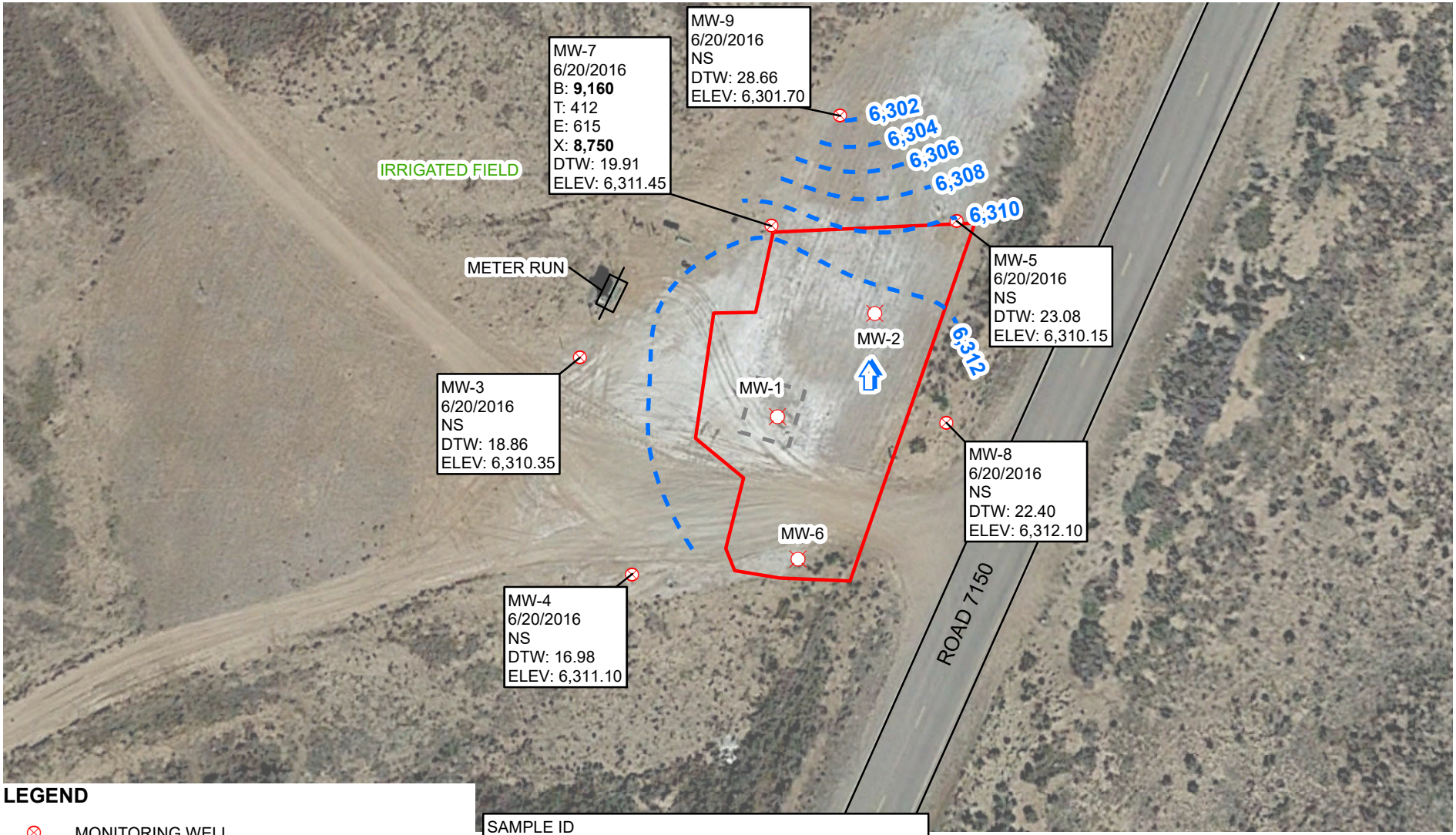

IMAGE COURTESY OF GOOGLE EARTH 2015

0 60 120
Feet

N

LEGEND

- MONITORING WELL
- DESTROYED MONITORING WELL
- ESTIMATED GROUNDWATER FLOW DIRECTION
- INFERRED GROUNDWATER ELEVATION CONTOUR
  CONTOUR INTERVAL = 2 FEET
- APPROXIMATE EXCAVATION PERIMETER (11/2006)
- ABANDONED SEPARATOR PIT

SAMPLE ID
SAMPLE DATE
B: BENZENE IN MICROGRAMS PER LITER (µg/L)
T: TOLUENE (µg/L)
E: ETHYLBENZENE (µg/L)
X: TOTAL XYLENES (µg/L)
DTW: DEPTH TO GROUNDWATER MEASURED IN FEET BELOW TOP OF CASING
ELEV: GROUNDWATER ELEVATION MEASURED IN FEET ABOVE MEAN SEA LEVEL
NS: NOT SAMPLED
BOLD INDICATES RESULT EXCEEDS THE NEW MEXICO WATER QUALITY CONTROL COMMISSION STANDARD

FIGURE 2
GROUNDWATER ELEVATIONS AND ANALYTICAL RESULTS (JUNE 2016)
OH RANDEL #007
NWNW SEC 15 T26N R11W
SAN JUAN COUNTY, NEW MEXICO
XTO ENERGY, INC.

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FIGURE 3

GROUNDWATER ELEVATIONS AND ANALYTUCAL RESULTS

(DECEMBER 2016)

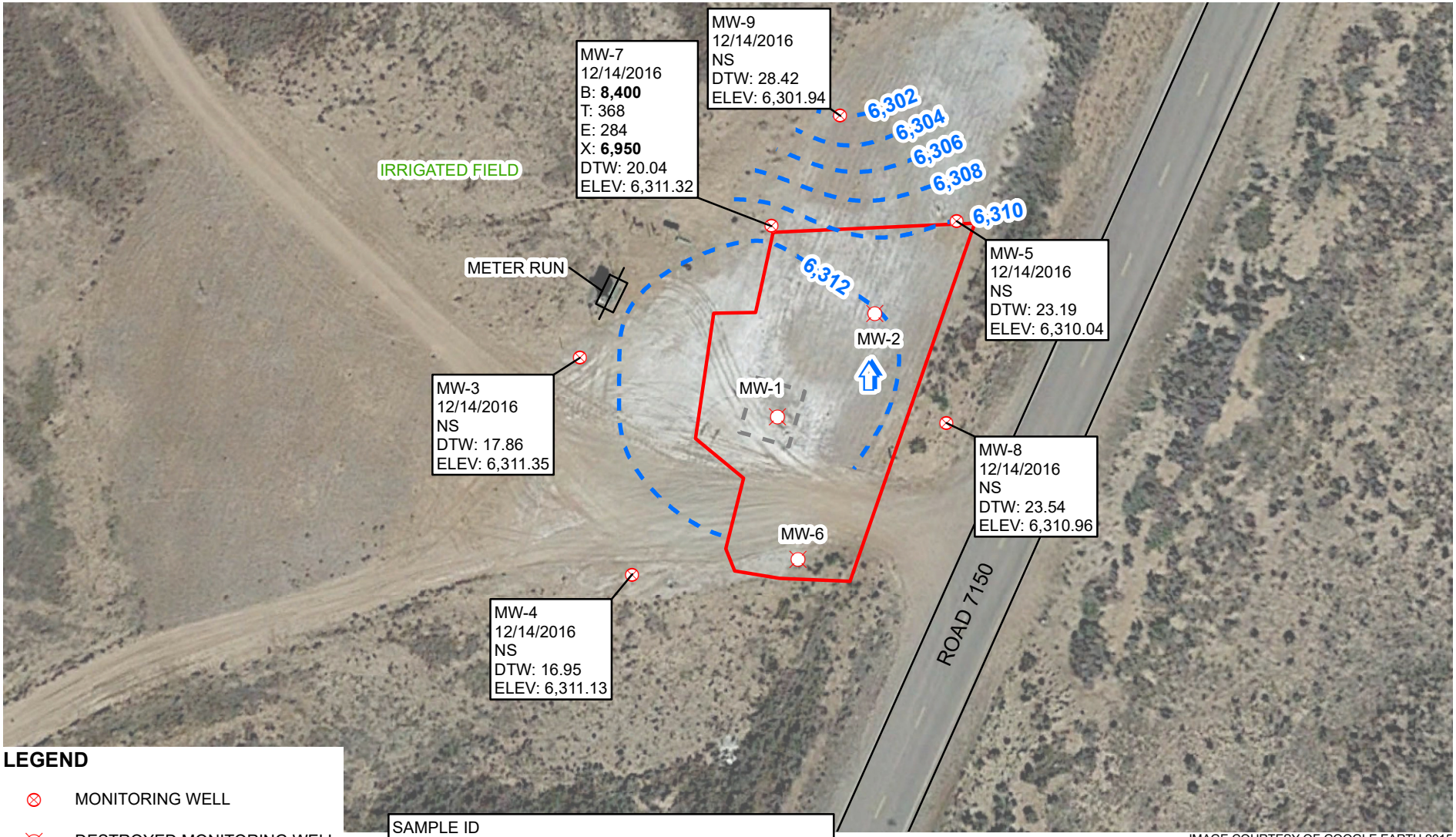

IMAGE COURTESY OF GOOGLE EARTH 2015

LEGEND

- MONITORING WELL
- DESTROYED MONITORING WELL
- ESTIMATED GROUNDWATER FLOW DIRECTION
- INFERRED GROUNDWATER ELEVATION CONTOUR
- CONTOUR INTERVAL = 2 FEET
- APPROXIMATE EXCAVATION PERIMETER (11/2006)
- ABANDONED SEPARATOR PIT

SAMPLE ID
SAMPLE DATE
B: BENZENE IN MICROGRAMS PER LITER (µg/L)
T: TOLUENE (µg/L)
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ELEV: GROUNDWATER ELEVATION MEASURED IN FEET ABOVE MEAN SEA LEVEL
NS: NOT SAMPLED
BOLD INDICATES RESULT EXCEEDS THE NEW MEXICO WATER QUALITY CONTROL COMMISSION STANDARD

0 60 120
Feet

N

FIGURE 3
GROUNDWATER ELEVATIONS AND ANALYTICAL RESULTS (DECEMBER 2016)
OH RANDEL #007
NWNW SEC 15 T26N R11W
SAN JUAN COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012911009\2016\012911009_004_OH_RANDEL_FIG03_GWE_GWA_2016_Q4.mxd

TABLE 1

GROUNDWATER ELEVATION SUMMARY

TABLE 1

GROUNDWATER ELEVATION SUMMARY
OH RANDEL #007
XTO ENERGY, INC.

Well ID	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Groundwater Elevation (feet AMSL)
MW-1	4/22/2002	16.30	16.63	No Survey Data
MW-1	4/24/2002	NM	NM	No Survey Data
MW-1	8/27/2002	16.19	16.49	No Survey Data
MW-1	10/08/2002	15.79	16.16	No Survey Data
MW-1	5/23/2003	15.73	16.04	No Survey Data
MW-1	5/28/2003	15.81	15.99	No Survey Data
MW-1	6/6/2003	15.93	16.04	No Survey Data
MW-1	6/18/2003	15.97	16.04	No Survey Data
MW-1	6/26/2003	17.85	17.93	No Survey Data
MW-1	7/31/2003	16.18	16.19	No Survey Data
MW-1	8/29/2003	NM	16.29	No Survey Data
MW-1	6/21/2004	16.28	17.09	No Survey Data
MW-1	9/20/2006	0.00	22.28	No Survey Data
MW-1	12/5/2006 *	NM	NM	No Survey Data
MW-2	4/22/2002	NM	18.32	No Survey Data
MW-2	4/24/2002	18.35	18.38	No Survey Data
MW-2	8/27/2002	18.92	19.86	No Survey Data
MW-2	10/08/2002	17.50	18.02	No Survey Data
MW-2	5/23/2003	17.30	17.83	No Survey Data
MW-2	5/28/2003	17.62	17.78	No Survey Data
MW-2	6/6/2003	17.71	17.83	No Survey Data
MW-2	6/18/2003	17.79	17.88	No Survey Data
MW-2	6/26/2003	16.05	16.09	No Survey Data
MW-2	7/31/2003	NM	15.86	No Survey Data
MW-2	8/29/2003	NM	15.99	No Survey Data
MW-2	6/21/2004	16.10	16.83	No Survey Data
MW-2	9/20/2006	0.00	17.15	No Survey Data
MW-2	12/5/2006 *	NM	NM	No Survey Data
MW-3	4/22/2002	0.00	16.26	6,312.95
MW-3	4/24/2002	0.00	16.25	6,312.96
MW-3	8/27/2002	0.00	15.28	6,313.93

TABLE 1

GROUNDWATER ELEVATION SUMMARY
OH RANDEL #007
XTO ENERGY, INC.

Well ID	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Groundwater Elevation (feet AMSL)
MW-3	10/8/2002	0.00	14.74	6,314.47
MW-3	3/3/2003	0.00	15.17	6,314.04
MW-3	6/18/2003	0.00	15.16	6,314.05
MW-3	8/29/2003	0.00	15.39	6,313.82
MW-3	9/20/2006	NM	NM	NM
MW-3	12/5/2006	0.00	13.85	6,315.36
MW-3	3/8/2007	0.00	13.40	6,315.81
MW-3	5/17/2007	0.00	12.87	6,316.34
MW-3	8/9/2007	0.00	12.37	6,316.84
MW-3	5/12/2008	0.00	14.83	6,314.38
MW-3	11/7/2008	0.00	13.92	6,315.29
MW-3	7/8/2009	0.00	14.14	6,315.07
MW-3	11/5/2009	0.00	14.53	6,314.68
MW-3	5/25/2010	0.00	14.21	6,315.00
MW-3	8/12/2010	0.00	NM	NM
MW-3	11/17/2010	0.00	15.30	6,313.91
MW-3	2/14/2011	NM	NM	NM
MW-3	5/17/2011	0.00	15.74	6,313.47
MW-3	8/9/2011	0.00	15.87	6,313.34
MW-3	11/9/2011	0.00	16.21	6,313.00
MW-3	6/17/2013	0.00	17.32	6,311.89
MW-3	12/16/2013	0.00	16.88	6,312.33
MW-3	6/11/2014	0.00	18.60	6,310.61
MW-3	12/9/2014	0.00	17.37	6,311.84
MW-3	6/11/2015	0.00	18.45	6,310.76
MW-3	12/21/2015	0.00	17.55	6,311.66
MW-3	6/20/2016	0.00	18.86	6,310.35
MW-3	12/14/2016	0.00	17.86	6,311.35
MW-4	4/22/2002	0.00	16.63	6,311.45
MW-4	4/24/2002	0.00	16.66	6,311.42
MW-4	8/27/2002	0.00	16.47	6,311.61
MW-4	10/8/2002	0.00	16.03	6,312.05

TABLE 1

GROUNDWATER ELEVATION SUMMARY
OH RANDEL #007
XTO ENERGY, INC.

Well ID	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Groundwater Elevation (feet AMSL)
MW-4	3/3/2003	0.00	15.94	6,312.14
MW-4	6/18/2003	0.00	16.03	6,312.05
MW-4	8/29/2003	0.00	16.29	6,311.79
MW-4	9/20/2006	NM	NM	NM
MW-4	12/5/2006	0.00	13.75	6,314.33
MW-4	3/8/2007	0.00	12.55	6,315.53
MW-4	5/17/2007	0.00	13.03	6,315.05
MW-4	8/9/2007	0.00	12.59	6,315.49
MW-4	5/12/2008	0.00	12.57	6,315.51
MW-4	11/7/2008	0.00	13.68	6,314.40
MW-4	7/8/2009	0.00	13.72	6,314.36
MW-4	11/5/2009	0.00	14.12	6,313.96
MW-4	5/25/2010	0.00	13.86	6,314.22
MW-4	8/12/2010	0.00	14.39	6,313.69
MW-4	11/17/2010	0.00	14.60	6,313.48
MW-4	2/14/2011	0.00	15.55	6,312.53
MW-4	5/17/2011	0.00	14.95	6,313.13
MW-4	8/9/2011	0.00	15.11	6,312.97
MW-4	11/9/2011	0.00	15.38	6,312.70
MW-4	6/17/2013	0.00	16.33	6,311.75
MW-4	12/16/2013	0.00	15.99	6,312.09
MW-4	6/11/2014	0.00	16.30	6,311.78
MW-4	12/9/2014	0.00	16.48	6,311.60
MW-4	6/11/2015	0.00	16.14	6,311.94
MW-4	12/21/2015	0.00	16.75	6,311.33
MW-4	6/20/2016	0.00	16.98	6,311.10
MW-4	12/14/2016	0.00	16.95	6,311.13
MW-5	4/22/2002	0.00	19.11	6,314.12
MW-5	4/24/2002	0.00	19.14	6,314.09
MW-5	8/10/2002	0.00	19.10	6,314.13
MW-5	6/18/2003	0.00	18.86	6,314.37
MW-5	6/21/2004	0.00	19.64	6,313.59

TABLE 1

GROUNDWATER ELEVATION SUMMARY
OH RANDEL #007
XTO ENERGY, INC.

Well ID	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Groundwater Elevation (feet AMSL)
MW-5	6/28/2005	0.00	17.30	6,315.93
MW-5	9/20/2006	NM	NM	NM
MW-5	12/5/2006	0.00	18.65	6,314.58
MW-5	3/8/2007	0.00	18.15	6,315.08
MW-5	5/17/2007	0.00	17.78	6,315.45
MW-5	8/9/2007	0.00	NM	NM
MW-5	5/12/2008	0.00	18.82	6,314.41
MW-5	11/7/2008	0.00	18.90	6,314.33
MW-5	7/8/2009	0.00	20.08	6,313.15
MW-5	11/5/2009	0.00	20.44	6,312.79
MW-5	5/25/2010	0.00	20.33	6,312.90
MW-5	8/12/2010	0.00	20.51	6,312.72
MW-5	11/17/2010	0.00	20.93	6,312.30
MW-5	2/14/2011	0.00	20.97	6,312.26
MW-5	5/17/2011	0.00	21.20	6,312.03
MW-5	8/9/2011	0.00	21.47	6,311.76
MW-5	11/9/2011	0.00	21.69	6,311.54
MW-5	6/17/2013	0.00	22.74	6,310.49
MW-5	12/16/2013	0.00	22.36	6,310.87
MW-5	6/11/2014	0.00	22.77	6,310.46
MW-5	12/9/2014	0.00	22.21	6,311.02
MW-5	6/11/2015	0.00	22.69	6,310.54
MW-5	12/21/2015	0.00	22.55	6,310.68
MW-5	6/20/2016	0.00	23.08	6,310.15
MW-5	12/14/2016	0.00	23.19	6,310.04
MW-6	4/22/2002	0.00	18.31	No Survey Data
MW-6	4/24/2002	0.00	18.32	No Survey Data
MW-6	8/27/2002	NM	NM	No Survey Data
MW-6	10/8/2002	16.84	18.13	No Survey Data
MW-6	5/23/2003	16.62	17.95	No Survey Data
MW-6	5/28/2003	16.68	17.90	No Survey Data
MW-6	6/6/2003	16.80	18.00	No Survey Data

TABLE 1

GROUNDWATER ELEVATION SUMMARY
OH RANDEL #007
XTO ENERGY, INC.

Well ID	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Groundwater Elevation (feet AMSL)
MW-6	6/18/2003	16.78	18.02	No Survey Data
MW-6	6/26/2003	16.88	18.10	No Survey Data
MW-6	7/31/2003	17.77	19.13	No Survey Data
MW-6	8/29/2003	16.88	18.34	No Survey Data
MW-6	6/21/2004	17.78	18.95	No Survey Data
MW-6	9/20/2006	15.79	16.87	No Survey Data
MW-6	12/5/2006 *	NM	NM	No Survey Data
MW-7	5/17/2007	0.00	15.46	6,315.90
MW-7	8/9/2007	0.00	14.72	6,316.64
MW-7	11/27/2007	0.00	14.91	6,316.45
MW-7	5/12/2008	0.00	15.12	6,316.24
MW-7	11/7/2008	0.00	15.82	6,315.54
MW-7	7/8/2009	0.00	16.44	6,314.92
MW-7	11/5/2009	0.00	16.76	6,314.60
MW-7	5/25/2010	0.00	16.63	6,314.73
MW-7	8/12/2010	0.00	16.82	6,314.54
MW-7	11/17/2010	0.00	17.65	6,313.71
MW-7	2/14/2011	0.00	17.74	6,313.62
MW-7	5/17/2011	0.00	17.92	6,313.44
MW-7	8/9/2011	0.00	18.11	6,313.25
MW-7	11/9/2011	0.00	18.46	6,312.90
MW-7	6/17/2013	0.00	19.45	6,311.91
MW-7	12/16/2013	0.00	19.39	6,311.97
MW-7	6/11/2014	0.00	19.56	6,311.80
MW-7	12/9/2014	0.00	19.67	6,311.69
MW-7	6/11/2015	0.00	19.40	6,311.96
MW-7	12/21/2015	0.00	19.50	6,311.86
MW-7	6/20/2016	0.00	19.91	6,311.45
MW-7	12/14/2016	0.00	20.04	6,311.32
MW-8	5/17/2007	0.00	19.64	6,314.86
MW-8	8/9/2007	0.00	18.94	6,315.56

TABLE 1

GROUNDWATER ELEVATION SUMMARY
OH RANDEL #007
XTO ENERGY, INC.

Well ID	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Groundwater Elevation (feet AMSL)
MW-8	11/27/2007	0.00	19.20	6,315.30
MW-8	5/12/2008	0.00	19.97	6,314.53
MW-8	11/7/2008	0.00	19.55	6,314.95
MW-8	7/8/2009	0.00	20.01	6,314.49
MW-8	11/5/2009	0.00	20.41	6,314.09
MW-8	5/25/2010	0.00	20.31	6,314.19
MW-8	8/12/2010	0.00	20.41	6,314.09
MW-8	11/17/2010	0.00	20.63	6,313.87
MW-8	2/14/2011	0.00	20.35	6,314.15
MW-8	5/17/2011	0.00	20.30	6,314.20
MW-8	8/9/2011	0.00	20.83	6,313.67
MW-8	11/9/2011	0.00	21.00	6,313.50
MW-8	6/17/2013	0.00	22.17	6,312.33
MW-8	12/16/2013	0.00	21.40	6,313.10
MW-8	6/11/2014	0.00	22.09	6,312.41
MW-8	12/9/2014	0.00	22.80	6,311.70
MW-8	6/11/2015	0.00	21.76	6,312.74
MW-8	12/21/2015	0.00	22.83	6,311.67
MW-8	6/20/2016	0.00	22.40	6,312.10
MW-8	12/14/2016	0.00	23.54	6,310.96
MW-9	7/8/2009	0.00	35.26	6,295.10
MW-9	11/5/2009	0.00	33.08	6,297.28
MW-9	5/25/2010	0.00	29.28	6,301.08
MW-9	8/12/2010	0.00	31.12	6,299.24
MW-9	5/25/2010	0.00	20.31	6,310.05
MW-9	8/12/2010	0.00	20.41	6,309.95
MW-9	11/17/2010	0.00	30.49	6,299.87
MW-9	2/14/2011	0.00	31.60	6,298.76
MW-9	5/17/2011	0.00	30.39	6,299.97
MW-9	8/9/2011	0.00	29.84	6,300.52
MW-9	11/9/2011	0.00	28.76	6,301.60
MW-9	6/17/2013	0.00	28.36	6,302.00

TABLE 1

GROUNDWATER ELEVATION SUMMARY
OH RANDEL #007
XTO ENERGY, INC.

Well ID	Date	Depth to Product (feet BTOC)	Depth to Water (feet BTOC)	Groundwater Elevation (feet AMSL)
MW-9	12/16/2013	0.00	27.97	6,302.39
MW-9	6/11/2014	0.00	28.68	6,301.68
MW-9	12/9/2014	0.00	28.45	6,301.91
MW-9	6/11/2015	0.00	28.98	6,301.38
MW-9	12/21/2015	0.00	28.22	6,302.14
MW-9	6/20/2016	0.00	28.66	6,301.70
MW-9	12/14/2016	0.00	28.42	6,301.94

Notes:

AMSL - Above Mean Sea Level
BTOC - Below Top of Casing
NM - Not Measured
* - Well was destroyed

TABLE 2

GROUNDWATER ANAYTICAL RESULTS

TABLE 2

GROUNDWATER ANALYTICAL RESULTS
OH RANDEL #007
XTO ENERGY, INC.

Well ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Groundwater Standard		**10**	**750**	**750**	**620**
MW-3	4/24/2002	24	2.4	0.58	200
MW-3	8/27/2002	9.4	ND	ND	150
MW-3	3/3/2003	5.5	ND	ND	43
MW-3	6/18/2003	6.1	0.97	ND	43
MW-3	8/29/2003	3.2	0.53	ND	24
MW-3	12/5/2006	<1	<1	<1	<3
MW-3	5/17/2007	<1	<1	<1	<2
MW-3	8/9/2007	<1	<1	<1	<2
MW-4	4/24/2002	ND	0.59	ND	2.1
MW-4	8/27/2002	1.3	ND	ND	3.5
MW-4	3/3/2003	4.2	ND	ND	5
MW-4	6/18/2003	6.2	ND	ND	4.5
MW-4	8/29/2003	8.3	ND	ND	4.3
MW-4	12/5/2006	<1	<1	<1	<3
MW-4	5/17/2007	<1	<1	<1	<2
MW-4	8/9/2007	<1	<1	<1	<2
MW-5	4/24/2002	**510**	0.64	8.9	240
MW-5	6/18/2003	**1,100**	20	ND	**660.0**
MW-5	6/21/2004	**2,000**	ND	ND	260.0
MW-5	6/28/2005	**1,100**	15	ND	160.0
MW-5	12/5/2006	**37**	<1	<1	4.1
MW-5	5/17/2007	<1	<1	<1	<2
MW-6	4/24/2002	**6,100**	**4,800**	**920**	**6,600**
MW-7	5/17/2007	**8,500**	**17,000**	**980**	**16,000**
MW-7	8/9/2007	**9,800**	**11,000**	**770**	**12,000**
MW-7	11/27/2007	**12,000**	**9,000**	**940**	**13,000**
MW-7	5/12/2008	**7,900**	**11,000**	**830**	**12,000**
MW-7	11/7/2008	**12,000**	**16,000**	**1,100**	**17,000**
MW-7	7/8/2009	**9,800**	**8,200**	<100	**12,000**
MW-7	11/5/2009	**9,800**	**7,900**	570	**13,000**
MW-7	5/25/2010	**7,200**	**3,800**	440	**11,000**
MW-7	8/12/2010	**82**	58	9.2	200
MW-7	11/17/2010	**5,200**	**5,500**	76.0	**3,400**
MW-7	2/14/2011	**2,200**	**1,000**	<120	**1,800**
MW-7	5/17/2011	**500**	190	16	180
MW-7	8/9/2011	**81.3**	36.9	5.3	39.4
MW-7	11/9/2011	**26**	16	2.3	20
MW-7	6/17/2013	0.72	<5.0	<0.50	<1.5

TABLE 2

GROUNDWATER ANALYTICAL RESULTS
OH RANDEL #007
XTO ENERGY, INC.

Well ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Groundwater Standard		**10**	**750**	**750**	**620**
MW-7	12/16/2013	**130**	<50	7.6	62
MW-7	6/11/2014	**7,600**	**6,400**	100	**5,900**
MW-7	12/9/2014	**9,400**	**2,600**	250	**6,100**
MW-7	6/11/2015	**8,300**	**960**	410	**7,200**
MW-7	12/21/2015	**9,040**	67.6	465	**7,310**
MW-7	6/20/2016	**9,160**	412	615	**8,750**
MW-7	12/14/2016	**8,400**	368	284	**6,950**
MW-8	5/17/2007	<1.0	1.9	<1.0	3.7
MW-8	8/9/2007	<1.0	<1.0	<1.0	<2.0
MW-8	11/27/2007	**21.0**	<1.0	<1.0	<2.0
MW-8	5/12/2008	1.4	<1.0	<1.0	<2.0
MW-8	11/7/2008	1.2	<1.0	<1.0	<2.0
MW-8	7/8/2009	<1.0	<1.0	<1.0	<2.0
MW-8	11/5/2009	1.1	<1.0	<1.0	<2.0
MW-9	7/8/2009	**91**	160	6.9	100
MW-9	11/30/2009	<1	<1	<1	<2
MW-9	5/25/2010	<1.0	<1.0	<1.0	<2.0
MW-9	8/12/2010	<0.5	<5.0	<0.5	<1.5
MW-9	11/17/2010	2.4	<5.0	<0.5	<1.5

Notes:

< indicates result is less than the stated laboratory method detection limit

µg/l - micrograms per liter

BOLD indicates the result exceeds the NMWQCC Standard

ND - not detected

NMWQCC - New Mexico Water Quality Control Commission

ATTACHMENT 1

BLAGG ENGINEERING, INC. PIT CLOSURE REPORT (2002)

3004524749 36.49193/107.99632

CLIENT: XTO

BLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199

LOCATION NO: _____
C.O.C. NO: 9796

FIELD REPORT: PIT CLOSURE VERIFICATION

PAGE No: 1 of 1

LOCATION: NAME: O.H. RANDEL WELL #: 7 TYPE: ABAN. SEP.
QUAD/UNIT: D SEC: 15 TWP: 26N RNG: 11W PM: NM CNTY: SJ ST: NM
QTR/FOOTAGE: 1150'N/1150'W NW/NW CONTRACTOR:

DATE STARTED: 3/12/02
DATE FINISHED: _____
ENVIRONMENTAL SPECIALIST: NV

EXCAVATION APPROX. NA FT. x NA FT. x NA FT. DEEP. CUBIC YARDAGE: NA
DISPOSAL FACILITY: ON-SITE REMEDIATION METHOD: _____
LAND USE: RANGE - BLM LEASE: _____ FORMATION: DK

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 239 FT. S75E FROM WELLHEAD.
DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'
NMOCD RANKING SCORE: 0 NMOCD TPH CLOSURE STD: 5000 PPM

OVM CALIB. READ. 52.7 ppm
OVM CALIB. GAS = 100 ppm RF = 0.52
TIME: 11:48 (am)/pm DATE: 3/12/02

SOIL AND EXCAVATION DESCRIPTION:

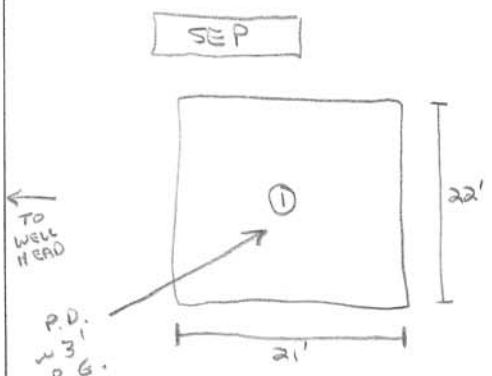
SOIL TYPE: (SAND) / SILTY SAND / SILT / SILTY CLAY / CLAY / GRAVEL / OTHER _____
SOIL COLOR: MED. GRAY
COHESION (ALL OTHERS): (NON COHESIVE) / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVE
CONSISTENCY (NON COHESIVE SOILS): (LOOSE) / (FIRM) / DENSE / VERY DENSE
~~PLASTICITY (CLAYS)~~: NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC
~~DENSITY (COHESIVE CLAYS & SILTS)~~: SOFT / FIRM / STIFF / VERY STIFF / HARD
MOISTURE: DRY / SLIGHTLY MOIST / (MOIST) / WET / SATURATED / SUPER SATURATED
DISCOLORATION/STAINING OBSERVED: (YES) / NO EXPLANATION - BET. 4-6' BELOW GRADE
HC ODOR DETECTED: (YES) / NO EXPLANATION - MED. GRAY SAND (STRONG)
SAMPLE TYPE: (GRAB) / COMPOSITE - # OF PTS. -
ADDITIONAL COMMENTS: CONDUCTED SAMPLING WITH HAND SHOVEL.

FIELD 418.1 CALCULATIONS

SAMP. TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm

SCALE
0 FT

PIT PERIMETER



PIT PROFILE

OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 6'	1,015
2 @	
3 @	
4 @	
5 @	

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME
(1) @ 6'	TPH (8015B)	1130
"	BTEX (8021B)	"

P.D. = PIT DEPRESSION; B.G. = BELOW GRADE
T.H. = TEST HOLE; ~ = APPROX.; B = BELOW

TRAVEL NOTES: CALLOUT: 3/12/02 - MORN. ONSITE: 3/12/02 - MORN.

revised: 02/27/02 bei1005C.skd

ATTACHMENT 2

COMPLETION DIAGRAMS AND BOREHOLE LOGS

FIGURE 8

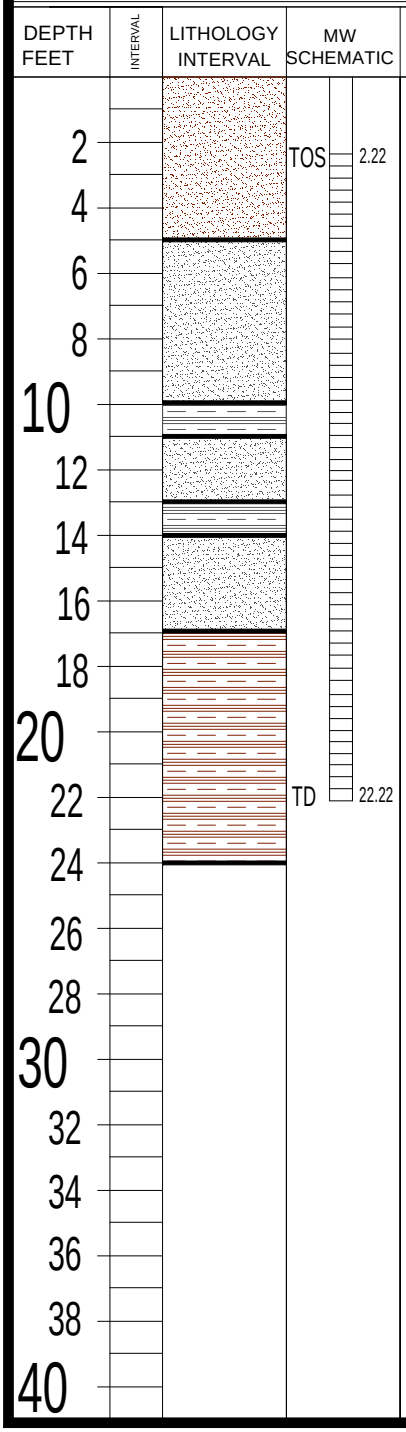
BLAGG ENGINEERING, INC.

P.O. BOX 87
BLOOMFIELD, NM 87413
(505) 632-1199

BORE / TEST HOLE REPORT

BORING #.....	BH - 1
MW #.....	1
PAGE #.....	1
DATE STARTED	3/22/02
DATE FINISHED	3/22/02
OPERATOR.....	JCB
PREPARED BY	NJV

CLIENT:	XTO ENERGY INC.
LOCATION NAME:	RANDEL, O.H. #7 - SEP. PIT, UNIT D, SEC. 15, T26N, R11W
CONTRACTOR:	BLAGG ENGINEERING, INC.
EQUIPMENT USED:	MOBILE DRILL RIG (EARTHPROBE)
BORING LOCATION:	240 FT., S76.5E FEET FROM WELL HEAD.



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 0.15 FT. ABOVE GROUND SURFACE.

MODERATE TO DARK YELLOWISH BROWN SAND & ROCK AGGREGATE, NON COHESIVE, SLIGHTLY MOIST, LOOSE TO FIRM, NO APPARENT HC ODOR DETECTED PHYSICALLY WITHIN AUGER CUTTINGS (0.0 - 5.0 FT. BELOW GRADE).

LIGHT TO MEDIUM GRAY SAND, NON COHESIVE, SLIGHTLY MOIST TO MOIST, FIRM, STRONG HC ODOR DETECTED PHYSICALLY WITHIN AUGER CUTTING (5.0 - 10.0 FT. BELOW GRADE).

LIGHT MEDIUM GRAY SILTY CLAY TO CLAY, MEDIUM PLASTIC, STIFF, SLIGHTLY MOIST, APPARENT HC ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (10.0 - 11.0 FT. BELOW GRADE).

SAME AS 5.0 - 10.0 FT. INTERVAL (11.0 - 13.0 FT. BELOW GRADE).

SAME AS 10.0 - 11.0 FT. INTERVAL (13.0 - 14.0 FT. BELOW GRADE).

SAME AS 5.0 - 10.0 FT. INTERVAL EXCEPT MOIST TO WET (14.0 - 17.0 FT. BELOW GRADE).

GW DEPTH ON 3/25/02 = 16.68 FT. (APPROX.) FROM GROUND SURFACE.

LIGHT DUSKY BROWN SILTY CLAY TO CLAY, MEDIUM PLASTIC, STIFF, WET TO SATURATED, APPARENT STRONG HC ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (17.0 - 24.0 FT. BELOW GRADE).

NOTE:

- SAND.
- SILTY CLAY TO CLAY.

TOS - TOP OF SCREEN FROM GROUND SURFACE.
TD - TOTAL DEPTH OF MONITOR WELL FROM GROUND SURFACE.
GW - GROUND WATER.

Monitor well consist of 2 inch PVC piping - casing from 0.15 ft. above grade to 2.22 ft. below grade, 0.010 slotted screen between 2.22 to 22.22 feet below grade, sand packed annular to grade.

DRAWING: RANDEL-7-MW1.SKF | DATE: 10/19/05 | DWN BY: NJV

FIGURE 9

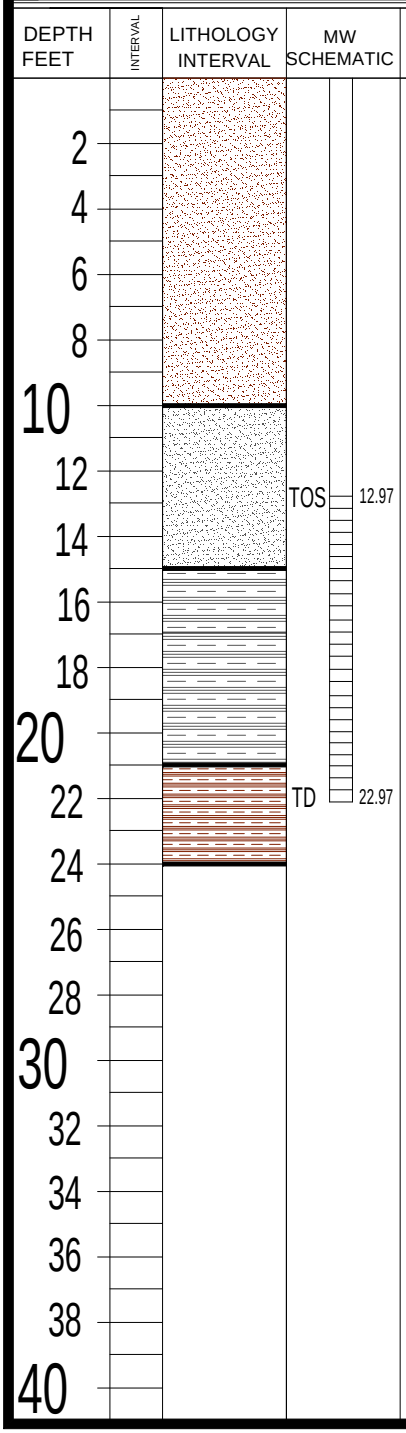
BLAGG ENGINEERING, INC.

P.O. BOX 87
BLOOMFIELD, NM 87413
(505) 632-1199

BORE / TEST HOLE REPORT

CLIENT:	XTO ENERGY INC.
LOCATION NAME:	RANDEL, O.H. #7 - SEP. PIT, UNIT D, SEC. 15, T26N, R11W
CONTRACTOR:	BLAGG ENGINEERING, INC.
EQUIPMENT USED:	MOBILE DRILL RIG (EARTHPROBE)
BORING LOCATION:	274 FT., S87.5E FEET FROM WELL HEAD.

BORING #.....	BH - 2
MW #.....	2
PAGE #.....	2
DATE STARTED	4/09/02
DATE FINISHED	4/09/02
OPERATOR.....	JCB
PREPARED BY	NJV



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 1.63 FT. ABOVE GROUND SURFACE.

MODERATE TO DARK YELLOWISH BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, LOOSE TO FIRM, NO APPARENT HC ODOR DETECTED PHYSICALLY WITHIN AUGER CUTTINGS (0.0 - 10.0 FT. BELOW GRADE).

LIGHT TO MEDIUM GRAY SILTY SAND, NON COHESIVE, DRY TO SLIGHTLY MOIST, DENSE, STRONG HC ODOR DETECTED PHYSICALLY WITHIN AUGER CUTTING (10.0 - 15.0 FT. BELOW GRADE).

▼ GW DEPTH ON 4/22/02 = 16.69 FT. (APPROX.) FROM GROUND SURFACE.

LIGHT MEDIUM GRAY SILTY CLAY TO CLAY, MEDIUM PLASTIC, STIFF, SLIGHTLY MOIST, APPARENT HC ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (15.0 - 21.0 FT. BELOW GRADE).

LIGHT DUSKY BROWN SILTY CLAY TO CLAY, MEDIUM PLASTIC, STIFF, DRY, SLIGHT APPARENT HC ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (21.0 - 24.0 FT. BELOW GRADE).

NOTE:

- SAND.
- SILTY SAND (HC IMPACTED).
- SILTY CLAY TO CLAY.

TOS - TOP OF SCREEN FROM GROUND SURFACE.
TD - TOTAL DEPTH OF MONITOR WELL FROM GROUND SURFACE.
GW - GROUND WATER.

Monitor well consist of 2 inch PVC piping - casing from 1.63 ft. above grade to 12.97 ft. below grade, 0.010 slotted screen between 12.97 to 22.97 feet below grade, sand packed annular to 10 ft. below grade, then filled with clean native soil to surface.

DRAWING: RANDEL-7-MW2.SKF | DATE: 10/19/05 | DWN BY: NJV

FIGURE 10

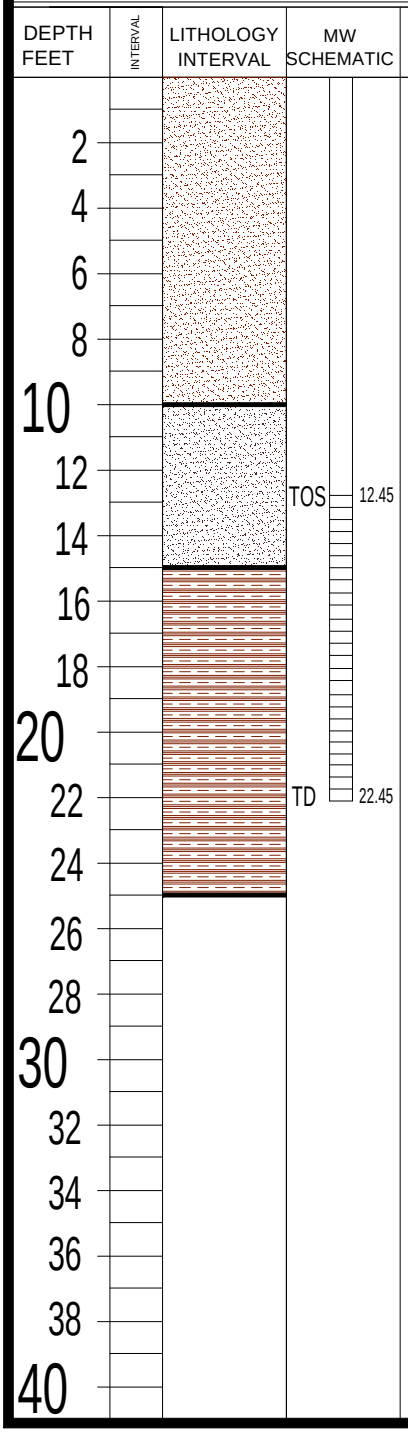
BLAGG ENGINEERING, INC.

P.O. BOX 87
BLOOMFIELD, NM 87413
(505) 632-1199

BORE / TEST HOLE REPORT

BORING #.....	BH - 3
MW #.....	3
PAGE #.....	3
DATE STARTED	4/09/02
DATE FINISHED	4/09/02
OPERATOR.....	JCB
PREPARED BY	NJV

CLIENT:	XTO ENERGY INC.
LOCATION NAME:	RANDEL, O.H. #7 - SEP. PIT, UNIT D, SEC. 15, T26N, R11W
CONTRACTOR:	BLAGG ENGINEERING, INC.
EQUIPMENT USED:	MOBILE DRILL RIG (EARTHPROBE)
BORING LOCATION:	158 FT., S80.5E FEET FROM WELL HEAD.



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 2.15 FT. ABOVE GROUND SURFACE.

MODERATE TO DARK YELLOWISH BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, LOOSE TO FIRM, NO APPARENT HC ODOR DETECTED PHYSICALLY WITHIN AUGER CUTTINGS (0.0 - 10.0 FT. BELOW GRADE).

MODERATE TO DARK YELLOWISH BROWN SILTY SAND, COHESIVE, SLIGHTLY MOIST TO WET, FIRM, NO APPARENT HC ODOR DETECTED PHYSICALLY WITHIN AUGER CUTTING (10.0 - 15.0 FT. BELOW GRADE).

GW DEPTH ON 4/22/02 = 14.11 FT. (APPROX.) FROM GROUND SURFACE.

LIGHT DUSKY BROWN SILTY CLAY TO CLAY, MEDIUM PLASTIC, STIFF, WET TO SATURATED, NO APPARENT HC ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (15.0 - 25.0 FT. BELOW GRADE).

NOTE:

- SAND.
- SILTY SAND.
- SILTY CLAY TO CLAY.

TOS - TOP OF SCREEN FROM GROUND SURFACE.
TD - TOTAL DEPTH OF MONITOR WELL FROM GROUND SURFACE.
GW - GROUND WATER.

Monitor well consist of 2 inch PVC piping - casing from 2.15 ft. above grade to 12.45 ft. below grade, 0.010 slotted screen between 12.45 to 22.45 feet below grade, sand packed annular to 10 ft. below grade, then filled with clean native soil to surface.

DRAWING: RANDEL-7-MW3.SKF	DATE: 10/19/05	DWN BY: NJV

FIGURE 11

BLAGG ENGINEERING, INC.

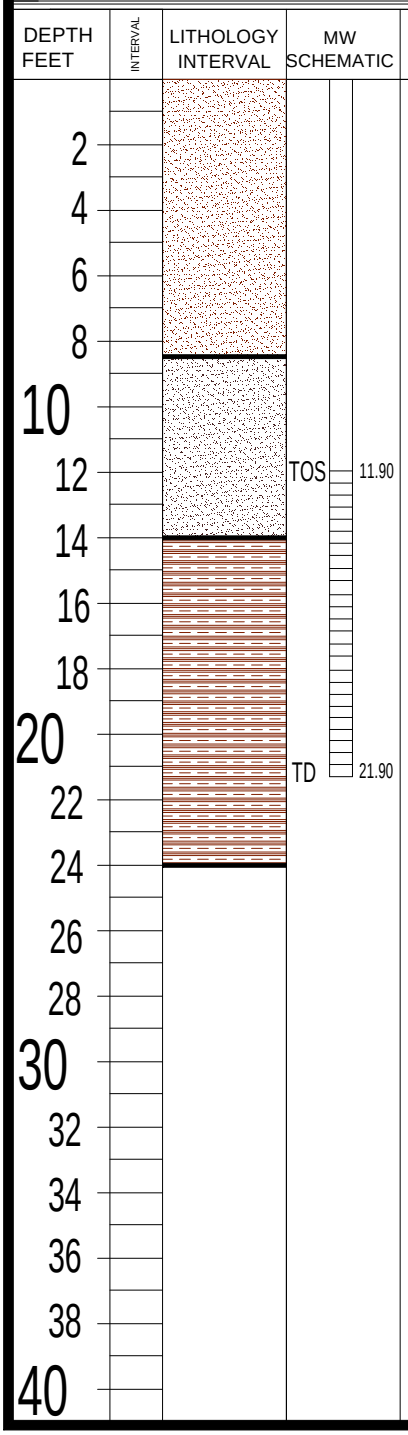
P.O. BOX 87
BLOOMFIELD, NM 87413

(505) 632-1199

BORE / TEST HOLE REPORT

CLIENT:	XTO ENERGY INC.
LOCATION NAME:	RANDEL, O.H. #7 - SEP. PIT, UNIT D, SEC. 15, T26N, R11W
CONTRACTOR:	BLAGG ENGINEERING, INC.
EQUIPMENT USED:	MOBILE DRILL RIG (EARTHPROBE)
BORING LOCATION:	210 FT., S56E FEET FROM WELL HEAD.

BORING #.....	BH - 4
MW #.....	4
PAGE #.....	4
DATE STARTED	4/09/02
DATE FINISHED	4/09/02
OPERATOR.....	JCB
PREPARED BY	NJV



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 1.60 FT. ABOVE GROUND SURFACE.

MODERATE TO DARK YELLOWISH BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, LOOSE TO FIRM, NO APPARENT HC ODOR DETECTED PHYSICALLY WITHIN AUGER CUTTINGS (0.0 - 8.5 FT. BELOW GRADE).

MODERATE TO DARK YELLOWISH BROWN SILTY SAND, COHESIVE, SLIGHTLY MOIST TO WET, FIRM, NO APPARENT HC ODOR DETECTED PHYSICALLY WITHIN AUGER CUTTING (8.5 - 14.0 FT. BELOW GRADE).

GW DEPTH ON 4/22/02 = 15.03 FT. (APPROX.) FROM GROUND SURFACE.

LIGHT DUSKY BROWN SILTY CLAY TO CLAY, MEDIUM PLASTIC, STIFF, WET TO SATURATED, NO APPARENT HC ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (14.0 - 24.0 FT. BELOW GRADE).

NOTE:

- SAND.
- SILTY SAND.
- SILTY CLAY TO CLAY.

TOS - TOP OF SCREEN FROM GROUND SURFACE.
TD - TOTAL DEPTH OF MONITOR WELL FROM GROUND SURFACE.
GW - GROUND WATER.

Monitor well consist of 2 inch PVC piping - casing from 1.60 ft. above grade to 11.90 ft. below grade, 0.010 slotted screen between 11.90 to 21.90 feet below grade, sand packed annular to 8 ft. below grade, then filled with clean native soil to surface.

DRAWING: RANDEL-7-MW4.SKF | DATE: 10/19/05 | DWN BY: NJV

FIGURE 12

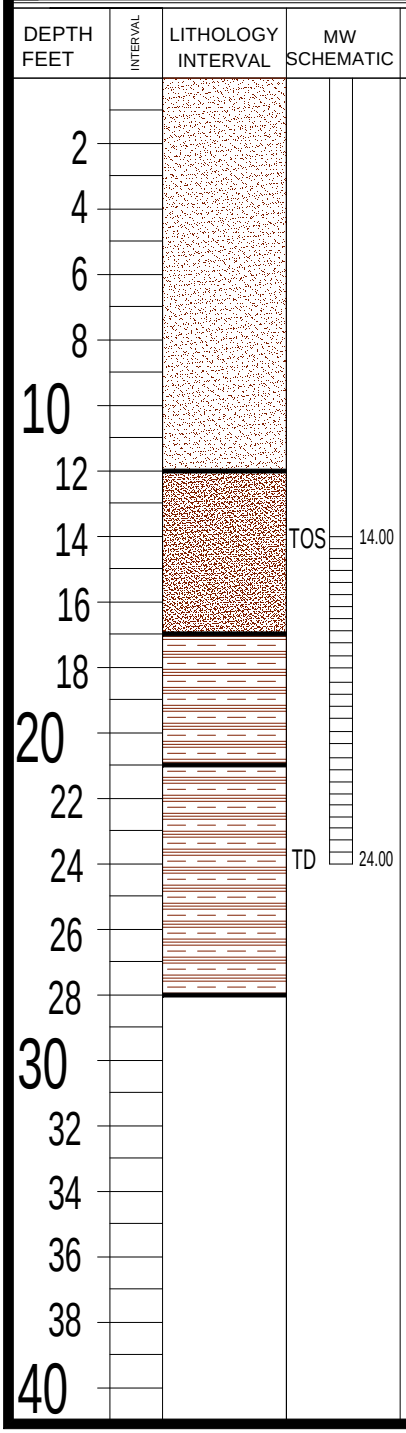
BLAGG ENGINEERING, INC.

P.O. BOX 87
BLOOMFIELD, NM 87413
(505) 632-1199

BORE / TEST HOLE REPORT

CLIENT:	XTO ENERGY INC.
LOCATION NAME:	RANDEL, O.H. #7 - SEP. PIT, UNIT D, SEC. 15, T26N, R11W
CONTRACTOR:	BLAGG ENGINEERING, INC.
EQUIPMENT USED:	MOBILE DRILL RIG (EARTHPROBE)
BORING LOCATION:	312 FT., N86E FEET FROM WELL HEAD.

BORING #.....	BH - 5
MW #.....	5
PAGE #.....	5
DATE STARTED	4/19/02
DATE FINISHED	4/19/02
OPERATOR.....	JCB
PREPARED BY	NJV



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 1.00 FT. ABOVE GROUND SURFACE.

MODERATE TO DARK YELLOWISH BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, LOOSE TO FIRM, NO APPARENT HC ODOR DETECTED PHYSICALLY WITHIN AUGER CUTTINGS (0.0 - 12.0 FT. BELOW GRADE).

MODERATE BROWN SILTY SAND, NON COHESIVE, DRY TO SLIGHTLY MOIST, DENSE, NO APPARENT HC ODOR DETECTED PHYSICALLY WITHIN AUGER CUTTING (12.0 - 17.0 FT. BELOW GRADE).

GW DEPTH ON 4/22/02 = 18.11 FT. (APPROX.) FROM GROUND SURFACE.

MEDIUM BROWN TO LIGHT OLIVE GRAY SILTY CLAY TO CLAY, MEDIUM PLASTIC, STIFF, SLIGHTLY MOIST, APPARENT HC ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (17.0 - 21.0 FT. BELOW GRADE).

LIGHT DUSKY BROWN SILTY CLAY TO CLAY, MEDIUM PLASTIC, STIFF, DRY, SLIGHT APPARENT HC ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (21.0 - 28.0 FT. BELOW GRADE).

NOTE:

- SAND.
- SILTY SAND.
- SILTY CLAY TO CLAY.

TOS - TOP OF SCREEN FROM GROUND SURFACE.
TD - TOTAL DEPTH OF MONITOR WELL FROM GROUND SURFACE.
GW - GROUND WATER.

Monitor well consist of 2 inch PVC piping - casing from 1.0 ft. above grade to 14.00 ft. below grade, 0.010 slotted screen between 14.00 to 24.00 feet below grade, sand packed annular to 12 ft. below grade, then filled with clean native soil to surface.

DRAWING: RANDEL-7-MW5.SKF	DATE: 10/19/05	DWN BY: NJV

FIGURE 13

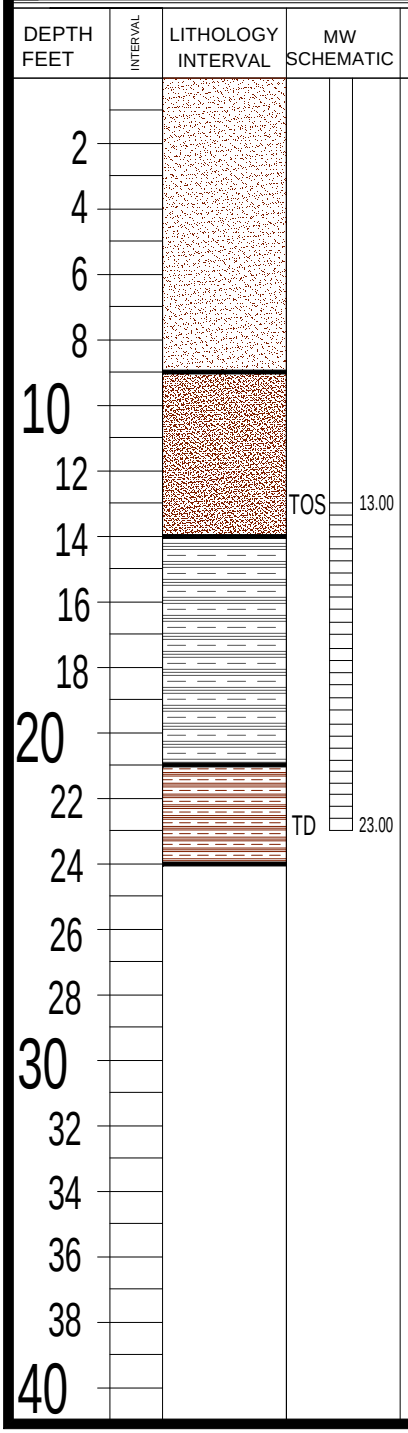
BLAGG ENGINEERING, INC.

P.O. BOX 87
BLOOMFIELD, NM 87413
(505) 632-1199

BORE / TEST HOLE REPORT

CLIENT:	XTO ENERGY INC.
LOCATION NAME:	RANDEL, O.H. #7 - SEP. PIT, UNIT D, SEC. 15, T26N, R11W
CONTRACTOR:	BLAGG ENGINEERING, INC.
EQUIPMENT USED:	MOBILE DRILL RIG (EARTHPROBE)
BORING LOCATION:	266 FT., S65.5E FEET FROM WELL HEAD.

BORING #.....	BH - 6
MW #.....	6
PAGE #.....	6
DATE STARTED	4/19/02
DATE FINISHED	4/19/02
OPERATOR.....	JCB
PREPARED BY	NJV



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 2.00 FT. ABOVE GROUND SURFACE.

MODERATE TO DARK YELLOWISH BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, LOOSE TO FIRM, NO APPARENT HC ODOR DETECTED PHYSICALLY WITHIN AUGER CUTTINGS (0.0 - 9.0 FT. BELOW GRADE).

MODERATE BROWN TO LIGHT OLIVE GRAY SILTY SAND, NON COHESIVE, DRY TO SLIGHTLY MOIST, DENSE, NO APPARENT HC ODOR DETECTED PHYSICALLY WITHIN AUGER CUTTING (9.0 - 14.0 FT. BELOW GRADE).

GW DEPTH ON 4/22/02 = 16.51 FT. (APPROX.) FROM GROUND SURFACE.

LIGHT OLIVE TO MEDIUM GRAY SILTY CLAY TO CLAY, MEDIUM PLASTIC, STIFF, SLIGHTLY MOIST, APPARENT HC ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (14.0 - 21.0 FT. BELOW GRADE).

LIGHT DUSKY BROWN SILTY CLAY TO CLAY, MEDIUM PLASTIC, STIFF, DRY, SLIGHT APPARENT HC ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (21.0 - 24.0 FT. BELOW GRADE).

NOTE:

- SAND.
- SILTY SAND.
- SILTY CLAY TO CLAY.

TOS - TOP OF SCREEN FROM GROUND SURFACE.
TD - TOTAL DEPTH OF MONITOR WELL FROM GROUND SURFACE.
GW - GROUND WATER.

Monitor well consist of 2 inch PVC piping - casing from 2.00 ft. above grade to 13.00 ft. below grade, 0.010 slotted screen between 13.00 to 23.00 feet below grade, sand packed annular to 10 ft. below grade, then filled with clean native soil to surface.

DRAWING: RANDEL-7-MW6.SKF | DATE: 10/19/05 | DWN BY: NJV

RECORD OF SUBSURFACE EXPLORATION

LodeStar Services
P.O. Box 4465
Durango, CO 81302
303-917-6288

Borehole #: 1
Well #: MW-7
Page: 1 of 2
Project Number:
Project Name: XTO Ground Water
Project Location: OH Randel #7

Borehole Location: 36º 29.508' N, 107º 59.720' W
GWL Depth: 19'
Drilled By: Enviro-Drill
Well Logged By: Ashley Ager
Date Started: 05/01/07
Date Completed: 05/01/07

Drilling Method: Hollow Stem Auger
Air Monitoring Method: PID

Depth (feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description	Air Monitoring	Drilling Conditions
0	1	0-5'	cuttings	brown, unconsolidated, poorly sorted sand and gravel, damp	0	Easy
5	2	5-7'	split spoon	brown, unconsolidated, poorly sorted sand and gravel, damp	0	Easy
10	3	10-12	split spoon	10-10.5: brown, unconsolidated, poorly sorted sand and gravel, damp 10.5-12: whitish-brown medium sand, well sorted, unconsolidated, dry	0 0	Easy
15	4	15-17	split spoon	15-15.5: reddish brown coarse sand, poorly sorted, damp 15.5-16.5: brown clay with white chalkish material on top 16.5-17: reddish brown silty sand, coarse, poorly sorted, damp	7.2 0 0	Easy
20						

Comments:

Geologist Signature *Ashley L. Ager*

RECORD OF SUBSURFACE EXPLORATION

LodeStar Services
P.O. Box 4465
Durango, CO 81302
303-917-6288

Borehole #: 1
Well #: MW-7
Page: 2 of 2
Project Number:
Project Name: XTO Ground Water
Project Location: OH Randel #7

Borehole Location: 36º 29.522' N, 107º 59.736' W
GWL Depth: 16.5
Drilled By: Enviro-Drill
Well Logged By: Ashley Ager
Date Started: 05/01/07
Date Completed: 05/01/07

Drilling Method: Hollow Stem Auger
Air Monitoring Method: PID

Depth (feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description	Air Monitoring	Drilling Conditions
20	5	20-22	split spoon	20-20.4: reddish brown, coarse sand, poorly sorted, damp	1.3	Easy
				20.4-20.8: gray coarse sand, moist, poorly sorted	1.0	
				20.8-21: saturated gray coarse sand, poorly sorted	0.5	
25				21-22: reddish gray clay	0	
	6	25-16	split spoon	Variegated reddish brown clay, dry	0	Easy
30	7	30-32	split spoon	Variegated reddish brown clay, dry	0	Easy
35						
40						

Comments: Very thin saturated layer at approximately 20'. Stiff clay is present below that. Wet layer probably represents a small perched aquifer atop the clay.

Geologist Signature *Ashley L. Ager*

RECORD OF SUBSURFACE EXPLORATION

LodeStar Services
P.O. Box 4465
Durango, CO 81302
303-917-6288

Borehole #: 1
Well #: MW-8
Page: 1 of 2
Project Number:
Project Name: XTO Ground Water
Project Location: OH Randel #7

Borehole Location: 36º 29.522' N, 107º 59.736' W
GWL Depth: 16.5
Drilled By: Enviro-Drill
Well Logged By: Ashley Ager
Date Started: 05/01/07
Date Completed: 05/01/07

Drilling Method: Hollow Stem Auger
Air Monitoring Method: PID

Depth (feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description	Air Monitoring	Drilling Conditions
0	1	0-5'	cuttings	brown, unconsolidated, poorly sorted sand and gravel, damp	0	Easy
5	2	5-7'	split spoon	brown, unconsolidated, poorly sorted sand and gravel, damp	0	Easy
10	3	10-11.8	split spoon	brown, unconsolidated, poorly sorted sand and gravel, damp	0	Easy
15	4	15-16.9	split spoon	15-15.8: brown, unconsolidated, poorly sorted sand and gravel 15.8-16.4: moist, grayish brown sandy silt 16.4-16.9: coarse, poorly sorted, grayish brown sand, wet, some HC odor	0 52.8 319	Easy Easy Easy
20						

Comments:

Geologist Signature *Ashley L. Ager*

RECORD OF SUBSURFACE EXPLORATION

LodeStar Services
P.O. Box 4465
Durango, CO 81302
303-917-6288

Borehole #: 1
Well #: MW-8
Page: 2 of 2
Project Number:
Project Name: XTO Ground Water
Project Location: OH Randel #7

Borehole Location: 36º 29.522' N, 107º 59.736' W
GWL Depth: 16.5
Drilled By: Enviro-Drill
Well Logged By: Ashley Ager
Date Started: 05/01/07
Date Completed: 05/01/07

Drilling Method: Hollow Stem Auger
Air Monitoring Method: PID

Depth (feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description	Air Monitoring	Drilling Conditions
20	5	20-21.8	split spoon	20-20.4: reddish brown sand, coarse, poorly sorted, some gravel content, moist	78.9	Easy
				20.4-21.8: variegated reddish gray stiff clay, moist	0.2	Easy
25	6	25-27	split spoon	Variegated reddish brown clay wet at top, dry at bottom	0	Easy
30	7	30-32	split spoon	30-30.7: variegated reddish brown clay	0	Steady
				30.7-31.8: greenish gray silty sand, coarse, poorly sorted, consolidated, dry	0	
35						
40						

Comments: Very thin saturated layer at approximately 16.5'. Stiff clay is present below that. Wet layer probably represents a small perched aquifer atop the clay.

Geologist Signature *Ashley L. Ager*

RECORD OF SUBSURFACE EXPLORATION

LodeStar Services
P.O. Box 4465
Durango, CO 81302
303-917-6288

Borehole #: B-1
Well #: MW-9
Page: 1 of 2
Project Number:
Project Name: XTO Ground Water
Project Location: OH Randel #7

Borehole Location: 36º 29.531' N, 107º 59.731' W
GWL Depth: 16'
Drilled By: Kelly Padilla
Well Logged By: Ashley Ager
Date Started: 07/07/09
Date Completed: 07/07/09

Drilling Method: Hollow Stem Auger
Air Monitoring Method: PID

Depth (feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description	Air Monitoring	Drilling Conditions
0		0-5	cuttings	brown, poorly sorted coarse sand and gravel, road base		easy
5	1	5-7'	split spoon, 17"	0-13.5": 7.5 YR 5/6 strong brown sp, poorly sorted coarse sand, sub angular, dry, unconsolidated 13.5 - 17": 10YR 6/1 gray, sandy shale, crumbly	0	34 Blows
10	2	10-12	split spoon, 22"	10 YR 5/3 brown sp, poorly sorted, coarse sand, sub angular, dry	0	30 Blows
15	3	15-17	split spoon, 18"	0-2": same as above 2 - 16": 10 YR 5/3 brown sm, poorly sorted, medium sand w/ higher silt content, damp	0	25 Blows
20						

Comments:

Geologist Signature: *Ashley L. Ager*

RECORD OF SUBSURFACE EXPLORATION

LodeStar Services
P.O. Box 4465
Durango, CO 81302
303-917-6288

Borehole #: B-1
Well #: MW-9
Page: 2 of 2
Project Number:
Project Name: XTO Ground Water
Project Location: OH Randel #7

Borehole Location: 36º 29.531' N, 107º 59.731' W
GWL Depth: 16'
Drilled By: Kelly Padilla
Well Logged By: Ashley Ager
Date Started: 07/07/09
Date Completed: 07/07/09

Drilling Method: Hollow Stem Auger
Air Monitoring Method: PID

Depth (feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description	Air Monitoring	Drilling Conditions
20	4	20-22	split spoon, 20"	10 YR 3/2 v. dark grayish brown CL, clay some coarse sand at top, damp	0.1	68 Blows Wet rod
25	5	25-27	split spoon, 18"	10 YR 7/2 light gray CL, clay interbedded with 10 yr 4/2 dark grayish brown clays, iron discoloration, dry	0	58 Blows
30	6	30-32	split spoon, 18"	same as above, dry	0	76 Blows
35	7	35-37'	split spoon, 15"	same as above, dry	0	41 Blows
40						

Comments: Drilling stopped at 35' based on previous knowledge of depth in existing monitoring wells. Identified damp sandy layer at 16', and hole is dry after drilling to 37'. Will let sit and see if water fills in. 3" of water in hole after 30 mins. Set well.

Geologist Signature: *Ashley L. Ager*

RECORD OF SUBSURFACE EXPLORATION

LodeStar Services
P.O. Box 4465
Durango, CO 81302
303-917-6288

Borehole #: B-2
Well #:
Page: 1 of 2
Project Number:
Project Name: XTO Ground Water
Project Location: OH Randel #7

Borehole Location: 36º 29' 30.46" N, 107º 59' 44.2" W
GWL Depth: Dry Hole
Drilled By: Kelly Padilla
Well Logged By: Ashley Ager
Date Started: 07/07/09
Date Completed: 07/08/09

Drilling Method: Hollow Stem Auger
Air Monitoring Method: PID

Depth (feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description	Air Monitoring	Drilling Conditions
0		0-5'	cuttings	brown poorly sorted coarse sand and gravel - road base		easy
5	1	5-7'	split spoon, 11"	2.5 Y 6/1 Gray coarse sand sp, subrounded, backfill	0	Easy, 26 Blows
10	2	10-12	split spoon, 16"	2.5 Y 4/2 dark grayish brown, fine sand, poorly sorted, lots of fines	0	25 Blows
15	3	15-17	split spoon, 10"	2.5 Y 4/1 Dark Gray, fine silty sand, about 5% c. content, damp, backfill	0	12 Blows Wet rod
20						

Comments:

Geologist Signature: *Ashley L. Ager*

RECORD OF SUBSURFACE EXPLORATION

LodeStar Services
P.O. Box 4465
Durango, CO 81302
303-917-6288

Borehole #: B-2
Well #:
Page: 2 of 2
Project Number:
Project Name: XTO Ground Water
Project Location: OH Randel #7

Borehole Location: 36º 29' 30.46" N, 107º 59' 44.2" W
GWL Depth: dry hole
Drilled By: Kelly Padilla
Well Logged By: Ashley Ager
Date Started: 07/07/09
Date Completed: 07/08/09

Drilling Method: Hollow Stem Auger
Air Monitoring Method: PID

Depth (feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description	Air Monitoring	Drilling Conditions
20	4	20-22	split spoon, 19"	5 YR 3/2 Dark reddish brown CL, Clay, damp	0.1	59 Blows
25	5	25-27	split spoon, 16.5"	0 - 2": same as above 2-16.5": 10YR 6/2 light brownish gray, silty clay, dry	0	66 Blows
30	6	30-32	split spoon, 14"	same as above, damp	0	48 Blows
35	7	35-37'	split spoon, 9"	same as above, dry Stop to see if it fills	11.2	45 Blows
40						

Comments: Drilling stopped at 35' based on previous knowledge of depth in existing monitoring wells. Identified damp sandy layer at ~16' and hole is dry after drilling to 37'. Let sit for 2 hours and did not fill in. Let sit overnight. At 11:15 am on 07/08/09, hole is still dry. Plug.

Geologist Signature: *Ashley L. Ager*

ATTACHMENT 3

LODESTAR SERVICES, INC. REMEDIATION WORK PLAN (2006)

Lodestar Services, Inc.
P.O. Box 3861, Farmington, NM 87499-3861, 505-334-2791

August 15, 2006

Mr. Steve Austin
Navajo Nation EPA
PO Box 1999
Shiprock, NM 87420

CERTIFIED MAIL: 7004 1160 0007 4952 1517

RE: OH Randel #7

Dear Mr. Austin,

XTO Energy Inc. (XTO) has contracted Lodestar Services, Incorporated (Lodestar) to oversee groundwater monitoring and remedial activities at the OH Randel #7 natural gas production well. It has come to our attention that the well is located on land regulated by the Navajo Nation Environmental Protection Agency (NNEPA). Previous regulatory correspondence has been with the New Mexico Oil Conservation Division (NMOCD). An annual comprehensive report was submitted to the NMOCD in January 2006 and is included for your review.

The OH Randel #7 is located in Unit D of Section 16 of Township 26N, Range 11W, and includes a former oil-water-separator pit that may have affected shallow groundwater. Six groundwater monitoring wells were previously installed on the site to investigate groundwater quality. One of the wells, MW-6, contains free-phase hydrocarbons. Previously MW-1 and MW-2 contained free-phase hydrocarbons. MW-1 is located in the center of the former pit. MW-2 is directly adjacent to the pit, and MW-6 is located down gradient of the pit. The annual report included herein has several groundwater contour maps provided by Blagg Engineering that indicate varying groundwater flow directions. Navajo Agricultural Products Incorporated (NAPI) conducts irrigation adjacent to the site and may influence groundwater flow direction.

The following steps are proposed remove impacted soil and free-phase hydrocarbons:

1. Excavate affected soil associated with historical operations from the former pit. Impacted soil will be disposed at a local land farm permitted by the NMOCD. Soil headspace gas will be monitored with a photo-ionization detector (PID) to determine extent of impacted soil during excavation according to the NMOCD Guidelines for headspace analysis. Soil above 10 milligrams per kilogram (mg/kg) benzene, 50 mg/kg total benzene, toluene, ethylbenzene, and xylenes (BTEX), and 100 mg/kg total petroleum hydrocarbons will be removed. Laboratory analyses of composite samples collected from the sidewalls of the excavation will be used to document that impacted soil has been removed.
2. Erect temporary fencing around the excavated site and remove impacted water and free-phase hydrocarbons from the pit.

3. Once the free-phase hydrocarbons have been removed, backfill the excavation site with clean soil.
4. Replace groundwater-monitoring wells as necessary.
5. Install additional down gradient monitoring wells as necessary to characterize impacted groundwater.
6. Remove free phase hydrocarbons from groundwater, then sample groundwater-monitoring wells for benzene, toluene, ethylbenzene and total xylenes (BTEX) on a quarterly basis to monitor progress at the site.

Following completion of the above tasks, XTO will provide a letter report describing onsite activities and analytical results. XTO wishes to complete this work as soon as practical and will contact you to schedule activities. Should you have any questions or require additional information, please do not hesitate to contact Lisa Winn of XTO at (505) 324-1090 or you can call me at (505) 334 2791.

Sincerely,
LODESTAR SERVICES, INC

Martin Nee

Cc: Lisa Winn, XTO, w/o enclosures
Kim Champlin, XTO, w/o enclosures
Ashley Ager, LSI, w/o enclosures
Glenn Von Gonten, NMOCD
File
Attachments: Annual Report

cc Mr Jim Walkins USEPA

ATTACHMENT 4

LODESTAR SERVICES, INC. REPORT OF EXCAVATION AND SAMPLING (2007)

Lodestar Services, Incorporated
PO Box 3861 Farmington, NM 87499-3861 Office (505) 334-2791

January 29, 2007

Mr. William Freeman
Navajo Nation Environmental Protection Agency
PO Box 1999
Shiprock, NM 87420

RE: Report of Excavation and Sampling at OH Randel #7

Dear Mr. Freeman:

XTO Energy Inc. (XTO) operates the OH Randel #7 natural gas production well located in Unit D of Section 16 of Township 26N, Range 11W, San Juan County, New Mexico. A former oil-water-separator pit may have impacted soil and shallow groundwater at the site. On August 15, 2006, XTO submitted a work plan to the Navajo Nation Environmental Protection Agency (NNEPA) describing planned remedial activities to investigate and remove impacted soil. XTO contracted Lodestar Services, Incorporated (Lodestar) to direct excavation activities according to the August 15 work plan. Core Oilfield Services completed the excavation, backfilling, and transportation of impacted soil to Envirotech Inc.'s land farm. Clean backfill was purchased from Moss Excavation's gravel pit located on highway 550 in Bloomfield, NM.

On November 13-27, 2006, a geologist from Lodestar was present during excavation of impacted soil at the OH Randel #7. During excavation, field screening according to the New Mexico Oil Conservation Division's (NMOCD) guidelines for headspace analysis was conducted to determine extent of impacted soil by collecting samples from the sidewalls and floor of the excavated pit. Following headspace screening and excavation, composite samples from the sidewalls and floor of the excavation were collected for laboratory analysis. Samples were collected where field screening indicated the highest concentrations of hydrocarbons. Compositing included placing four aliquots of soil from a given wall or floor into a one-gallon plastic bag. The soil within the bag was thoroughly mixed before filling a four-ounce glass jar. The sample was immediately placed on ice, and maintained under strict chain-of-custody until delivered to Envirotech Laboratories in Farmington, NM. Envirotech Laboratories analyzed the samples for benzene, toluene, ethylbenzene, and xylenes (BTEX) and total petroleum hydrocarbons (TPH) by United States Environmental Protection Agency (USEPA) methods 8021 and 8015, respectively. The results of sample analyses are as follows:

	GRO (ppm)	DRO (ppm)	TPH (ppm)	Benzene (ppb)	Toluene (ppb)	Ethyl benzene (ppb)	P&M Xylenes (ppb)	O Xylenes (ppb)	Total BTEX (ppb)
NMOCD Standard			100	10,000					50,000
North Excavation North Wall	2.6	3.6	6.2	2.2	20.3	39.1	374	64.8	500
North Excavation East Wall	1080	266	1350	518	3230	3290	9590	3610	20240

	GRO (ppm)	DRO (ppm)	TPH (ppm)	Benzene (ppb)	Toluene (ppb)	Ethyl benzene (ppb)	P&M Xylenes (ppb)	O Xylenes (ppb)	Total BTEX (ppb)
NMOCD Standard			100	10,000					50,000
North Excavation West Wall	8.0	ND	8.0	2.0	746	889	2170	979	4790
North Excavation Floor	3.6	ND	3.6	10.5	65.9	119	619	202	1020
South Excavation East Wall	5.2	15.0	20.2	7.4	50.7	16.7	78.6	37.0	190
South Excavation West Wall	0.5	0.4	0.9	3.3	9.1	19.6	84.7	28.4	145
South Excavation Floor	ND	ND	ND	ND	4.4	7.7	24.5	5.3	41.9
South Excavation South Wall	ND	ND	ND	ND	1.9	7.9	24.8	8.7	43.3

GRO: Gasoline Range Organics; DRO: Diesel Range Organics;
ND: Not Detected in sample; ppm: parts per million; ppb: parts per billion

Approximately six thousand eight hundred and eighty two cubic yards of soil were removed for treatment to the land farm. Lodestar and XTO met with the USEPA and the NNEPA on November 27, 2006 at the job site and received permission to backfill the excavation based on the above results.

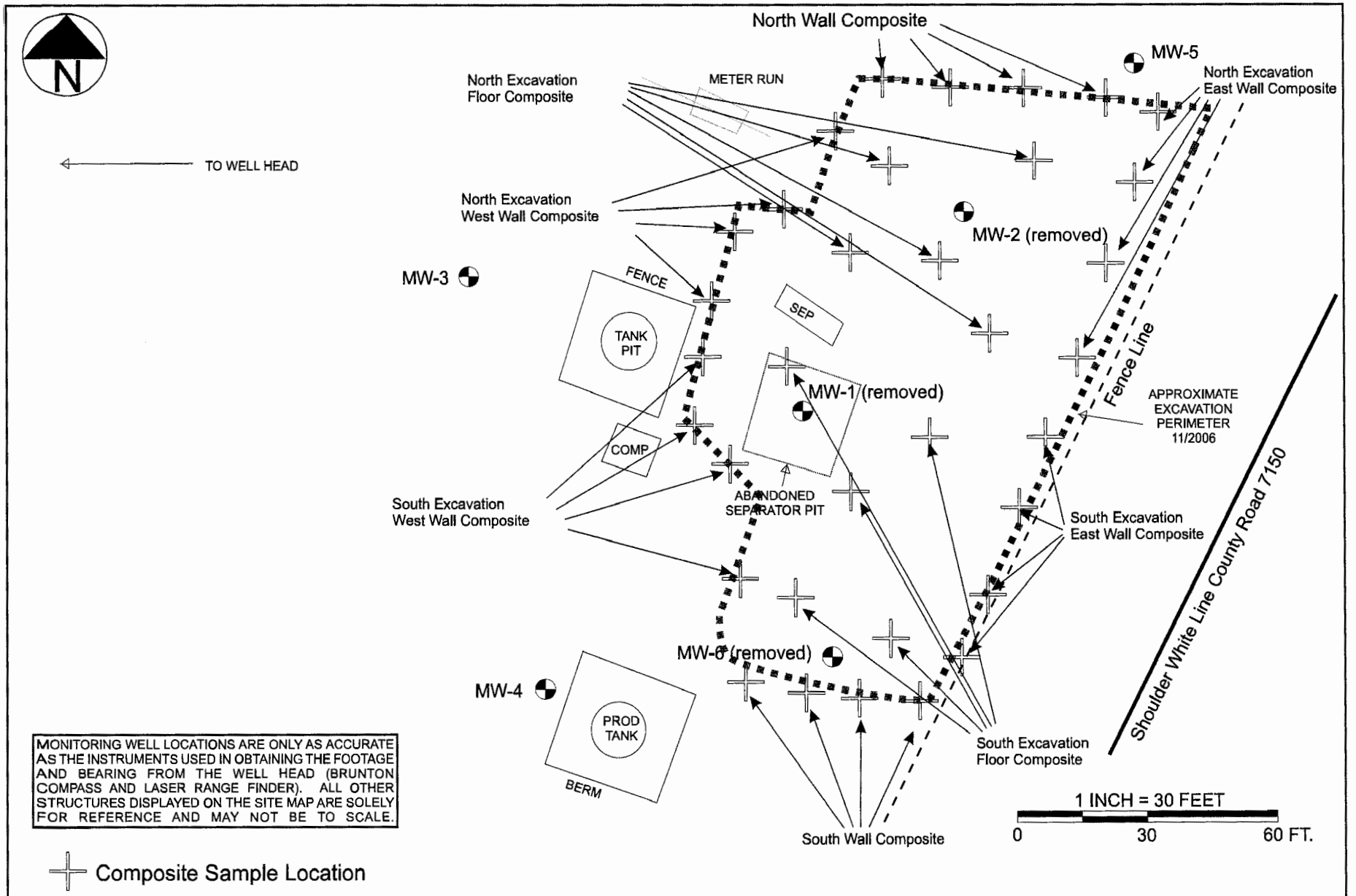
Six groundwater monitoring wells were previously installed on the site to investigate groundwater quality. Three of the wells, MW-1, MW-2, and MW-6 were removed during excavation activities.

Laboratory reports and Bill-of-Lading copies are attached. Please contact Lisa Winn of XTO at (505) 324-1090 with any questions that may arise.

Sincerely,
Lodestar Services, Inc.

Martin Nee

Cc: Jim Walker, USEPA
Lisa Winn, XTO Energy
Kim Champlin, XTO Energy
Ashley Ager, Lodestar Services



Lodestar Services, Inc PO Box 3861 Farmington, NM 87499	OH RANDEL #7 NW/4 NW/4 SEC. 15, T26N, R11W SAN JUAN COUNTY, NEW MEXICO	PROJECT: XTO Excavation DRAWN BY: MJN REVISED: 01/29/07	Composite Sample Location Map 1/29/2007

ATTACHMENT 5

2016 LABORATORY REPORTS

ANALYTICAL REPORT

June 28, 2016

XTO Energy - San Juan Division

Sample Delivery Group:	L842713
Samples Received:	06/21/2016
Project Number:	30-045-24749
Description:	OH Randal #007

Report To:

James McDaniel
382 County Road 3100
Aztec, NM 87410

Entire Report Reviewed By:

Daphne R Richards

Daphne Richards
Technical Service Representative

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FARAC-062016-1215 L842713-01 GW

Collected by: A. Crooks
Collected date/time: 06/20/16 12:15
Received date/time: 06/21/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8021B	WG883317	20	06/25/16 02:43	06/25/16 02:43	JAH
Volatile Organic Compounds (GC) by Method 8021B	WG883929	200	06/28/16 15:46	06/28/16 15:46	JHH

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Daphne R Richards

Daphne Richards
Technical Service Representative

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	9.16		0.100	200	06/28/2016 15:46	WG883929
Toluene	0.412		0.100	20	06/25/2016 02:43	WG883317
Ethylbenzene	0.615		0.0100	20	06/25/2016 02:43	WG883317
Total Xylene	8.75		0.0300	20	06/25/2016 02:43	WG883317
(S) a,a,a-Trifluorotoluene(PID)	*98.9*		*55.0-122*		*06/25/2016 02:43*	WG883317
(S) a,a,a-Trifluorotoluene(PID)	*102*		*55.0-122*		*06/28/2016 15:46*	WG883929

Method Blank (MB)

(MB) R3145978-3 06/24/16 20:50

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Toluene	U		0.000180	0.00500
Ethylbenzene	U		0.000160	0.000500
Total Xylene	U		0.000510	0.00150
(S) a,a,a-Trifluorotoluene(PID)	*101*			*55.0-122*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3145978-1 06/24/16 19:42 • (LCSD) R3145978-2 06/24/16 20:05

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
Toluene	0.0500	0.0478	0.0481	95.6	96.2	70.0-130			0.590	20
Ethylbenzene	0.0500	0.0498	0.0499	99.5	99.8	70.0-130			0.240	20
Total Xylene	0.150	0.151	0.149	101	99.6	70.0-130			1.33	20
(S) a,a,a-Trifluorotoluene(PID)				*100*	*100*	*55.0-122*				

L842799-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L842799-01 06/24/16 22:58 • (MS) R3145978-4 06/24/16 21:28 • (MSD) R3145978-5 06/24/16 21:51

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Toluene	0.0500	U	0.0325	0.0508	65.0	102	1	63.7-134		J3	44.0	20
Ethylbenzene	0.0500	U	0.0333	0.0530	66.6	106	1	67.5-135	J6	J3	45.7	20
Total Xylene	0.150	U	0.103	0.159	68.6	106	1	65.9-138	J6	J3	42.7	20
(S) a,a,a-Trifluorotoluene(PID)					*100*	*101*		*55.0-122*				

Method Blank (MB)

(MB) R3146339-3 06/28/16 12:34

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Benzene	U		0.000190	0.000500
(S) a,a,a-Trifluorotoluene(PID)	*102*			*55.0-122*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3146339-1 06/28/16 11:26 • (LCSD) R3146339-2 06/28/16 11:49

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
Benzene	0.0500	0.0616	0.0599	123	120	70.0-130			2.78	20
(S) a,a,a-Trifluorotoluene(PID)				*102*	*102*	*55.0-122*				

L843090-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L843090-05 06/28/16 13:08 • (MS) R3146339-4 06/28/16 13:30 • (MSD) R3146339-5 06/28/16 13:53

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Benzene	0.0500	U	0.0611	0.0587	122	117	1	57.2-131			4.08	20
(S) a,a,a-Trifluorotoluene(PID)					*101*	*101*		*55.0-122*				

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier	Description
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

ACCREDITATIONS & LOCATIONS

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**
***** Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1 4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

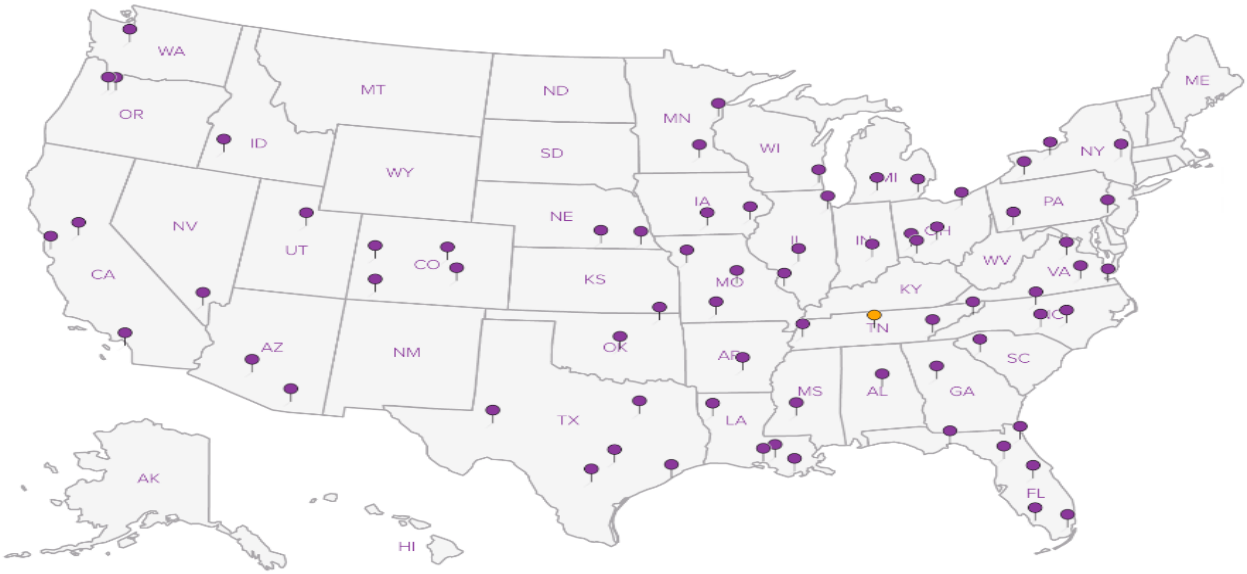
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [n/a] Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



XTO ENERGY
Western Division

Quote Number XTO Contact:	Page _1_ of _1_	
XTO Contact: James McDaniel	XTO Contact Phone #: 505-333-3701	
Email Results to: james_mcdaniel@xtoenergy.com bherb@ltenv.com		
Well Site/Location OH Randel #007	API Number 30-045-24749	Test Reason Quarterly GW
Collected By A. Crooks	Samples on Ice (Y / N)	Turnaround ___ 24-Hour ___ Next Day ___ Two Day ___ Three Day _X_ Std.5 Bus. Days(by contract) Date Needed _____
Company LT Environmental, Inc.	QA/QC Requested Standard	
Signature	Gray Areas for Lab Use Only!	

Analysis: BTEX

Lab Information

Office Abbreviations
Farmington = FAR
Durango = DUR
Bakken = BAK
Raton = RAT
Piceance = PC
Roosevelt = RSV
La Barge = LB
Orangeville = OV

A236

Sample ID	Sample Name	Media	Date	Time	Preservative	No. of Conts.	BTEX	Sample Number
FARAC-062016-1215	MW-7	GW	6/20/2016	1215	HCL	3	X	L842713-01

Media : Filter = F Soil = S Wastewater = WW Groundwater = GW Drinking Waster = DW Sludge = SG Surface Water = SW Air = A Drill Mud = DM Other = OT

Relinquished By: (Signature)	Date: 6/20/16	Time: 1530	Received By: (Signature)	Number of Bottles: 3 FP	Sample Condition: OK
Relinquished By: (Signature)	Date:	Time:	Received By: (Signature)	Temperature: 3.2	Other Information
Relinquished By: (Signature)	Date:	Time:	Received for Lab by: (Signature)	Date: 6/21/16 9W	

GDC

Comments

* Sample ID will be the office and sampler-date-military time-sampler initials FARJM-MMDDYY-1200

ANALYTICAL REPORT

December 27, 2016

XTO Energy - San Juan Division

Sample Delivery Group:	L879645
Samples Received:	12/17/2016
Project Number:	30-045-24749
Description:	OH Randel #007

Report To: James McDaniel
382 County Road 3100
Aztec, NM 87410

Entire Report Reviewed By:

Nancy McLain
Technical Service Representative

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FARES-121416-1428 L879645-01 GW

Collected by: Emilee Skyles
Collected date/time: 12/14/16 14:28
Received date/time: 12/17/16 10:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8021B	WG936564	10	12/22/16 13:04	12/22/16 13:04	GLN
Volatile Organic Compounds (GC) by Method 8021B	WG936564	50	12/23/16 16:50	12/23/16 16:50	BMB

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Nancy McLain
Technical Service Representative

Volatile Organic Compounds (GC) by Method 8021B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	8.40		0.0250	50	12/23/2016 16:50	WG936564
Toluene	0.368		0.0100	10	12/22/2016 13:04	WG936564
Ethylbenzene	0.284		0.00500	10	12/22/2016 13:04	WG936564
Total Xylene	6.95		0.0750	50	12/23/2016 16:50	WG936564
(S) a,a,a-Trifluorotoluene(PID)	*99.8*		*55.0-122*		*12/23/2016 16:50*	WG936564
(S) a,a,a-Trifluorotoluene(PID)	*97.6*		*55.0-122*		*12/22/2016 13:04*	WG936564

Method Blank (MB)

(MB) R3186574-3 12/22/16 02:07

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Benzene	U		0.000190	0.000500
Toluene	U		0.000412	0.00100
Ethylbenzene	U		0.000160	0.000500
Total Xylene	U		0.000510	0.00150
(S) a,a,a-Trifluorotoluene(PID)	*99.7*			*55.0-122*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3186574-1 12/22/16 01:22 • (LCSD) R3186574-2 12/22/16 01:44

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
Benzene	0.0500	0.0517	0.0505	103	101	70.0-130			2.22	20
Toluene	0.0500	0.0502	0.0491	100	98.1	70.0-130			2.25	20
Ethylbenzene	0.0500	0.0509	0.0497	102	99.4	70.0-130			2.40	20
Total Xylene	0.150	0.151	0.148	101	98.5	70.0-130			2.37	20
(S) a,a,a-Trifluorotoluene(PID)				*98.7*	*99.0*	*55.0-122*				

L879413-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L879413-02 12/22/16 05:43 • (MS) R3186574-4 12/22/16 02:29 • (MSD) R3186574-5 12/22/16 04:36

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Benzene	0.0500	0.0913	0.0852	0.0805	0.000	0.000	1	57.2-131	J6	J6	5.63	20
Toluene	0.0500	0.204	0.167	0.158	0.000	0.000	1	63.7-134	V	V	5.59	20
Ethylbenzene	0.0500	0.0153	0.0435	0.0405	56.4	50.4	1	67.5-135	J6	J6	7.16	20
Total Xylene	0.150	0.105	0.174	0.163	46.2	38.5	1	65.9-138	J6	J6	6.91	20
(S) a,a,a-Trifluorotoluene(PID)					*99.4*	*96.4*		*55.0-122*				

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier	Description
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

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State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1 4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

[1.] Drinking Water [2.] Underground Storage Tanks [3.] Aquatic Toxicity [4.] Chemical/Microbiological [5.] Mold [n/a] Accreditation not applicable

Our Locations

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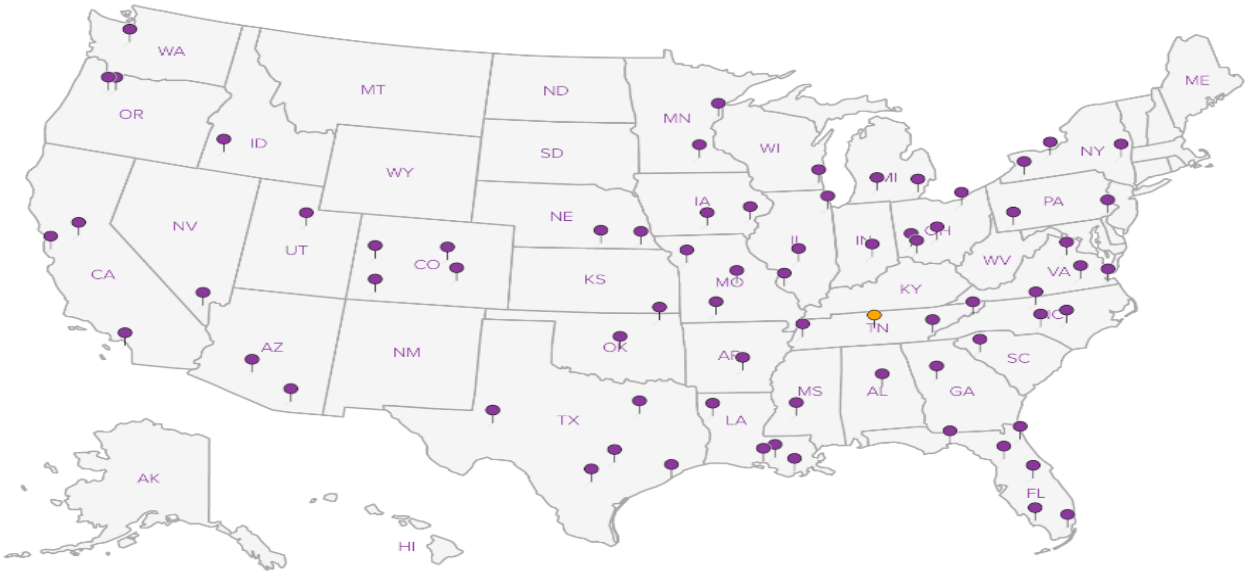

1204

XTO ENERGY
Western Division

Quote Number		Page _1_ of _1_
XTO Contact: James McDaniel		XTO Contact Phone #: (505) 333-3701
Email Results to: james_mcdaniel@XTOenergy.com, Logan_Hixon@XTOenergy.com Bherb@LTEnv.com, Dburns@ltenv.com		
Well Site/Location: OH Randel #007	API Number: 30-045-24749	Test Reason: Quarterly GW
Collected By: Emilee Skyles	Samples on Ice (Y / N)	Turnaround: ___ 24-Hour ___ Next Day ___ Two Day ___ Three Day _X_ Standard Date Needed _____
Company: LT Environmental, Inc.	QA/QC Requested: Standard	
Signature: Emilee Skyles	Gray Areas for Lab Use Only!	

Sample ID	Sample Name	Media	Date	Time	Preservative	No. of Conts.	TPH-GRO/DRO	8021 - BTEX	SAR	EC	CHLORIDE	See Attached	Sample Number
FARES-121416-1428	MW-7	GW	12/14/2016	14:28	HCl	3		X					876645-01

Analysis

Lab Information

Office Abbreviations
Farmington = FAR
Durango = DUR
Bakken = BAK
Raton = RAT
Piceance = PC
Roosevelt = RSV
La Barge = LB
Orangeville = OV

Media : Filter = F Soil = S Wastewater = WW Groundwater = GW Drinking Waster = DW Sludge = SG Surface Water = SW Air = A Drill Mud = DM Other = OT

Relinquished By: (Signature) Emilee Skyles	Date: 12/16/16	Time: 1300	Received By: (Signature)	Number of Bottles	Sample Condition
Relinquished By: (Signature)	Date:	Time:	Received By: (Signature)	Temperature: 1.9	Other Information
Relinquished By: (Signature)	Date:	Time:	Received for Lab by: (Signature) Mwt	Date: 12-17-16 / Time: 10:30	

Comments Please include 3 EDD's- LTE Format, COGCC Format, and XTO Format

TOTAL= 3=VP

MW SO COGCC

* Sample ID will be the office and sampler-date-military time-sampler initials FARJM-MMDDYY-1200

ESC
LAB SCIENCES
YOUR LAB OF CHOICE

Cooler Receipt Form

Client:	XTOXMT	SDG#	379645
Cooler Received/Opened On:	12/17/16	Temperature Upon Receipt:	1.9 °c
Received By: Michael Witherspoon			
Signature:	MWA		

Receipt Check List	Yes	No	N/A
Were custody seals on outside of cooler and intact?	✓		
Were custody papers properly filled out?	✓		
Did all bottles arrive in good condition?	✓		
Were correct bottles used for the analyses requested?	✓		
Was sufficient amount of sample sent in each bottle?	✓		
Were all applicable sample containers correctly preserved and checked for preservation? (Any not in accepted range noted on COC)			✓
If applicable, was an observable VOA headspace present?		✓	
Non Conformance Generated. (If yes see attached NCF)			

ATTACHMENT 6

2016 FIELD NOTES

COMPLIANCE / ENGINEERING / REMEDIATION

LT Environmental, Inc.
2243 Main Avenue, Suite 3
Durango, Colorado 81301
T 970.385.1096 / F
970.385.1873

Water Sample Collection Form

Project Name XTO Groundwater Monitoring
Project Number 01291809

Site Name Offcandel #007
Sampler Alex Crooks
Sample Date ~~6/17/2016~~ 6/20/16
Matrix Groundwater
Analyses 8021 BTEX
Laboratory ESC
Turn Around Time Standard
Shipping FedEx
Trip Blank No
Method of Purging Dedicated bailer
Method of Sampling Purge 3 volumes or bail dry

Sample ID	Depth to Water (ft)	Total Depth (ft)	Vol to Purge (gal)*	Actual Vol Purged (gal)	Sample Time	Comments
MW-7	19.91	32.20	6.00	6.00	1215	Clear/no cloud/no odor

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

Comments
32.20 - 19.91 = 12.29 x .1631 = 2.00 x 3 = 6.00
Purged 3 well volumes & took sample at 1215

Signature: [signature] Date: 6/20/16

COMPLIANCE / ENGINEERING / REMEDIATION

LT Environmental, Inc.
2243 Main Avenue, Suite 3
Durango, Colorado 81301
T 970.385.1096 / F

Water Sample Collection Form

Project Name XTO Groundwater Monitoring
Project Number ~~12911007~~ 012911009

Site Name OH Randel #007
Sampler E. Skyles
Sample Date 12/14/16
Matrix Groundwater
Laboratory ESC
Shipping FedEx
Method of Purging Dedicated bailer
Method of Sampling Purge 3 volumes or bail dry

Analyses 8021 BTEX
Turn Around Time Standard
Trip Blank No

Sample ID	Depth to Water (ft)	Total Depth (ft)	Vol to Purge (gal)*	Actual Vol Purged (gal)	Sample Time	Comments
MW-3	17.86	20.17	—	—	NS	- Not Sampled
MW-4	16.95	20.91	—	—	NS	- not sampled
MW-5	23.19	27.78	—	—	NS	- not sampled.
MW-7	20.04	32.19	5.9	6.0	1428	Cloudy, light odor, no sheen
MW-8	23.54	32.57	—	—	NS	- not sampled
MW-9	28.42	37.35	—	—	NS	- not sampled

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

Comments

Signature: E. L Sk L Date: 12/27/16