March 02, 2014

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

RE: Online Submission of 2014 Annual Groundwater Reports

Dear Mr. Von Gonten

LT Environmental (LTE), Inc., on behalf of XTO Energy Inc. (XTO), is electronically submitting the attached 2014 annual groundwater monitoring reports covering the period from January 1, 2014 to December 31, 2014 for the following sites:

- 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,

CERTIFIED HAZARDOUS MATERIALS MANAGER
JAMES P. McDANIEL
15676
CHMM
EXPIRES MAY 16, 2016

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

cc: Attachments (5)

2014 ANNUAL GROUNDWATER REPORT

McCoy Gas Com D #1E

3RP-414

Unit E, Section 28, Township 30N, Range 12W
San Juan County, New Mexico

PREPARED FOR:

Mr. Glenn Von Gonten
New Mexico Oil Conservation Division
1220 South St. Francis Street
Santa Fe, New Mexico 87505
(505) 476-3488

January 2015

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Attachments

Attachment 1: Envirotech Inc. Site Assessment (1992)

Attachment 2: Blagg Engineering Inc. Field Report (2006)

Attachment 3: Completion Diagrams and Borehole Logs

Attachment 4: 2014 Laboratory Reports

Attachment 5: 2014 Field Notes

2014 XTO GROUNDWATER REPORT

McCOY GAS COM D #1E
3RP-414

SITE DETAILS

LEGALS – **TWN**: 30N	**RNG**: 12W	**SEC**: 28	**UNIT**: E
OCD HAZARD RANKING: 30		**LAND TYPE**: FEE	
LATITUDE: 36.78668		**LONGITUDE**: -108.10751	

INTRODUCTION

XTO Energy, Inc. (XTO) acquired the McCoy Gas Com D #1E natural gas production well from Amoco Production Company (Amoco) in January 1998. This is a gas producing well in the Dakota Sandstone and is currently active. There is a seasonal irrigation ditch directly south of the location that flows in the summer months while remaining dry in the winter months. A topographic map is presented as ***Figure 1***.

HISTORY

In February 2006, while removing a 95-barrel steel separator pit tank, XTO exposed impacted soil from a former earthen separator pit. Impact to soil by the former pit was originally assessed by Amoco with test holes in 1992 as detailed in an Envirotech, Inc. site assessment included as ***Attachment 1***. Impacted soil was excavated to a depth of approximately 23 feet and an estimated 750 cubic yards of impacted soil were removed. A Blagg Engineering, Inc. field report detailing the excavation is included with this report as ***Attachment 2***. The floor of the excavation was sampled and no groundwater was encountered. Monitoring well MW-1R was installed in September 2006 and sampled in October 2006. The completion diagrams and borehole logs are presented as ***Attachment 3***. Laboratory results for groundwater samples from monitoring well MW-1R revealed benzene, toluene, ethylbenzene, and total xylenes (BTEX) concentrations exceeded New Mexico Water Quality Control Commission (NMWQCC) standards.

The 2006 annual groundwater report was submitted to the New Mexico Oil Conservation Division (NMOCD) in February 2007, proposing the installation of two downgradient monitoring wells to further delineate impact to groundwater.

XTO installed monitoring wells MW-2 and MW-3 in May 2007. Completion diagrams and borehole logs are presented as ***Attachment 3***. Monitoring wells MW-1R, MW-2, and MW-3 were sampled in May 2007. Groundwater analytical results indicated elevated BTEX concentrations were present in monitoring well MW-1R (source area), but BTEX constituents were not detected above the laboratory detection limits in monitoring wells MW-2 and MW-3.

In a remediation work plan submitted to NMOCD on October 31, 2007, XTO proposed

installation of Oxygen Release Compound® (ORC) socks in monitoring well MW-1R. In November 2007, ORC socks that produce a controlled release of oxygen into the groundwater for up to 12 months were installed in monitoring well MW-1R across the vertical length of the water column.

From 2007 to 2009, XTO maintained ORC socks in monitoring well MW-1R. XTO sampled all monitoring wells regularly to monitor BTEX concentrations, verify dissolved oxygen concentrations in MW-1R, monitor for potential downgradient migration in MW-2 and MW-3, and assess groundwater flow behavior.

In January 2009, the NMOCD requested XTO sample monitoring well MW-1R while an NMOCD representative collected a duplicate sample. This was completed on January 21, 2009.

The 2010 annual groundwater report submitted to NMOCD in March 2011 recommended continued use of ORC socks in monitoring well MW-1R. Additionally, XTO proposed to conduct a specific capacity test on MW-1R during the irrigation season to determine a flow rate and assess remediation options for the groundwater.

The 2011 annual groundwater report was submitted in 2012 to the NMOCD indicating the specific capacity test was not conducted because XTO did not receive approval. XTO continued use of ORC socks and monitoring of BTEX concentrations in MW-1R as well as monitoring of groundwater elevations in all monitoring wells through 2012. Free-phase product was detected in MW-1R in March 2012 and the ORC socks were removed from the monitoring well.

Due to the presence of free-phase product in MW-1R, XTO installed oil-absorbent socks in the monitoring well to recover product. From February through June 2013, the oil-absorbent socks were monitored every other week. When greater than fifty percent saturation was observed, the oil-absorbent socks were wrung out and the recovered liquid was discarded in the pit tank on site. Due to decreased saturation of the oil-absorbent sock, XTO permanently removed the product recovery socks in September 2013. No free-phase product has been detected in the monitoring well since that time.

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

METHODOLOGY

In 2014, quarterly depth to groundwater data was collected at MW-1R, MW-2, and MW-3. Quarterly groundwater samples were collected from groundwater monitoring well MW-1R and submitted for laboratory analysis of BTEX using United States Environmental Protection Agency Method 8021B.

Water Level Measurements

Static groundwater level monitoring included measuring depth to groundwater with a Keck

oil/water interface probe. The interface probe was decontaminated with Alconox™ soap and rinsed with de-ionized water prior to each measurement.

Groundwater Sampling

Prior to sampling groundwater, depth to groundwater and total depth of the well was measured with a Keck oil/water interface probe. Presence of any free-phase product 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. The volume of water in the wells was calculated, and a minimum of three well casing volumes of water was purged from each well using a new disposable polyvinyl chloride (PVC) bailer or a dedicated PVC bailer or the well was purged dry. All purge water was disposed of into tanks on site.

Once the monitoring well was purged, groundwater samples were collected by filling at least two (2) 40-milliliter (ml) glass vials. The laboratory supplied vials were filled with sample water and capped with no air inside to prevent degradation of the sample. Samples were labeled with the date and time of collection, well designation, project name, collector's name, and parameters to be analyzed. They were immediately sealed, packed on ice, and shipped to Environmental Science Corporation (ESC) in Mount Juliet, Tennessee, for analysis. Proper chain-of-custody (COC) procedures were followed with logs documenting the date and time sampled, sample number, type of sample, sampler's name, preservative used, analyses required, and sampler's signature. Laboratory reports for the quarterly groundwater monitoring event are attached to this report as ***Attachment 4*** and copies of the field notes are included in ***Attachment 5***.

Groundwater Contour Maps

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

RESULTS

No measurable free-phase product was observed in groundwater monitoring wells MW-1R, MW-2, or MW-3 during 2014. Benzene concentrations in monitoring well MW-1R exceeded the NMWQCC standard during the first and second quarter. Total xylenes concentrations in monitoring well MW-1R exceeded the NMWQCC standards during all sampling events. Benzene concentrations ranged from a maximum of 100 micrograms per liter (µg/L) in March 2014 to a minimum of <9.5 µg/L in December 2014. Total xylenes concentrations ranged from a maximum of 8,800 µg/L in March 2014 to a minimum of 1,400 µg/L in September 2014. Ethylbenzene and toluene concentrations did not exceed the NMWQCC standards during any of the sampling events in 2014.

As documented in the past, groundwater elevations vary by as much as ten feet depending upon the presence or absence of water in the adjacent irrigation ditch. Groundwater flows

away from the irrigation ditch when it contains water and toward the irrigation ditch when it is dry. ***Figure 2 through Figure 5*** illustrate the groundwater potentiometric contours inferred for 2014 and the groundwater analytical results.

CONCLUSIONS

Laboratory analytical results indicated benzene concentrations in monitoring well MW-1R exceeded the NMWQCC standard during the first and second quarters. Total xylenes concentrations in monitoring well MW-1R exceeded the NMWQCC standards during all 2014 sampling events. The varying direction of groundwater flow and depth to groundwater at the site are caused by the presence or absence of water in the adjacent irrigation ditch.

RECOMMENDATIONS

XTO proposes continued quarterly sampling at monitoring well MW-1R until analytical results indicate hydrocarbon constituents are compliant with NMWQCC standards for four consecutive quarters. Depth to groundwater in monitoring wells MW-1R, MW-2, and MW-3 will be measured quarterly in 2015. Following NMOCD approval for closure, all monitoring well locations will be abandoned in accordance with the monitoring well abandonment plan.

TABLE 1
GROUNDWATER ELEVATIONS SUMMARY

TABLE 1

GROUNDWATER ELEVATIONS SUMMARY
MCCOY GAS COM D #1E
XTO ENERGY, INC.

Well ID	Date	Depth to Product (feet BTOC)	Depth to Groundwater (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
MW-1R	10/16/2006	NP	32.86	0.00	5502.27
MW-1R	5/16/2007	NP	30.69	0.00	5504.44
MW-1R	7/23/2007	NP	30.57	0.00	5504.56
MW-1R	9/27/2007	NP	32.01	0.00	5503.12
MW-1R	11/27/2007	NP	34.60	0.00	5500.53
MW-1R	5/13/2008	NP	31.97	0.00	5503.16
MW-1R	1/21/2009	NP	36.88	0.00	5498.25
MW-1R	5/26/2009	NP	30.68	0.00	5504.45
MW-1R	5/25/2010	NP	30.13	0.00	5505.00
MW-1R	8/12/2010	NP	30.87	0.00	5504.26
MW-1R	11/17/2010	NP	33.96	0.00	5501.17
MW-1R	2/14/2011	NP	37.27	0.00	5497.86
MW-1R *	5/17/2011	NP	29.31	0.00	5504.27
MW-1R	8/9/2011	NP	29.04	0.00	5504.54
MW-1R	11/9/2011	NP	31.51	0.00	5502.07
MW-1R **	3/8/2012	37.07	37.41	0.34	5496.44
MW-1R **	6/14/2012	28.29	28.39	0.10	5505.27
MW-1R	9/12/2012	NP	29.89	0.00	5503.69
MW-1R **	12/21/2012	34.19	34.22	0.03	5499.38
MW-1R	3/14/2013	NP	38.31	0.00	5495.27
MW-1R	6/17/2013	NP	28.05	0.00	5505.53
MW-1R	9/11/2013	NP	29.11	0.00	5504.47
MW-1R	12/16/2013	NP	34.61	0.00	5498.97
MW-1R	3/12/2014	NP	35.78	0.00	5497.80
MW-1R	6/11/2014	NP	28.05	0.00	5505.53
MW-1R	9/22/2014	NP	29.25	0.00	5504.33
MW-1R	12/9/2014	NP	34.61	0.00	5498.97
MW-2	5/17/2007	NP	30.56	0.00	5505.12
MW-2	7/23/2007	NP	31.98	0.00	5503.70
MW-2	9/27/2007	NP	32.44	0.00	5503.24
MW-2	11/27/2007	NP	35.29	0.00	5500.39
MW-2	5/13/2008	NP	31.98	0.00	5503.70
MW-2	5/26/2009	NP	36.46	0.00	5499.22
MW-2	5/25/2010	NP	29.88	0.00	5505.80
MW-2	8/12/2010	NP	31.30	0.00	5504.38
MW-2	11/17/2010	NP	34.61	0.00	5501.07
MW-2	2/14/2011	NP	Dry	Dry	Dry
MW-2	5/17/2011	NP	30.60	0.00	5505.08
MW-2	8/9/2011	NP	31.22	0.00	5504.46
MW-2	11/9/2011	NP	33.70	0.00	5501.98
MW-2	3/8/2012	NP	Dry	Dry	Dry
MW-2	6/14/2012	NP	29.66	0.00	5506.02
MW-2	9/12/2012	NP	31.77	0.00	5503.91
MW-2	12/21/2012	NP	36.44	0.00	5499.24
MW-2	3/14/2013	NP	Dry	Dry	Dry
MW-2	6/17/2013	NP	29.45	0.00	5506.23
MW-2	9/11/2013	NP	31.11	0.00	5504.57
MW-2	12/16/2013	OBS	OBS	OBS	OBS
MW-2	3/12/2014	OBS	OBS	OBS	OBS
MW-2	6/11/2014	NP	30.26	0.00	5505.42
MW-2	9/22/2014	NP	31.11	0.00	5504.57
MW-2	12/9/2014	NP	34.31	0.00	5501.37

TABLE 1

GROUNDWATER ELEVATIONS SUMMARY
MCCOY GAS COM D #1E
XTO ENERGY, INC.

Well ID	Date	Depth to Product (feet BTOC)	Depth to Groundwater (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet AMSL)
MW-3	5/17/2007	NP	21.55	0.00	5505.56
MW-3	7/23/2007	NP	30.65	0.00	5496.46
MW-3	9/27/2007	NP	24.02	0.00	5503.09
MW-3	11/27/2007	NP	28.94	0.00	5498.17
MW-3	5/12/2008	NP	22.55	0.00	5504.56
MW-3	5/26/2009	NP	21.37	0.00	5505.74
MW-3	5/25/2010	NP	20.99	0.00	5506.12
MW-3	8/12/2010	NP	23.03	0.00	5504.08
MW-3	11/17/2010	NP	26.85	0.00	5500.26
MW-3	2/14/2011	NP	Dry	Dry	Dry
MW-3	5/17/2011	NP	21.49	0.00	5505.62
MW-3	8/9/2011	NP	22.12	0.00	5504.99
MW-3	11/9/2011	NP	25.69	0.00	5501.42
MW-3	3/8/2012	NP	Dry	Dry	Dry
MW-3	6/14/2012	NP	20.97	0.00	5506.14
MW-3	9/12/2012	NP	23.31	0.00	5503.80
MW-3	12/21/2012	NP	30.61	0.00	5496.50
MW-3	3/14/2013	NP	Dry	Dry	Dry
MW-3	6/17/2013	NP	20.80	0.00	5506.31
MW-3	9/11/2013	NP	22.75	0.00	5504.36
MW-3	12/16/2013	NP	31.95	0.00	5495.16
MW-3	3/12/2014	NP	Dry	Dry	Dry
MW-3	6/11/2014	NP	20.93	0.00	5506.18
MW-3	9/22/2014	NP	22.62	0.00	5504.49
MW-3	12/9/2014	NP	29.24	0.00	5497.87

Notes:
AMSL - Above Mean Sea Level
BTOC - Below Top of Casing
NP - No Product
OBS - Obstruction in well
* - New Top of Casing Elevation; Casing Cut Off 1.55 Feet to Remove ORC Socks in May 2011.
** - Groundwater elevation calculation: (Top of Casing Elevaton - Depth to Water) + (Product Thickness * 0.8)

TABLE 2
GROUNDWATER ANALYTICAL RESULTS SUMMARY

TABLE 2

GROUNDWATER ANALYTICAL RESULTS SUMMARY
MCCOY GAS COM D #1E
XTO ENERGY, INC.

Well ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
NMWQCC Groundwater Standard		**10 µg/L**	**750 µg/L**	**750 µg/L**	**620 µg/L**
MW-1R	10/16/2006	**22**	**2,500**	**2,700**	**19,000**
MW-1R	5/16/2007	**30**	**760**	**1,700**	**24,000**
MW-1R	5/13/2008	<10	640	540	**11,000**
MW-1R	1/21/2009	<100	**1,200**	**1,100**	**12,000**
MW-1R	5/26/2009	<10	620	640	**11,000**
MW-1R	5/25/2010	**130**	160	430	**7,100**
MW-1R	8/12/2010	**120**	<120	260	**6,700**
MW-1R	11/17/2010	**360**	<2,500	**1,400**	**16,000**
MW-1R	2/14/2011	**16**	**1,000**	**870**	**13,000**
MW-1R	5/17/2011	**300**	290	**850**	**13,000**
MW-1R	8/9/2011	<5	53.6	19.3	**6,220**
MW-1R	11/9/2011	**11**	<50	<5	**1,600**
MW-1R	3/8/2012	NS	NS	NS	**NS**
MW-1R	6/14/2012	**120**	110	**750**	**5,000**
MW-1R	9/12/2012	**78**	<250	120	**4,600**
MW-1R	12/21/2012	<25	<250	280	**7,400**
MW-1R	3/21/2013	**98**	<250	<25.0	**7,100**
MW-1R	6/17/2013	**66**	<250	94	**4,500**
MW-1R	9/11/2013	**33**	<25	76	**840**
MW-1R	12/13/2013	**52**	<100	160	**2,000**
MW-1R	3/12/2014	**100**	<120	680	**8,800**
MW-1R	6/11/2014	**36**	<25	430	**4,100**
MW-1R	9/22/2014	2.7	<25	490	**1,400**
MW-1R	12/9/2014	<9.5	<250	840	**8,500**
MW-2	5/17/2007	<1.0	<1.0	<1.0	3.10
MW-2	5/13/2008	<1.0	<1.0	<1.0	<2.0
MW-2	5/25/2010	<1.0	<1.0	<1.0	<2.0
MW-3	5/17/2007	<1.0	<1.0	<1.0	<2.0
MW-3	5/12/2008	<1.0	<1.0	<1.0	<2.0
MW-3	5/25/2010	<1.0	<1.0	<1.0	<2.0

Notes:
BOLD indicates the result exceeds the NMWQCC Standard
NMWQCC - New Mexico Water Quality Control Commission
NS - Not Sampled
µg/L - micrograms per liter
< indicates result is less than the stated laboratory method detection limit

FIGURE 1
SITE LOCATION MAP

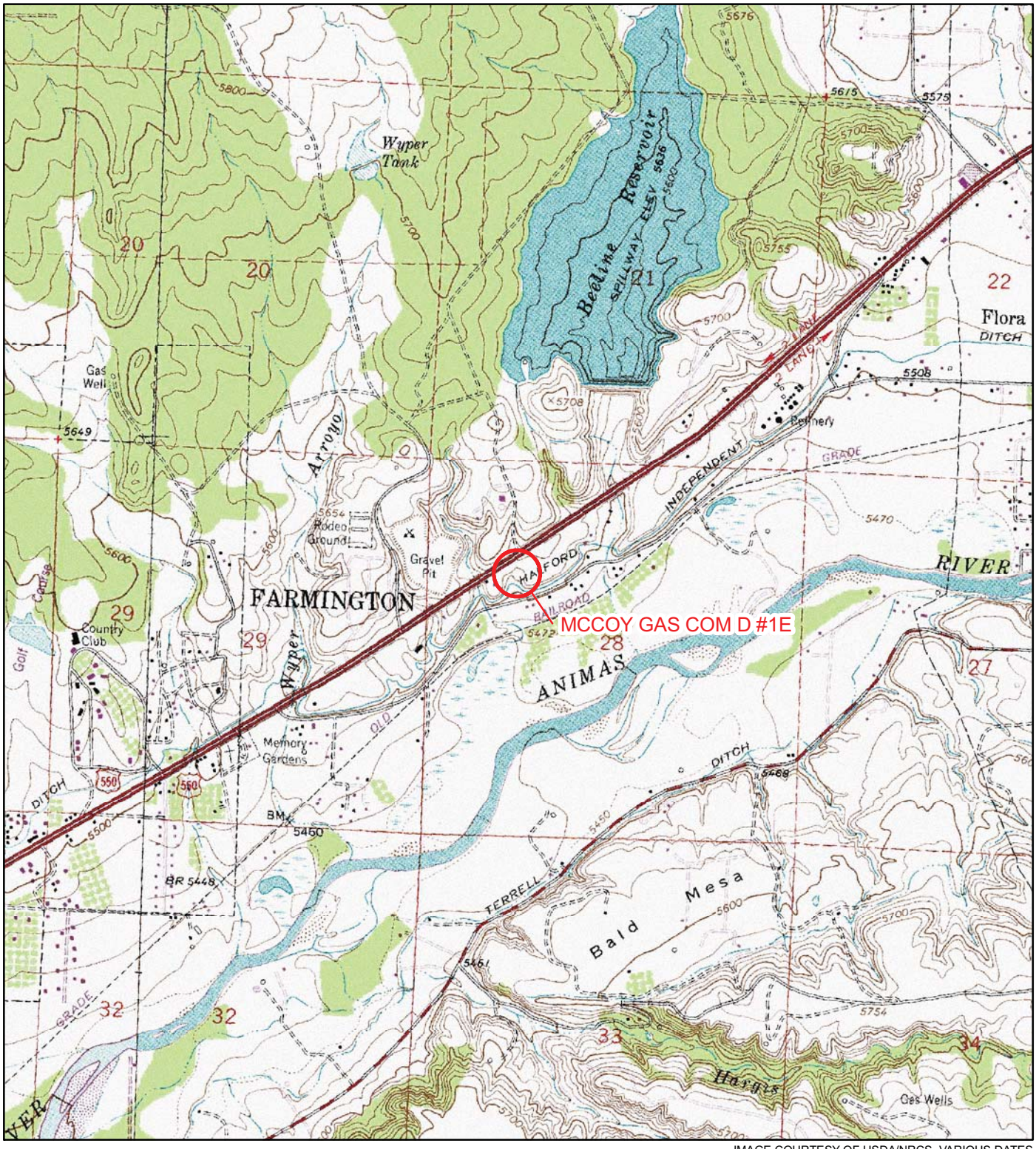

IMAGE COURTESY OF USDA/NRCS, VARIOUS DATES

LEGEND

SITE LOCATION

0 2,000 4,000

Feet

N

FIGURE 1
SITE LOCATION MAP
MCCOY GAS COM D #1E
SWNW SEC 28 T30N R12W
SAN JUAN COUNTY, NEW MEXICO

XTO ENERGY, INC.

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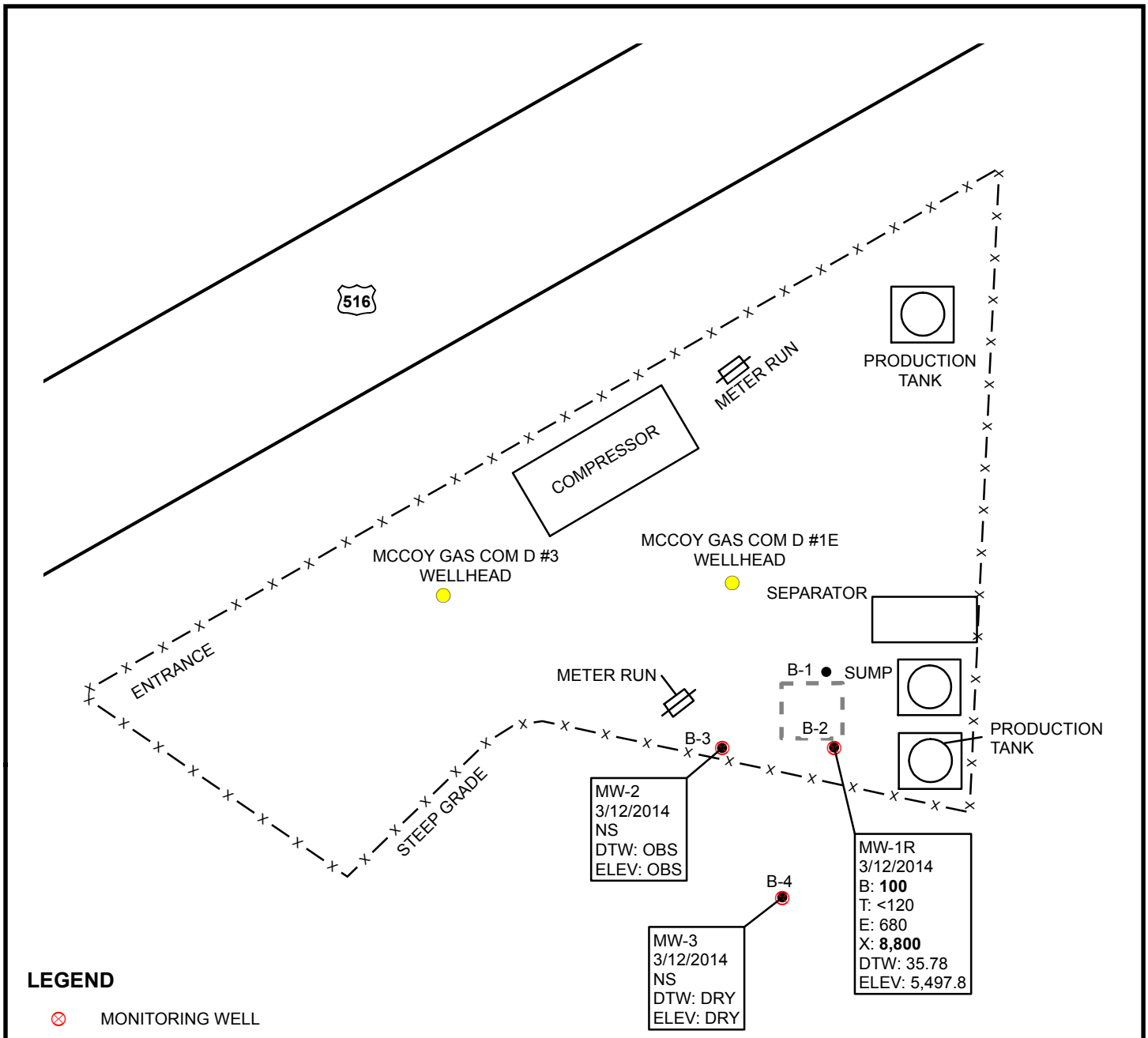
FIGURE 2
GROUNDWATER ELEVATION AND ANALYTICAL RESULTS (MARCH 2014)



LEGEND

- ⊗ MONITORING WELL
- ● BORING HOLE
- ○ WELLHEAD
- – – – FORMER PIT TANK
- x — x FENCE

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
OBS: OBSTRUCTION IN WELL
<: LESS THAN LABORATORY METHOD DETECTION LIMIT
BOLD INDICATES RESULT EXCEEDS THE NEW MEXICO WATER QUALITY CONTROL COMMISSION STANDARD

0 80 160
Feet

N

FIGURE 2
GROUNDWATER ELEVATION AND ANALYTICAL RESULTS (MARCH 2014)
MCCOY GAS COM D #1E
SWNW SEC 28 T30N R12W
SAN JUAN COUNTY, NEW MEXICO
XTO ENERGY, INC.

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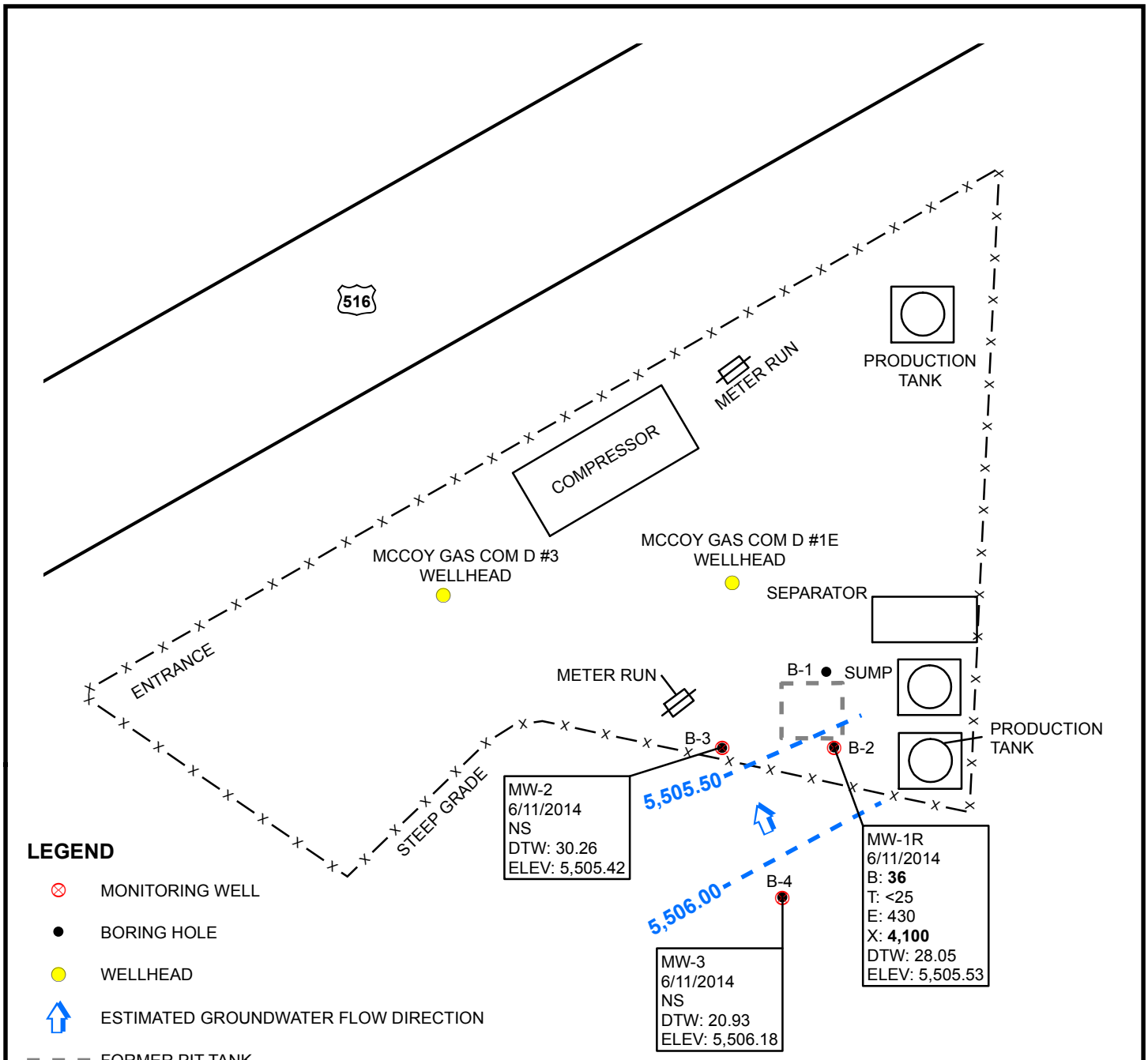
FIGURE 3
GROUNDWATER ELEVATION AND ANALYTICAL RESULTS (JUNE 2014)



LEGEND

- MONITORING WELL
- BORING HOLE
- WELLHEAD
- ESTIMATED GROUNDWATER FLOW DIRECTION
- FORMER PIT TANK
- FENCE
- INFERRED RELATIVE GROUNDWATER ELEVATION CONTOUR

CONTOUR INTERVAL = 0.5 FEET

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
OBS: OBSTRUCTION IN WELL
<: LESS THAN LABORATORY METHOD DETECTION LIMIT
BOLD INDICATES RESULT EXCEEDS THE NEW MEXICO WATER QUALITY CONTROL COMMISSION STANDARD

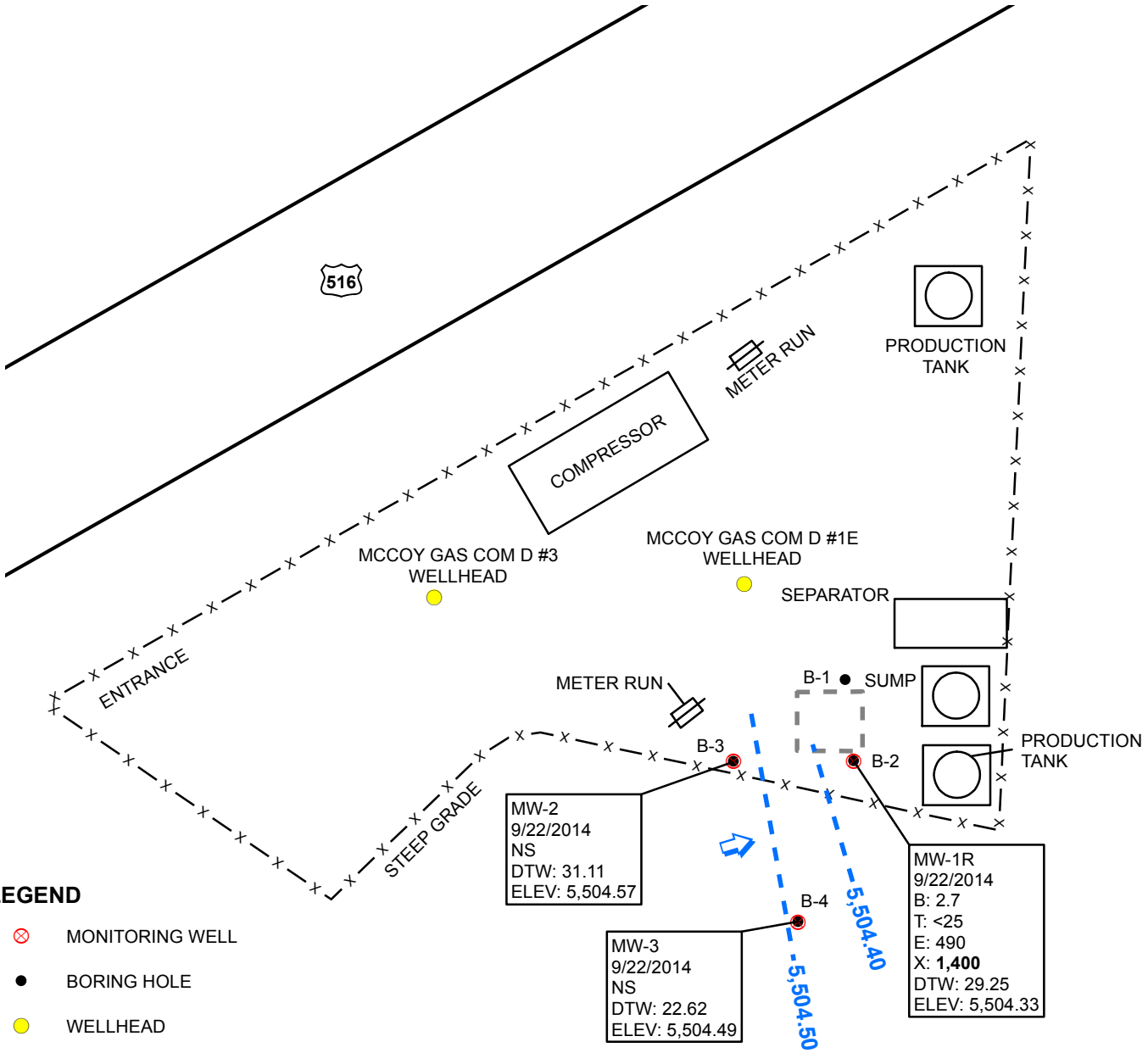
0 80 160
Feet

N

FIGURE 3
GROUNDWATER ELEVATION AND ANALYTICAL RESULTS (JUNE 2014)
MCCOY GAS COM D #1E
SWNW SEC 28 T30N R12W
SAN JUAN COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012911009\2014\012911009_003_MCCOY_FIG03_GWE_GWA_2014_Q2.mxd

FIGURE 4
GROUNDWATER ELEVATION AND ANALYTICAL RESULTS (SEPTEMBER 2014)



LEGEND

- MONITORING WELL
- BORING HOLE
- WELLHEAD
- ESTIMATED GROUNDWATER FLOW DIRECTION
- FORMER PIT TANK
- FENCE
- INFERRED RELATIVE GROUNDWATER ELEVATION CONTOUR

CONTOUR INTERVAL = 0.1 FEET

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
<: LESS THAN LABORATORY METHOD DETECTION LIMIT
BOLD INDICATES RESULT EXCEEDS THE NEW MEXICO WATER QUALITY CONTROL COMMISSION STANDARD

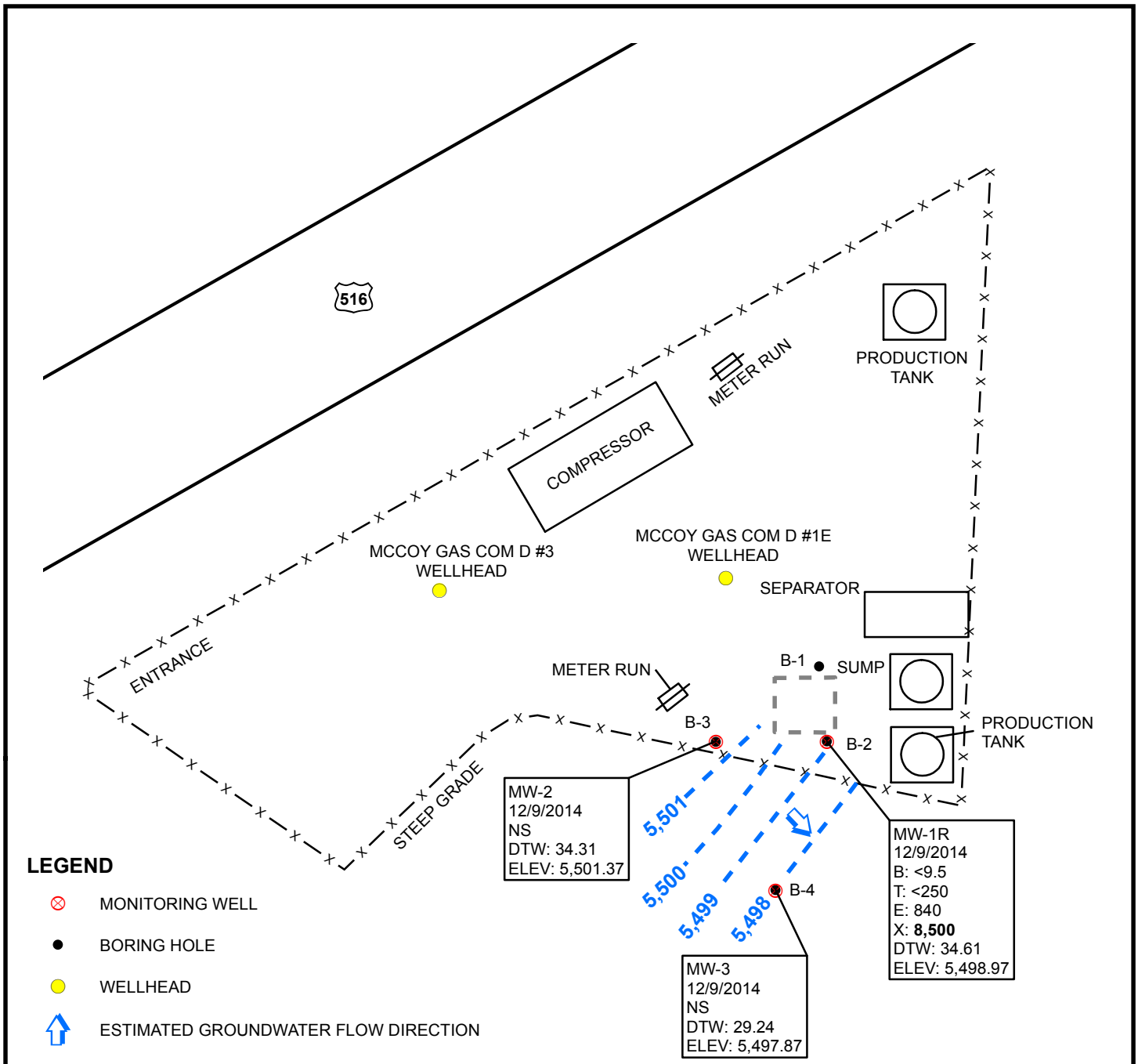
0 80 160
Feet

N

FIGURE 4
GROUNDWATER ELEVATION AND ANALYTICAL RESULTS (SEPTEMBER 2014)
MCCOY GAS COM D #001E
SWNW SEC 28 T30N R12W
SAN JUAN COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012911009\2014\012911009_003_MCCOY_FIG04_GWE_GWA_2014_Q3.mxd

FIGURE 5
GROUNDWATER ELEVATION AND ANALYTICAL RESULTS (DECEMBER 2014)



LEGEND

- MONITORING WELL
- BORING HOLE
- WELLHEAD
- ESTIMATED GROUNDWATER FLOW DIRECTION
- FORMER PIT TANK
- FENCE
- INFERRED RELATIVE GROUNDWATER ELEVATION CONTOUR

CONTOUR INTERVAL = 1 FEET

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
<: LESS THAN LABORATORY METHOD DETECTION LIMIT
BOLD INDICATES RESULT EXCEEDS THE NEW MEXICO WATER QUALITY CONTROL COMMISSION STANDARD

0 80 160
Feet

N

FIGURE 5
GROUNDWATER ELEVATION AND ANALYTICAL RESULTS (DECEMBER 2014)
MCCOY GAS COM D #1E
SWNW SEC 28 T30N R12W
SAN JUAN COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012911009\2014\012911009_003_MCCOY_FIG05_GWE_GWA_2014_Q4.mxd

ATTACHMENT 1
ENVIROTECH, INC. SITE ASSESSMENT (1992)

ENVIROTECH Inc.

5796 US HWY. 64, FARMINGTON, NM 87401
(505) 632-0615

94022

FIELD REPORT: SITE ASSESSMENT

JOB No: 92140
PAGE No: 1 of 1

PROJECT: PIT ASSESSMENTS & CLOSURE
CLIENT: AMOCO PRODUCTION COMPANY
CONTRACTOR: ENVIROTECH, INC.
EQUIPMENT USED: EXTENDAHOE

DATE STARTED: 4-24-92
DATE FINISHED: 4-24-92
ENVIRO. SPCLT: MKL
OPERATOR: MS
ASSISTANT: PV

LOCATION: LSE: McCOY G.C. WELL: "D" 1E QD: SW/4 NW/4 (E)
SEC: 28 TWP: 30N RNG: 12W PM: NM CNTY: SJ ST: NM PIT: SEP. PIT

LAND USE: RURAL RESIDENTIAL & COMMERCIAL (FLEA MARKET TO EAST)
SURFACE CONDITIONS: STEEL DOUBLE LINED TANK W/SAND (12'DIA X 5') BELOW GRADE

FIELD NOTES & REMARKS: LOCATED 70' SOUTH & 30' EAST OF WELL HEAD. SOIL CONDITIONS; BROWN SILTY SAND TO GRAVEL, MOIST, DENSE (POSSIBLE FILL). PIT LOCATED IN SOUTH EAST CORNER OF LOCATION ABOVE DRAINAGE TO SOUTH. APPEARS THAT WELL LOCATION HAS 20± FEET OF FILL. IRRIGATION DITCH UNLINED FLOWING WEST, 150' SOUTH OF LOCATION. TANK BEDDED IN PEA GRAVEL.

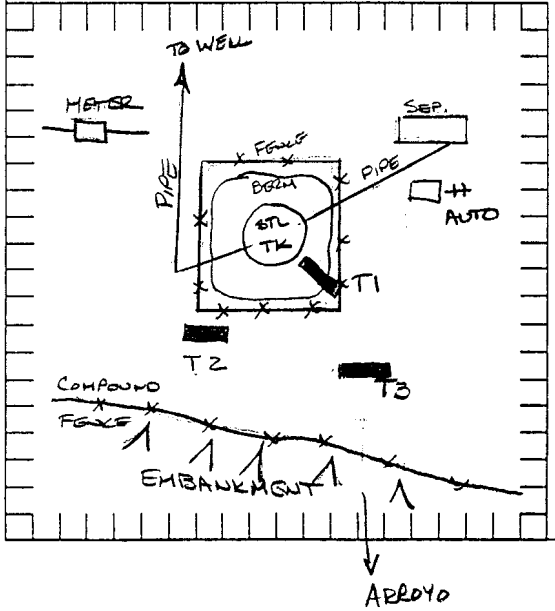
SAMPLE INVENTORY:

SMPL ID:	SMPL TYPE:	LABORATORY ANALYSIS:
T1@5'	SOIL	HEAD
T1@5'	SOIL	8020/TPH

SCALE
0 10 20 FEET

N

SITE DIAGRAM



TEST HOLE LOGS:

TH#: 1

SOIL TYPE:	SMPL TYPE:	OVM/TPH
GM/SM		
		2K.3
		188
TD - 9'		
GW - NR		

TH#: 2

SOIL TYPE:	SMPL TYPE:	OVM/TPH
GM/SM		
CALICHE LAYER		
		ND
		ND
TD - 12		
GW - NOT REACH		

TH#: 3

SOIL TYPE:	SMPL TYPE:	OVM/TPH
SM/SC		
BOTTOM OF FILL		
		ND
GM/SM		
		ND
TD - 14'		
GW - NR		

TH#:

SOIL TYPE:	SMPL TYPE:	OVM/TPH

SOIL TYPE: C - Clay, M - Silt, S - Sand, G - Gravel Plasticity: L - None, H - Plastic Grading: P - Poorly, W - Well

ATTACHMENT 2
BLAGG ENGINEERING, INC. FIELD REPORT (2006)

FLORA VISTA QUAD. VW 30045 24873 36.78677 / 108.10784

CLIENT: XTO	**BLAGG ENGINEERING, INC.** **P.O. BOX 87, BLOOMFIELD, NM 87413** **(505) 632-1199**	LOCATION NO: COCR NO: HALL

FIELD REPORT: PIT CLOSURE VERIFICATION

PAGE No: 1 of 1

LOCATION: NAME: McCoy GC D WELL #: 1E TYPE: SEP.
QUAD/UNIT: E SEC: 28 TWP: 30N RNG: 12W PM: NM CNTY: SJ ST: NM
QTR/FOOTAGE: 1600'N/1230'W SW/NW CONTRACTOR: HDI (HERB)

DATE STARTED: 2/17/06
DATE FINISHED:
ENVIRONMENTAL SPECIALIST: NV

EXCAVATION APPROX. 30 FT. x 30 FT. x 23 FT. DEEP. CUBIC YARDAGE: 750
DISPOSAL FACILITY: JFJ LF - CROUCH MESA REMEDIATION METHOD: LANDFARM
LAND USE: INDUSTRIAL LEASE: FEE FORMATION: DK

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 80 FT. S24E FROM WELLHEAD.
DEPTH TO GROUNDWATER: <100' NEAREST WATER SOURCE: >1,000' NEAREST SURFACE WATER: <200'
NMOCD RANKING SCORE: 30 NMOCD TPH CLOSURE STD: 100 PPM

OVM CALIB. READ. = 53.3 ppm
OVM CALIB. GAS = 100 ppm RF = 0.52
TIME: 3:20 am/pm DATE: 2/16/06

SOIL AND EXCAVATION DESCRIPTION: ELEV. - 5,524'

SOIL TYPE: SAND / SILTY SAND / SILT / SILTY CLAY / CLAY / GRAVEL / OTHER
SOIL COLOR: DK. YELL. ORANGE TO BLACK
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 - VARYING GRAY TO BLACK STARTING @ 1' BELOW GRADE
HC ODOR DETECTED: YES / NO EXPLANATION - DISCOLORED PORTION ONLY. AROUND TANK PERIMETER
SAMPLE TYPE: GRAB / COMPOSITE - # OF PTS.
ADDITIONAL COMMENTS: ORIGINAL PIT DIMENSION 17'x19' W/ STEEL TANK ~ 5' BELOW GRADE.

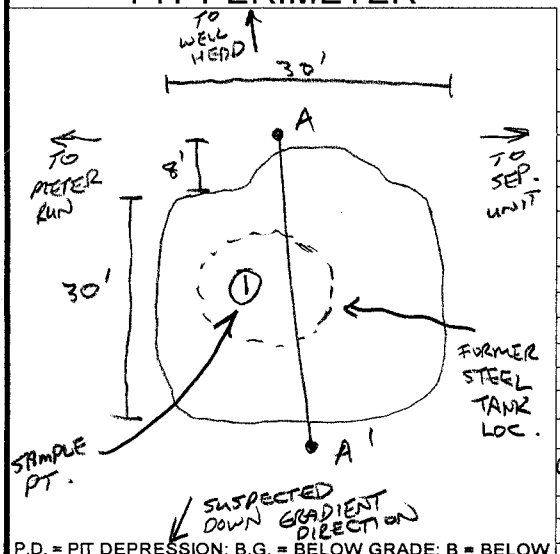
NEED TO ESTABLISH HORIZ. & VERT. EXTENT

FIELD 418.1 CALCULATIONS

SAMP. TIME	SAMP. ID	LAB NO.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. (ppm)

SCALE 0 FT

PIT PERIMETER



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

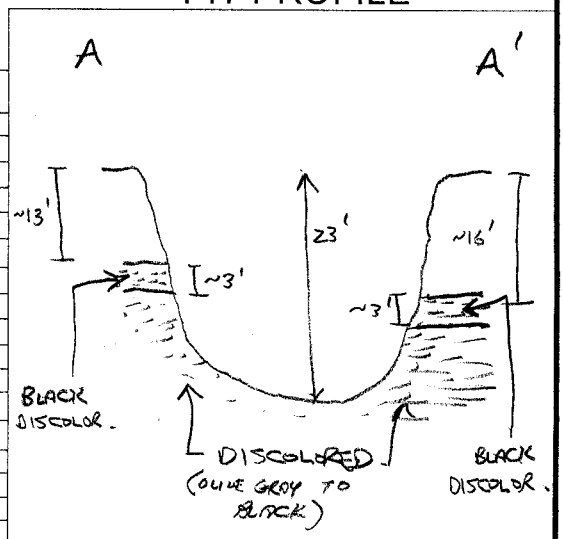
OVM READING

SAMPLE ID	FIELD HEADSPACE (ppm)
1 @ 23'	768
2 @	
3 @	
4 @	
5 @	

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME
① @ 23'	TPH (8015B)	1043
"	BTEX (8021B)	"
"	CHLORIDE	"

PIT PROFILE



TRAVEL NOTES: CALLOUT: 2/16/06 - MORN. ONSITE: 2/16/06 - NOON 2/17/06 - MORN. 9AM

revised: 09/04/02 bei1005C.skf

ATTACHMENT 3
COMPLETION DIAGRAMS AND BOREHOLE LOGS

MONITORING WELL INSTALLATION RECORD

Borehole # 2
Well # MW-1
Page 1 of 1

Lodestar Services, Inc
PO Box 3861
Farmington, New Mexico 87499
(505) 334-2791

Project Name XTO Ground Water
Project Number _____ Cost Code _____
Project Location McCoy Gas Com D 1E

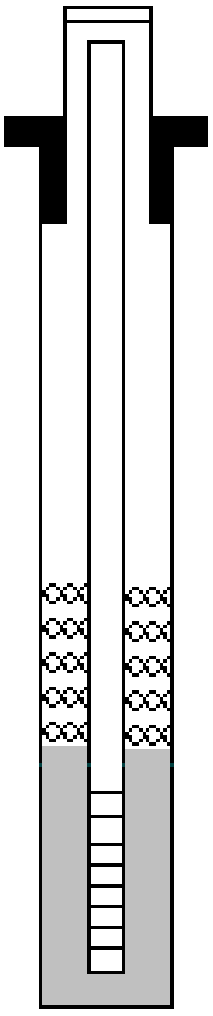
Elevation 5532
Well Location 36º 47.196' N, 108º 06.468' W
GWL Depth 34'
Installed By Envirotech

On-Site Geologist Ashley Ager
Personnel On-Site
Contractors On-Site Kelly Padilla and assistant
Client Personnel On-Site

Date/Time Started 09/21/06, 15:23
Date/Time Completed 09/22/06, 10:35

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
Top of Protective Casing		2.9
Bottom of Protective Casing		-0.9
Top of Permanent Borehole Casing	Sch. 40 PVC	2.8
Bottom of Permanent Borehole Casing		-40.40
Top of Concrete	Concrete	.25
Bottom of Concrete		-5.0
Top of Grout		-5.0
Bottom of Grout		-16.0
Top of Well Riser	Sch. 40 PVC	2.8
Bottom of Well Riser		-39.95
Top of Well Screen	Sch. 40 PVC	-19.9
Bottom of Well Screen		-39.9
Top of Peltonite Seal	Bentonite	-16.0
Bottom of Peltonite Seal		-18.0
Top of Gravel Pack	Sand	-18.0
Bottom of Gravel Pack		-39.95
Top of Natural Cave-In	Sand	-39.95
Bottom of Natural Cave-In		-40
Top of Groundwater		-34.0
Total Depth of Borehole		-40



Top of Protective Casing 2.9
Top of Riser 2.8
Ground Surface 0
Top of Seal -16
Top of Gravel Pack -18
Top of Screen -19.9
Bottom of Screen -39.9
Bottom of Borehole -40

Comments: 50 lb bags of sand used: 18 ea.

50 lb bags of bentontie used: 6 ea.

Geologist Signature *Ashley L. Ager*

C:\Documents and Settings\Owner\My Documents\Ashley\LodeStar\XTO\Ground Water Sampling\McCoy\MW-1 install\monitoring well install_McCoy_MW-1.doc

MONITORING WELL INSTALLATION RECORD

Borehole # 3
Well # MW-2
Page 1 of 1

Lodestar Services, Inc
PO Box 3861
Farmington, New Mexico 87499
(505) 334-2791

Project Name XTO Ground Water
Project Number _____ Cost Code _____
Project Location McCoy Gas Com D 1E

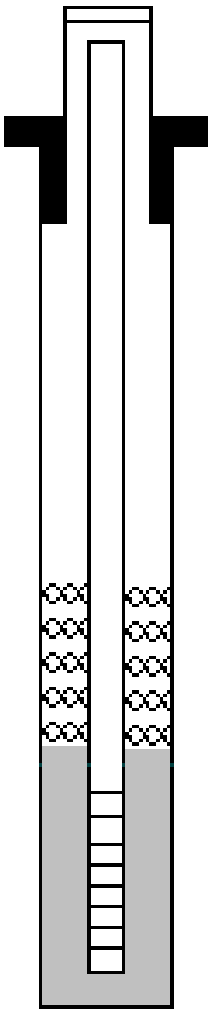
Elevation 5525
Well Location 36º 47.194' N, 108º 06.474' W
GWL Depth 32.5'
Installed By Enviro-Drill

On-Site Geologist Ashley Ager
Personnel On-Site
Contractors On-Site Shad Betts, Rodney Begay
Client Personnel On-Site

Date/Time Started 05/08/07, 12:27
Date/Time Completed 05/08/07, 13:55

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
Top of Protective Casing		3
Bottom of Protective Casing	steel	-2
Top of Permanent Borehole Casing		NA
Bottom of Permanent Borehole Casing		NA
Top of Concrete	quikcrete	0.2
Bottom of Concrete		-0.8
Top of Grout	quikcrete and quikgrout	-0.8
Bottom of Grout		-23
Top of Well Riser	Sch. 40 PVC	2.5
Bottom of Well Riser		-42.4
Top of Well Screen	Sch. 40 PVC	-27.2
Bottom of Well Screen		-42.2
Top of Peltonite Seal	3/8" Bentonite hole plug	-23
Bottom of Peltonite Seal		-25
Top of Gravel Pack	10-20 grade silica sand	-25
Bottom of Gravel Pack		-42.4
Top of Natural Cave-In	Sand and cobbles	-42.4
Bottom of Natural Cave-In		-45
Top of Groundwater		-32.5
Total Depth of Borehole		-42.4



Top of Protective Casing 3
Top of Riser 2.5
Ground Surface 0
Top of Seal -23
Top of Gravel Pack -25
Top of Screen -27.2
Bottom of Screen -42.2
Bottom of Borehole -42.4

Comments: PVC riser pulled out of hole 2'8" while pulling auger.
50 lb bags of sand used: 6 ea. , 50 lb bags of bentonite used: 1 ea., Grout: 1 bag bentonite, 1 bag quikcrete; concrete: 1 bag of quikcrete used

Geologist Signature *Ashley L. Ager*

MONITORING WELL INSTALLATION RECORD

Borehole # 4
Well # MW-3
Page 1 of 1

Lodestar Services, Inc
PO Box 3861
Farmington, New Mexico 87499
(505) 334-2791

Project Name XTO Ground Water
Project Number _____ Cost Code _____
Project Location McCoy Gas Com D 1E

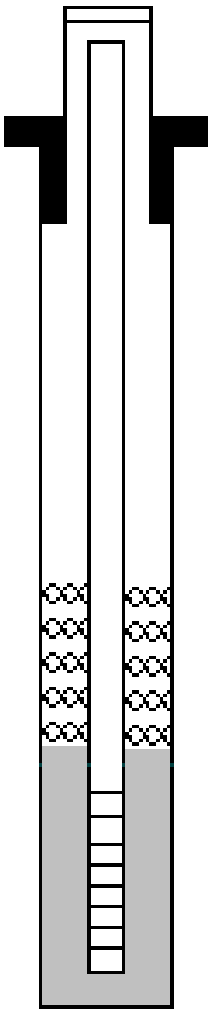
Elevation 5525
Well Location 36º 47.181' N, 108º 06.462' W
GWL Depth 24'
Installed By Enviro-Drill

On-Site Geologist Ashley Ager
Personnel On-Site
Contractors On-Site Shad Betts, Rodney Begay
Client Personnel On-Site

Date/Time Started 05/09/07, 1209
Date/Time Completed 05/09/07, 1740

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
Top of Protective Casing		2.5
Bottom of Protective Casing	steel	-2.5
Top of Permanent Borehole Casing		NA
Bottom of Permanent Borehole Casing		NA
Top of Concrete	quikcrete	0.2
Bottom of Concrete		-1
Top of Grout	quikcrete and quikgrout	-1
Bottom of Grout		-17
Top of Well Riser	Sch. 40 PVC	2.2
Bottom of Well Riser		-32
Top of Well Screen	Sch. 40 PVC	-21.8
Bottom of Well Screen		-31.8
Top of Peltonite Seal	3/8" Bentonite hole plug	-17
Bottom of Peltonite Seal		-19
Top of Gravel Pack	10-20 grade silica sand	-19
Bottom of Gravel Pack		-32
Top of Natural Cave-In		NA
Bottom of Natural Cave-In		NA
Top of Groundwater		-24
Total Depth of Borehole		-32



Top of Protective Casing 2.5
Top of Riser 2.2
Ground Surface 0
Top of Seal -17
Top of Gravel Pack -19
Top of Screen -21.8
Bottom of Screen -31.8
Bottom of Borehole -32

Comments: Hole caved in while installing bentonite plug. Had to auger out cave in mixed with bentonite to reform seal. 50 lb bags of sand used: 4.5 ea. , 50 lb bags of bentonite used: 2 ea., Grout: 2 bags bentonite, 2 bags quikcrete; concrete: 1 bag of quikcrete

Geologist Signature *Ashley L. Ager*

ATTACHMENT 4
2014 LABORATORY REPORTS

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

James McDaniel
XTO Energy - San Juan Division
382 County Road 3100
Aztec, NM 87410

Report Summary

Wednesday March 19, 2014

Report Number: L687840
Samples Received: 03/13/14
Client Project:

Description: McCoy Gas Com #1E

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Daphne R Richards

Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

ESC LAB SCIENCES
YOUR LAB OF CHOICE

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1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

James McDaniel
XTO Energy - San Juan Division
382 County Road 3100
Aztec, NM 87410

March 19, 2014

ESC Sample # : L687840-01

Date Received : March 13, 2014
Description : McCoy Gas Com #1E

Site ID :

Sample ID : FARDN-031214-1227

Project # :

Collected By : Daniel Newman
Collection Date : 03/12/14 12:27

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.10	0.012	mg/l	8021B	03/19/14	25
Toluene	BDL	0.12	mg/l	8021B	03/19/14	25
Ethylbenzene	0.68	0.012	mg/l	8021B	03/19/14	25
Total Xylene	8.8	0.038	mg/l	8021B	03/19/14	25
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021B	03/19/14	25

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

.
Reported: 03/19/14 16:35 Printed: 03/19/14 16:36

Summary of Remarks For Samples Printed
03/19/14 at 16:36:11

TSR Signing Reports: 288
R5 - Desired TAT

Domestic Water Well Sampling-see L609759 Lobato for tests EDD's on ALL projects email James, Kurt and Logan all reports

Sample: L687840-01 Account: XTORNM Received: 03/13/14 09:30 Due Date: 03/20/14 00:00 RPT Date: 03/19/14 16:35

ESC LAB SCIENCES
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Est. 1970

XTO Energy - San Juan Division
James McDaniel
382 County Road 3100

Aztec, NM 87410

Quality Assurance Report
Level II

L687840

March 19, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Benzene	< .0005	mg/l			WG711455	03/19/14 00:49
Ethylbenzene	< .0005	mg/l			WG711455	03/19/14 00:49
Toluene	< .005	mg/l			WG711455	03/19/14 00:49
Total Xylene	< .0015	mg/l			WG711455	03/19/14 00:49
a,a,a-Trifluorotoluene(PID)		% Rec.	104.0	55-122	WG711455	03/19/14 00:49

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Benzene	mg/l	.05	0.0515	103.	70-130	WG711455
Ethylbenzene	mg/l	.05	0.0500	100.	70-130	WG711455
Toluene	mg/l	.05	0.0513	103.	70-130	WG711455
Total Xylene	mg/l	.15	0.154	103.	70-130	WG711455
a,a,a-Trifluorotoluene(PID)				103.0	55-122	WG711455

Laboratory Control Sample Duplicate

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
Benzene	mg/l	0.0509	0.0515	102.	70-130	1.14	20	WG711455
Ethylbenzene	mg/l	0.0501	0.0500	100.	70-130	0.120	20	WG711455
Toluene	mg/l	0.0509	0.0513	102.	70-130	0.920	20	WG711455
Total Xylene	mg/l	0.155	0.154	103.	70-130	0.460	20	WG711455
a,a,a-Trifluorotoluene(PID)				103.0	55-122			WG711455

Matrix Spike

Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Benzene	mg/l	0.0565	0.00256	.05	110.	57.2-131	L688272-01	WG711455
Ethylbenzene	mg/l	0.0564	0.00380	.05	100.	67.5-135	L688272-01	WG711455
Toluene	mg/l	0.0730	0.0203	.05	100.	63.7-134	L688272-01	WG711455
Total Xylene	mg/l	0.201	0.0445	.15	100.	65.9-138	L688272-01	WG711455
a,a,a-Trifluorotoluene(PID)					104.0	55-122		WG711455

Matrix Spike Duplicate

Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Benzene	mg/l	0.0572	0.0565	109.	57.2-131	1.19	20	L688272-01	WG711455
Ethylbenzene	mg/l	0.0576	0.0564	108.	67.5-135	2.10	20	L688272-01	WG711455
Toluene	mg/l	0.0737	0.0730	107.	63.7-134	0.960	20	L688272-01	WG711455
Total Xylene	mg/l	0.205	0.201	107.	65.9-138	2.01	20	L688272-01	WG711455
a,a,a-Trifluorotoluene(PID)				104.0	55-122				WG711455

Batch number /Run number / Sample number cross reference

WG711455: R2895144: L687840-01

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

ESC LAB SCIENCES
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XTO Energy - San Juan Division
James McDaniel
382 County Road 3100

Aztec, NM 87410

Quality Assurance Report
Level II

L687840

March 19, 2014

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Logan Hixon
XTO Energy - San Juan Division
382 County Road 3100
Aztec, NM 87410

Report Summary

Wednesday June 18, 2014

Report Number: L704588
Samples Received: 06/13/14
Client Project: 30-045-24873

Description: McCoy Gas Com D 001E

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Daphne R Richards

Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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Est. 1970

REPORT OF ANALYSIS

Logan Hixon
XTO Energy - San Juan Division
382 County Road 3100
Aztec, NM 87410

June 18, 2014

ESC Sample # : L704588-01

Site ID :

Project # : 30-045-24873

Date Received : June 13, 2014
Description : McCoy Gas Com D 001E

Sample ID : FARBH-061114-1522

Collected By : BHS
Collection Date : 06/11/14 15:22

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.036	0.0025	mg/l	8021B	06/16/14	5
Toluene	BDL	0.025	mg/l	8021B	06/16/14	5
Ethylbenzene	0.43	0.0025	mg/l	8021B	06/16/14	5
Total Xylene	4.1	0.075	mg/l	8021B	06/17/14	50
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	96.5		% Rec.	8021B	06/16/14	5

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

.
Reported: 06/18/14 09:26 Printed: 06/18/14 09:26

Summary of Remarks For Samples Printed
06/18/14 at 09:26:31

TSR Signing Reports: 288
R5 - Desired TAT

Domestic Water Well Sampling-see L609759 Lobato for tests EDD's on ALL projects email James, Kurt and Logan all reports

Sample: L704588-01 Account: XTORNM Received: 06/13/14 09:00 Due Date: 06/20/14 00:00 RPT Date: 06/18/14 09:26

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XTO Energy - San Juan Division
Logan Hixon
382 County Road 3100

Aztec, NM 87410

Quality Assurance Report
Level II

L704588

June 18, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Benzene	< .0005	mg/l			WG726608	06/16/14 12:23
Ethylbenzene	< .0005	mg/l			WG726608	06/16/14 12:23
Toluene	< .005	mg/l			WG726608	06/16/14 12:23
a,a,a-Trifluorotoluene(PID)		% Rec.	96.70	55-122	WG726608	06/16/14 12:23
Total Xylene	< .0015	mg/l			WG726835	06/17/14 14:17
a,a,a-Trifluorotoluene(PID)		% Rec.	96.80	55-122	WG726835	06/17/14 14:17

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Benzene	mg/l	.05	0.0409	81.8	70-130	WG726608
Ethylbenzene	mg/l	.05	0.0425	85.0	70-130	WG726608
Toluene	mg/l	.05	0.0420	84.0	70-130	WG726608
a,a,a-Trifluorotoluene(PID)				95.80	55-122	WG726608
Total Xylene	mg/l	.15	0.139	92.9	70-130	WG726835
a,a,a-Trifluorotoluene(PID)				96.20	55-122	WG726835

Laboratory Control Sample Duplicate

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
Benzene	mg/l	0.0381	0.0409	76.0	70-130	7.13	20	WG726608
Ethylbenzene	mg/l	0.0397	0.0425	79.0	70-130	6.85	20	WG726608
Toluene	mg/l	0.0392	0.0420	78.0	70-130	6.80	20	WG726608
a,a,a-Trifluorotoluene(PID)				96.10	55-122			WG726608
Total Xylene	mg/l	0.138	0.139	92.0	70-130	1.11	20	WG726835
a,a,a-Trifluorotoluene(PID)				96.20	55-122			WG726835

Matrix Spike

Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Benzene	mg/l	0.0424	0.00125	.05	82.0	57.2-131	L704405-02	WG726608
Ethylbenzene	mg/l	0.0431	0.0000712	.05	86.0	67.5-135	L704405-02	WG726608
Toluene	mg/l	0.0423	0.000103	.05	84.0	63.7-134	L704405-02	WG726608
a,a,a-Trifluorotoluene(PID)					97.20	55-122		WG726608
Total Xylene	mg/l	0.137	0.000178	.15	91.0	65.9-138	L704907-07	WG726835
a,a,a-Trifluorotoluene(PID)					96.40	55-122		WG726835

Matrix Spike Duplicate

Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Benzene	mg/l	0.0400	0.0424	77.5	57.2-131	5.82	20	L704405-02	WG726608
Ethylbenzene	mg/l	0.0408	0.0431	81.4	67.5-135	5.44	20	L704405-02	WG726608
Toluene	mg/l	0.0399	0.0423	79.6	63.7-134	5.81	20	L704405-02	WG726608
a,a,a-Trifluorotoluene(PID)				97.30	55-122				WG726608
Total Xylene	mg/l	0.142	0.137	94.2	65.9-138	3.52	20	L704907-07	WG726835
a,a,a-Trifluorotoluene(PID)				96.30	55-122				WG726835

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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XTO Energy - San Juan Division
Logan Hixon
382 County Road 3100

Aztec, NM 87410

Quality Assurance Report
Level II

L704588

June 18, 2014

Batch number /Run number / Sample number cross reference

WG726608: R2942370: L704588-01
WG726835: R2943384: L704588-01

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
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Quality Assurance Report
Level II

L704588

June 18, 2014

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

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James McDaniel
XTO Energy - San Juan Division
382 County Road 3100
Aztec, NM 87410

Report Summary

Tuesday September 30, 2014

Report Number: L723212
Samples Received: 09/23/14
Client Project: 30-045-24873

Description: McCoy Gas Com D # 001E

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Daphne R Richards

Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

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REPORT OF ANALYSIS

James McDaniel
XTO Energy - San Juan Division
382 County Road 3100
Aztec, NM 87410

September 30, 2014

ESC Sample # : L723212-01

Site ID :

Project # : 30-045-24873

Date Received : September 23, 2014
Description : McCoy Gas Com D # 001E

Sample ID : FARAC-092214-1300

Collected By : Alex Crooks
Collection Date : 09/22/14 13:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.0027	0.0025	mg/l	8021B	09/30/14	5
Toluene	BDL	0.025	mg/l	8021B	09/30/14	5
Ethylbenzene	0.49	0.0025	mg/l	8021B	09/30/14	5
Total Xylene	1.4	0.0075	mg/l	8021B	09/30/14	5
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021B	09/30/14	5

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

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Reported: 09/30/14 15:40 Printed: 09/30/14 15:41

Summary of Remarks For Samples Printed
09/30/14 at 15:41:06

TSR Signing Reports: 288
R5 - Desired TAT

Domestic Water Well Sampling-see L609759 Lobato for tests EDD's on ALL projects email James, Kurt and Logan all reports

Sample: L723212-01 Account: XTORNM Received: 09/23/14 09:00 Due Date: 09/30/14 00:00 RPT Date: 09/30/14 15:40

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XTO Energy - San Juan Division
James McDaniel
382 County Road 3100

Aztec, NM 87410

Quality Assurance Report
Level II

L723212

September 30, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Benzene	< .0005	mg/l			WG745789	09/30/14 11:49
Ethylbenzene	< .0005	mg/l			WG745789	09/30/14 11:49
Toluene	< .005	mg/l			WG745789	09/30/14 11:49
Total Xylene	< .0015	mg/l			WG745789	09/30/14 11:49
a,a,a-Trifluorotoluene(PID)		% Rec.	102.0	55-122	WG745789	09/30/14 11:49

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Benzene	mg/l	.05	0.0469	93.8	70-130	WG745789
Ethylbenzene	mg/l	.05	0.0470	93.9	70-130	WG745789
Toluene	mg/l	.05	0.0468	93.5	70-130	WG745789
Total Xylene	mg/l	.15	0.143	95.1	70-130	WG745789
a,a,a-Trifluorotoluene(PID)				102.0	55-122	WG745789

Laboratory Control Sample Duplicate

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
Benzene	mg/l	0.0464	0.0469	93.0	70-130	1.06	20	WG745789
Ethylbenzene	mg/l	0.0465	0.0470	93.0	70-130	1.09	20	WG745789
Toluene	mg/l	0.0460	0.0468	92.0	70-130	1.66	20	WG745789
Total Xylene	mg/l	0.141	0.143	94.0	70-130	1.25	20	WG745789
a,a,a-Trifluorotoluene(PID)				102.0	55-122			WG745789

Matrix Spike

Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Benzene	mg/l	0.0452	0.0000582	.05	90.0	57.2-131	L723806-15	WG745789
Ethylbenzene	mg/l	0.0451	0.0000447	.05	90.0	67.5-135	L723806-15	WG745789
Toluene	mg/l	0.0445	0.0000827	.05	89.0	63.7-134	L723806-15	WG745789
Total Xylene	mg/l	0.137	0.000199	.15	91.0	65.9-138	L723806-15	WG745789
a,a,a-Trifluorotoluene(PID)					102.0	55-122		WG745789

Matrix Spike Duplicate

Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Benzene	mg/l	0.0468	0.0452	93.4	57.2-131	3.47	20	L723806-15	WG745789
Ethylbenzene	mg/l	0.0467	0.0451	93.4	67.5-135	3.53	20	L723806-15	WG745789
Toluene	mg/l	0.0461	0.0445	92.0	63.7-134	3.44	20	L723806-15	WG745789
Total Xylene	mg/l	0.141	0.137	94.1	65.9-138	3.27	20	L723806-15	WG745789
a,a,a-Trifluorotoluene(PID)				102.0	55-122				WG745789

Batch number /Run number / Sample number cross reference

WG745789: R2993949: L723212-01

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Quality Assurance Report
Level II

L723212

September 30, 2014

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

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James McDaniel
XTO Energy - San Juan Division
382 County Road 3100
Aztec, NM 87410

Report Summary

Wednesday December 24, 2014

Report Number: L738068
Samples Received: 12/10/14
Client Project: 30-045-24873

Description: McCoy Gas Com D#0001E

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Daphne R Richards

Daphne Richards , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

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REPORT OF ANALYSIS

James McDaniel
XTO Energy - San Juan Division
382 County Road 3100
Aztec, NM 87410

December 24, 2014

ESC Sample # : L738068-01

Site ID :

Project # : 30-045-24873

Date Received : December 10, 2014
Description : McCoy Gas Com D#0001E

Sample ID : FARDN-120914-1345 MW-1R

Collected By : Daniel Newman
Collection Date : 12/09/14 13:45

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.0095	mg/l	8021B	12/17/14	50
Toluene	BDL	0.25	mg/l	8021B	12/17/14	50
Ethylbenzene	0.84	0.025	mg/l	8021B	12/17/14	50
Total Xylene	8.5	0.075	mg/l	8021B	12/17/14	50
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	99.4		% Rec.	8021B	12/17/14	50

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

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Reported: 12/17/14 13:34 Revised: 12/24/14 08:59

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L738068-01	WG759561	SAMP	Benzene	R3010441	U

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
U	BDL (EPA) - Below Detectable Limits: Indicates that the compound was analyzed but not detected.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

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XTO Energy - San Juan Division
James McDaniel
382 County Road 3100

Aztec, NM 87410

Quality Assurance Report
Level II

L738068

December 24, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Benzene	< .0005	mg/l			WG759561	12/17/14 10:57
Ethylbenzene	< .0005	mg/l			WG759561	12/17/14 10:57
Toluene	< .005	mg/l			WG759561	12/17/14 10:57
Total Xylene	< .0015	mg/l			WG759561	12/17/14 10:57
a,a,a-Trifluorotoluene(PID)		% Rec.	100.0	55-122	WG759561	12/17/14 10:57

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Benzene	mg/l	.05	0.0424	84.8	70-130	WG759561
Ethylbenzene	mg/l	.05	0.0422	84.5	70-130	WG759561
Toluene	mg/l	.05	0.0404	80.8	70-130	WG759561
Total Xylene	mg/l	.15	0.128	85.6	70-130	WG759561
a,a,a-Trifluorotoluene(PID)				100.0	55-122	WG759561

Laboratory Control Sample Duplicate

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
Benzene	mg/l	0.0418	0.0424	84.0	70-130	1.42	20	WG759561
Ethylbenzene	mg/l	0.0403	0.0422	80.0	70-130	4.75	20	WG759561
Toluene	mg/l	0.0385	0.0404	77.0	70-130	4.98	20	WG759561
Total Xylene	mg/l	0.122	0.128	81.0	70-130	5.23	20	WG759561
a,a,a-Trifluorotoluene(PID)				98.70	55-122			WG759561

Matrix Spike

Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Benzene	mg/l	0.0383	0.0	.05	77.0	57.2-131	L738383-02	WG759561
Ethylbenzene	mg/l	0.0377	0.0	.05	75.0	67.5-135	L738383-02	WG759561
Toluene	mg/l	0.0360	0.0	.05	72.0	63.7-134	L738383-02	WG759561
Total Xylene	mg/l	0.113	0.000107	.15	76.0	65.9-138	L738383-02	WG759561
a,a,a-Trifluorotoluene(PID)					98.40	55-122		WG759561

Matrix Spike Duplicate

Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Benzene	mg/l	0.0439	0.0383	87.7	57.2-131	13.6	20	L738383-02	WG759561
Ethylbenzene	mg/l	0.0424	0.0377	84.8	67.5-135	11.7	20	L738383-02	WG759561
Toluene	mg/l	0.0405	0.0360	81.0	63.7-134	11.7	20	L738383-02	WG759561
Total Xylene	mg/l	0.127	0.113	84.8	65.9-138	11.6	20	L738383-02	WG759561
a,a,a-Trifluorotoluene(PID)				99.20	55-122				WG759561

Batch number /Run number / Sample number cross reference

WG759561: R3010441: L738068-01

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Est. 1970

XTO Energy - San Juan Division
James McDaniel
382 County Road 3100

Aztec, NM 87410

Quality Assurance Report
Level II

L738068

December 24, 2014

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

ATTACHMENT 5
2014 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 12911007

Site Name McCoy Gas Com #1E
Sampler Daniel Neuman
Sample Date 3/12/14
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-7DN~~						DN
MW-1R	35.78	38.81	1.5	1.75	1227	@ 1227
MW-2						OBSTRUCTED
MW-3	DRY					DRY @ 32.62

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

Comments
No product on water @ MW-1R
so did not put a PR sock in well

Signature: [signature] Date: 3/12/14

COMPLIANCE / ENGINEERING / REMEDIATION

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

Water Level Data Collection Form

Project Name: XTO Groundwater Sampling
Site Name: McCoy GCD #1E
Project Number: 12911009
Date: 6/11/14
Employee Name: ~~Alex Connors BH~~ Brooke Herb

Well ID	Depth to Product (ft)	Depth to Water (ft)	Dissolved Oxygen (mg/L)	Comments
MW-1R	NA	28.05	NA	See Sample Collection Form
MW-2	↓	30.24	↓	
MW-3	↓	20.93	↓	

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 12911009

Site Name McCoy
Sampler Brooke Herb
Sample Date 6/11/14
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 10.710 X .16 = 1.72 X 3 = 5.16

Sample ID	Depth to Water (ft)	Total Depth (ft)	Vol to Purge (gal)*	Actual Vol Purged (gal)	Sample Time	Comments
MW-1R	28.05	38.81	5.16	5.25	15:20	Black, strong HC odor debris

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

Comments
No Socks in well

Signature: [signature] Date: 6/11/14

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

Site Name McCoy GC D #1E
Sampler AC
Sample Date 9/22/14
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 AC (gal)	Sample Time	Comments
MW-1R	29.25	38.81	4.68	4.75	1300	Gray/Slight cloud/color
MW-2	31.11					
MW-3	22.62					

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

Comments
38.81 - 29.25 = 9.56 x .1631 = 1.55 x 3 = 4.68
Sampled @ 1300

Signature: Allen Crooke Date: 9/22/14

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

Site Name McCoy Gas Com D #001E (30-045-24873)
Sampler Daniel Neuman
Sample Date 12/9/14
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)	Dissolved Oxygen (mg/L)	Sample Time	Comments
MW1R	34.61	38.81	2.05	2.25	-	1315	Black, HC odor
MW-2	34.31	-	-	-	-	-	- OBStructed @ 34.31
MW-3	29.24	-	-	-	-	-	-

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

12/9/14

Comments
38.81 - 34.61 = 4.2 x 0.1631 = 0.68502 x 3 = 2.05
- = N/A
MW-2 obstructed by old/stuck Bailer @ 34.31
Fill 3 HCL VOAs
Decon Interface Probe between wells

Signature: _____ Date: 12/9/14