3R - 110

2011 AGWMR

02 / 01 / 2012

February 1, 2012

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

RE: Federal Gas Com H #1 – 2011 Annual Groundwater Report
Case File No. – 3RP-110

Mr. Von Gonten,

Please find attached the ***2011 Annual Groundwater Report*** for the Federal Gas Com H #1 well site, located in Unit C, Section 31, Township 30N, Range 12W, San Juan County, New Mexico. If you have any questions or comments, please feel free to contact me at your convenience.

Sincerely,

James McDaniel
EH&S Supervisor, CHMM #15676
XTO Energy, Inc.
(505) 333-3701

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

CC: Brandon Powell, OCD Aztec Division

2011 ANNUAL GROUNDWATER REPORT

FEDERAL GAS COM H #1

3RP-110

Unit C, Section 31, Township 30N, Range 12W
San Juan County, New Mexico

PREPARED FOR:

MR. GLENN VON GONTEN
NEW MEXICO OIL CONSERVATION DIVISION
1220 SOUTH ST FRANCIS DRIVE
SANTA FE, NEW MEXICO 87505
(505) 476-3488

January 2012

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2011 XTO GROUNDWATER REPORT

FEDERAL GAS COM H #1
3RP-110

SITE DETAILS

LEGALS - TWN: 30N **RNG:** 12W **SEC:** 31 **UNIT:** C
OCD HAZARD RANKING: 30 **LAND TYPE:** FEE
LATITUDE: 36.77306 **LONGITUDE:** 108.14085

INTRODUCTION

XTO Energy Inc. (XTO) acquired the Federal Gas Com H #1 well site from Amoco Production Company (Amoco) in January 1998. This is a gas producing well in the Dakota Sandstone and is currently active. A topographic map detailing the well site location is attached as ***Figure 1***.

HISTORY

In November 1999 XTO responded to a release of a produced water/condensate mixture of approximately 69 barrels. The clean up involved excavating and disposing of 304 cubic yards of impacted soil and sampling the perimeter of the excavation. A copy of the spill cleanup report, completed by Blagg Engineering, Inc in 2000, detailing cleanup activities is attached to this report as ***Attachment 1***. In reviewing the field and analytical data at the time it appeared that vertical extent had been established and lateral extent of the impact met closure standards with the exception of the source area. Vertical vent piping was installed in January 2000 in an effort to passively remediate the remaining impacted soil.

In March 2005, while upgrading equipment on location, XTO discovered what was believed to be a historical earthen blow pit. Approximately 300 cubic yards of impacted soil was excavated and disposed of off site. This excavation overlapped part of the previous excavation from 1999. Groundwater was encountered during the second excavation and monitoring wells were installed in each of the source areas, but were not sampled at the time of installation. Completion Diagram and Borehole Logs documenting drilling that occurred in 2005 are presented in ***Figure 3-4***.

In April 2006 a third monitoring well (MW-3) was installed cross gradient of the source area. Completion Diagram and Borehole Log for monitoring well MW-3 is presented in ***Figure 5***. In June 2010, MW-3 was plugged and abandoned. In January 2011, MW-3R was installed near the location of MW-3. A Completion Diagram and Borehole Log was not completed for MW-3R since it's completion was the same as MW-3.

The 2006 annual groundwater report was submitted to the New Mexico Oil Conservation Division (OCD) in February 2007 proposing removal of passive remediation system (wind turbines) and quarterly sampling of monitoring wells in accordance with the OCD approved Groundwater Management Plan.

The 2007 annual groundwater report was submitted to the OCD in February 2008 proposing semi-annual sampling of monitoring wells MW-1 and MW-2 until analytical results show hydrocarbon constituents below New Mexico Water Quality Control Commission (WQCC) groundwater standards.

2011 XTO GROUNDWATER REPORT

The 2008 annual groundwater report was submitted to the OCD in April 2009 proposing installation of an additional monitoring well, quarterly sampling of monitoring wells MW-1 and MW-2, annual sampling of monitoring well MW-3 and possible addition of an oxygenate in monitoring wells MW-1 and MW-2.

The 2009 Annual Groundwater Report was submitted to Mr. Glenn Von Gonten in March of 2010, recommending quarterly groundwater sampling of monitoring wells MW-1 and MW-2 until four (4) consecutive quarters of analytical results show BTEX to be below the WQCC standards.

The 2010 annual groundwater report, submitted to Mr. Glenn Von Gonten in March of 2011, recommended XTO continue quarterly sampling at monitoring wells MW-1 and MW-2 until analytical results show hydrocarbon constituents are below New Mexico groundwater standards along with annual sampling of MW-3R to confirm migration has not occurred.

XTO also proposed the addition of a hydrogen peroxide slug into the aquifer using monitoring wells MW-1 and MW-2 as a conduit, indicating the hydrogen peroxide will enhance the bioremediation already naturally occurring in this groundwater aquifer. In June 2010, the Vertical vent piping installed in January 2000 was removed.

A summary of water levels and laboratory results from historical and current groundwater monitoring is presented as ***Table 1*** and ***Table 2***. Laboratory reports for quarterly groundwater monitoring are attached to this report in ***Attachment 2***.

METHODOLOGY

In 2011, quarterly groundwater sampling was conducted at MW-1 and MW-2 and MW-3R was installed to replace MW-3. Quarterly groundwater samples were collected from monitoring wells MW-1 and MW-2 and submitted for laboratory analysis of benzene, toluene, ethyl benzene and total xylene (BTEX) in 2011.

Water Level Measurements

Static groundwater level monitoring includes recording depth to groundwater measurements with a Keck oil/water interface probe. The interface probe is decontaminated with Alconox™ soap and rinsed with de-ionized water prior to each measurement. This data are recorded in ***Table 1***.

Groundwater Sampling

Prior to sampling groundwater, depth to groundwater and total depth of wells is measured with a Keck oil/water interface probe. Presence of any free-phase crude oil is also investigated using the interface probe. The interface probe is decontaminated with Alconox™ soap and rinsed with de-ionized water prior to each measurement. The volume of water in the wells is calculated, and a minimum of three casing volumes of water is purged from each well using a disposable bailer or a permanent decontaminated PVC bailer. As water is extracted, pH, electric conductivity and temperature are monitored. Wells are purged until these properties stabilize, indicating that the purge water is representative of aquifer conditions. Stabilization is defined as three consecutive stable readings for each water property (±0.4 units for pH, ±10 percent for electric conductivity and ±2° C for temperature). All purge water is disposed of into tanks on site. A copy of

field sheets submitted to XTO Energy, Inc. during the 2011 monitoring are submitted in ***Attachment 3***.

Once each monitoring well is properly purged, groundwater samples are collected by filling at least two 40-milliliter (ml) glass vials. The pre-cleaned non-preserved vials are filled and capped with no air inside to prevent degradation of the sample. Samples are labeled with the date and time of collection, well designation, project name, collector's name and parameters to be analyzed. They are immediately sealed and packed on ice. The samples are shipped to Environmental Science Corporation (ESC) based out of Mt. Juliet, Tennessee for analysis. Samples are shipped in a sealed cooler via Fed Ex overnight. Proper chain-of-custody (COC) procedures are 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.

Groundwater Contour Maps
Top of casing well elevations were surveyed using a surveyor's level; and groundwater elevations obtained from monitoring wells during site visits were used to draft groundwater contour maps. Contours were inferred based on groundwater elevations obtained and observation of physical characteristics at the site (topography, proximity to irrigation ditches, etc.).

RESULTS

Benzene concentrations in MW-1 exceeded WQCC standards, but decreased during 2011 from a maximum of 33 parts per billion (ppb) in January to a minimum of 17 ppb during November. Total xylenes concentrations in MW-1 varied during the year, with a maximum concentration of 700 ppb during April to a minimum of 390 ppb during November. Toluene and ethylbenzene concentrations in MW-1 remain below the WQCC levels. Benzene concentrations in MW-2 varied from a maximum of 30 ppb during January to a low of 4 ppb during August. Toluene, ethylbenzene, and total xylenes concentrations in MW-2 remain below the WQCC levels. MW-3R was inadvertently left off of the sampling schedule in 2011; this well will be sampled annually in 2012 to confirm the plume has not migrated.

Field data collected during site monitoring activities in the first and second quarter indicate that the groundwater gradient trends toward the southeast. ***Figure 2*** contains the groundwater gradient maps for 2011.

CONCLUSIONS

Laboratory analysis indicates a downward trend in the benzene and total xylenes concentrations in monitoring well MW-1. Benzene concentrations in MW-2 are stable. The data indicate that the hydrocarbons in the source areas are degrading, and installation of a downgradient monitoring well to the south/southwest of monitoring well MW-2 is not needed.

RECOMMENDATIONS

XTO proposed continued quarterly sampling at monitoring wells MW-1 and MW-2 until analytical results show hydrocarbon constituents are below WQCC standards. XTO also proposes annual sampling of MW-3R to confirm the plume has not migrated.

Following OCD approval for closure, all monitoring well locations will be abandoned in accordance with the monitoring well abandonment plan.

Table 1

Water Level Summary Table

TABLE 1

GROUNDWATER LEVEL SUMMARY
FEDERAL GAS COM H #1
XTO ENERGY, INC.

Well ID	Date	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet AMSL)
MW-1	3/29/2007	31.34	5504.48
MW-1	7/23/2007	31.55	5504.27
MW-1	10/11/2007	31.09	5504.73
MW-1	1/8/2008	31.26	5504.56
MW-1	7/1/2008	31.40	5504.42
MW-1	1/20/2009	31.29	5504.53
MW-1	7/8/2009	31.58	5504.24
MW-1	10/20/2009	31.31	5504.51
MW-1	1/12/2010	31.29	5504.53
MW-1	4/7/2010	31.03	5504.79
MW-1	7/20/2010	31.11	5504.71
MW-1	10/7/2010	30.51	5505.31
MW-1	1/18/2011	30.56	5505.26
MW-1	4/12/2011	30.83	5504.99
MW-1	8/9/2011	30.92	5504.90
MW-1	11/9/2011	30.46	5505.36
MW-2	3/29/2007	33.05	5501.91
MW-2	7/23/2007	33.24	5501.72
MW-2	10/11/2007	32.87	5502.09
MW-2	1/8/2008	32.98	5501.98
MW-2	7/1/2008	33.08	5501.88
MW-2	1/20/2009	35.34	5499.62
MW-2	7/8/2009	33.23	5501.73
MW-2	10/20/2009	32.94	5502.02
MW-2	1/12/2010	32.94	5502.02
MW-2	4/7/2010	32.71	5502.25
MW-2	7/20/2010	32.80	5502.16
MW-2	10/7/2010	32.30	5502.66
MW-2	1/18/2011	32.33	5502.63
MW-2	4/12/2011	32.55	5502.41
MW-2	8/9/2011	32.70	5502.26

TABLE 1

GROUNDWATER LEVEL SUMMARY
FEDERAL GAS COM H #1
XTO ENERGY, INC.

Well ID	Date	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet AMSL)
MW-2	11/9/2011	32.28	5502.68
MW-3	12/6/2006	34.76	5504.79
MW-3	3/29/2007	34.85	5504.70
MW-3	7/23/2007	35.00	5504.55
MW-3	10/11/2007	34.55	5505.00
MW-3	1/8/2008	31.74	5507.81
MW-3	7/1/2008	34.86	5504.69
MW-3	1/20/2009	34.75	5504.80
MW-3	7/8/2009	35.01	5504.54
MW-3	10/20/2009	34.68	5504.87
MW-3	1/12/2010	34.71	5504.84
MW-3	4/7/2010	34.53	5505.02
MW-3R	1/18/2011	34.69	5501.91
MW-3R	4/12/2011	34.91	5501.69
MW-3R	8/9/2011	35.01	5501.59
MW-3R	11/9/2011	34.59	5502.01

Notes:
BTOC - below top of casing
AMSL - above mean sea level

Table 2

Groundwater Results Summary Table

TABLE 2

GROUNDWATER ANALYTICAL RESULTS
FEDERAL GAS COM H #1 SITE
XTO ENERGY, INC.

Well ID	Date	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)
NMWQCC Groundwater Standard		**10 ug/l**	**750 ug/l**	**750 ug/l**	**620 ug/l**
MW-1	3/29/2007	**39**	ND	560	**2,300**
MW-1	7/23/2007	**32**	ND	610	**2,300**
MW-1	10/11/2007	**50**	18	440	**1,500**
MW-1	1/8/2008	**47**	7.1	730	**3,000**
MW-1	7/1/2008	**18**	9.6	350	**980**
MW-1	1/20/2009	**30**	22	370	**910**
MW-1	7/8/2009	**16**	ND	280	**530**
MW-1	10/20/2009	**33**	9.7	310	**630**
MW-1	1/12/2010	**31**	<1.0	270	**500**
MW-1	4/7/2010	**33**	16	290	**630**
MW-1	7/20/2010	**27**	10	360	**710**
MW-1	10/7/2010	**26**	<50	320	600
MW-1	1/18/2011	**33**	50	300	600
MW-1	4/12/2011	**27**	<100	320	**700**
MW-1	8/9/2011	**20.8**	21	257	444
MW-1	11/9/2011	**17**	<250	240	390
MW-2	3/29/2007	**55**	ND	39	60
MW-2	7/23/2007	**39**	ND	25	9.2
MW-2	10/11/2007	**86**	ND	97	140
MW-2	1/8/2008	**65**	ND	82	56
MW-2	7/1/2008	**15**	ND	22	7.3
MW-2	1/20/2009	**38**	ND	85	49
MW-2	7/8/2009	7.5	ND	13	3
MW-2	10/20/2009	**20**	<1.0	31	29
MW-2	1/12/2010	**22**	<1.0	54	41
MW-2	4/7/2010	**37**	1.3	110	130
MW-2	7/20/2010	**17**	<1.0	94	92
MW-2	10/7/2010	**34**	<5	120	140
MW-2	1/18/2011	**30**	<50	160	170
MW-2	4/12/2011	**25**	<25	62	100
MW-2	8/9/2011	4	<1	9.8	33.2
MW-2	11/9/2011	**26**	<5	160	160

TABLE 2

GROUNDWATER ANALYTICAL RESULTS
FEDERAL GAS COM H #1 SITE
XTO ENERGY, INC.

Well ID	Date	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)
NMWQCC Groundwater Standard		**10 ug/l**	**750 ug/l**	**750 ug/l**	**620 ug/l**
MW-3	12/6/2006	ND	ND	ND	ND
MW-3	3/29/2007	ND	ND	ND	ND
MW-3	7/23/2007	ND	ND	ND	ND
MW-3	10/11/2007	ND	ND	ND	ND
MW-3*	1/8/2008	ND	ND	ND	ND

Notes:

ug/L - micrograms per liter

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

NMWQCC - New Mexico Water Quality Control Commission

ND - Not detected above the laboratory detection limit

BOLD values exceed the NMWQCC Standard

* MW-3 was abandoned on May 10, 2010

Figure 1

Topographic Map

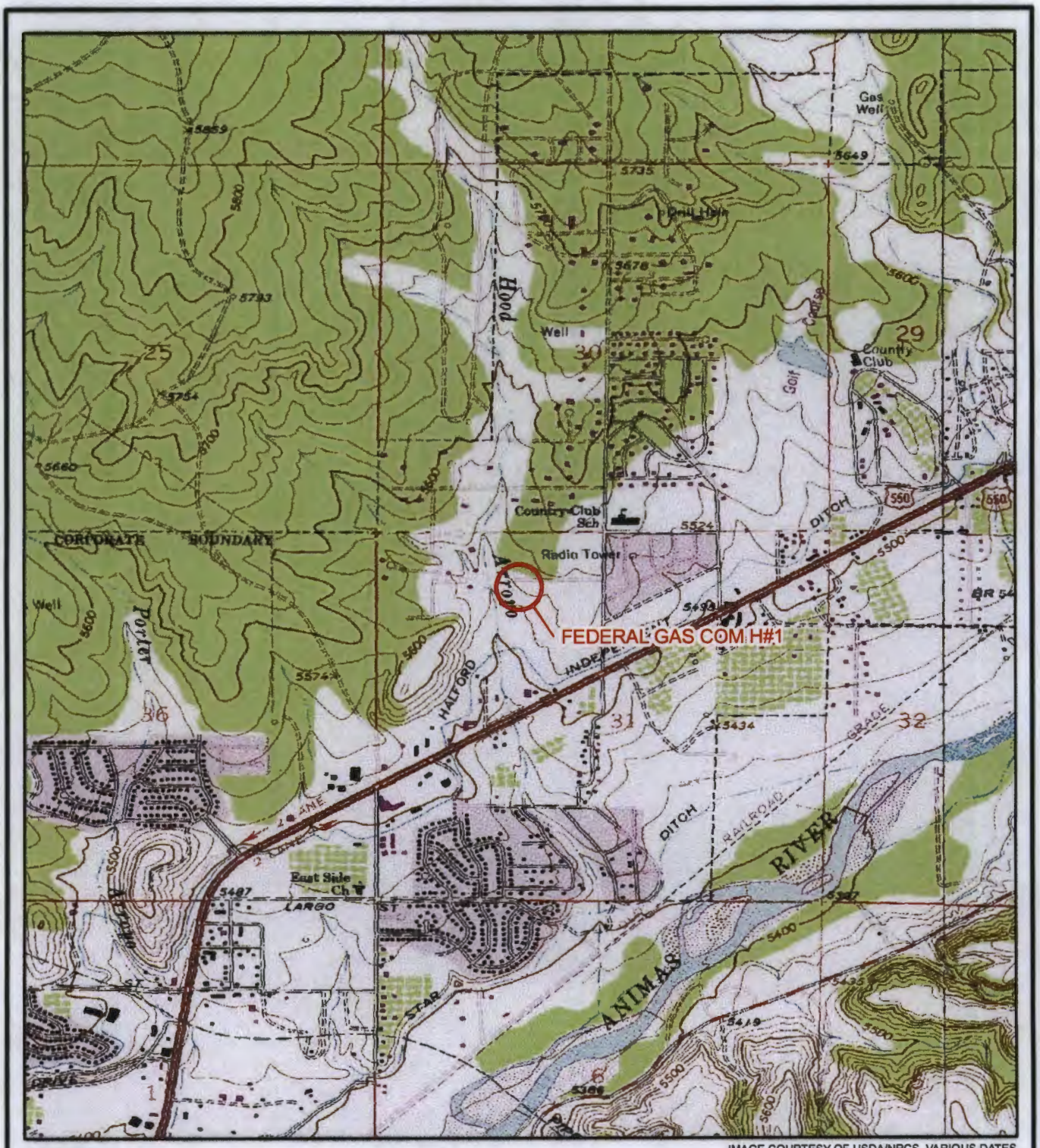


IMAGE COURTESY OF USDA/NRCS, VARIOUS DATES

LEGEND

SITE LOCATION

0 2,000 4,000

Feet

N

FIGURE 1
SITE LOCATION MAP
FEDERAL GAS COM H#1
NENE SEC 31 T30N R12W
SAN JUAN COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\XTO1002\XTO1002_FEDERAL_H#1_FIG01_SL.mxd

Figure 2

Potentiometric Surface Diagrams

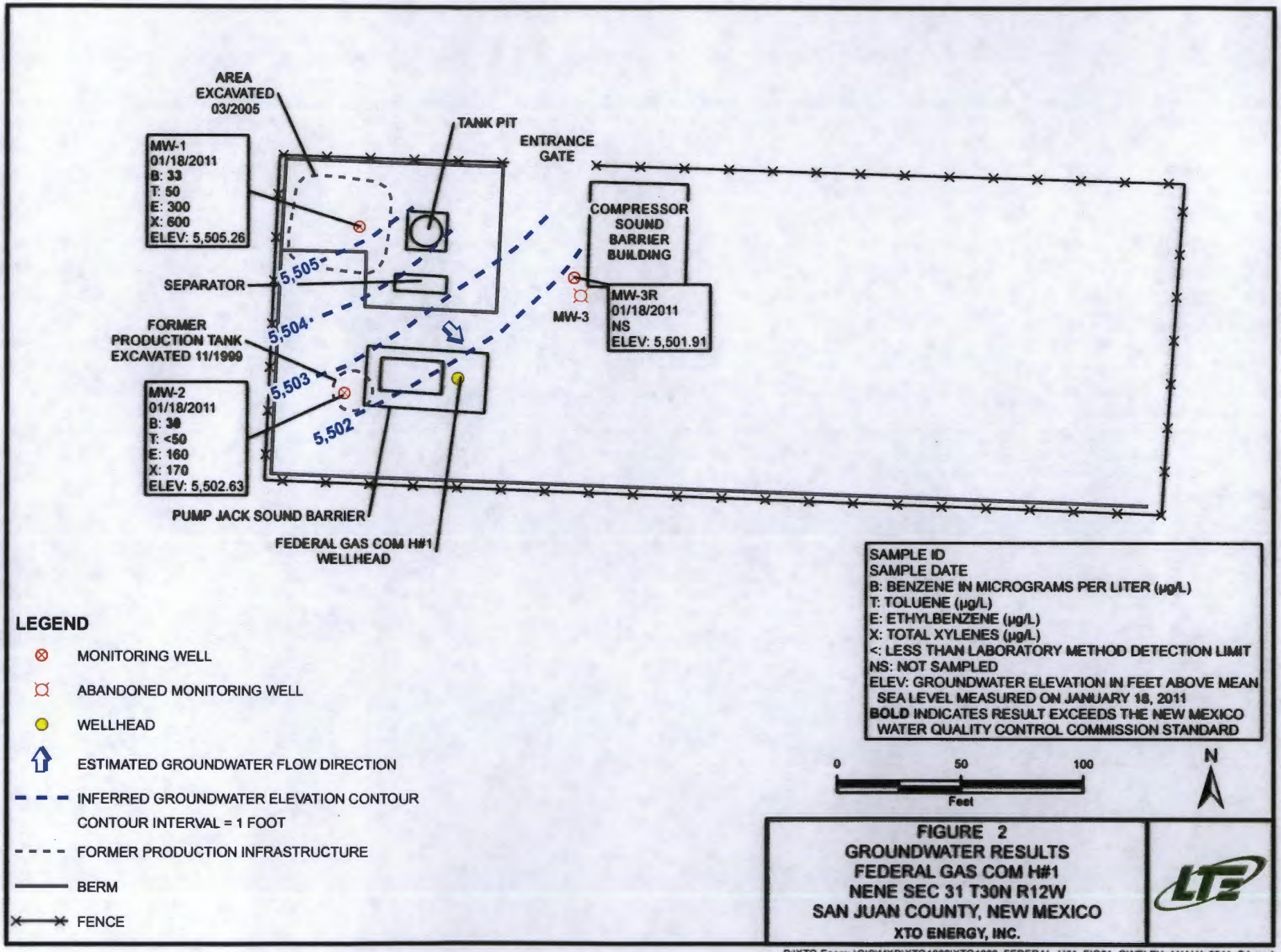


FIGURE 2
GROUNDWATER RESULTS
FEDERAL GAS COM H#1
NENE SEC 31 T30N R12W
SAN JUAN COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\XTO1002\XTO1002_FEDERAL_H#1_FIG01_GWELEV_ANALY_2011_Q1.mxd

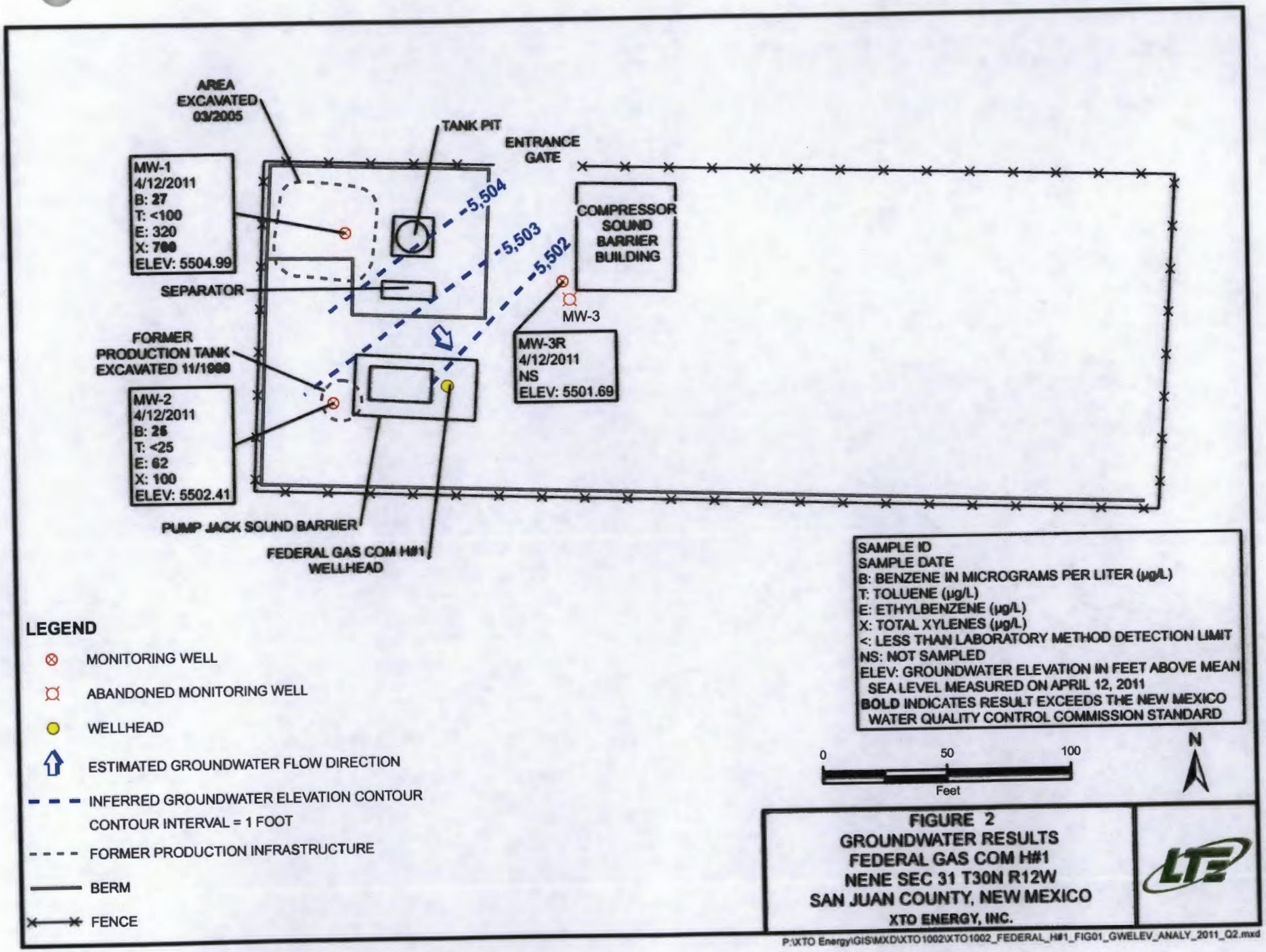


FIGURE 2
GROUNDWATER RESULTS
FEDERAL GAS COM H#1
NENE SEC 31 T30N R12W
SAN JUAN COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\XTO1002\XTO1002_FEDERAL_H#1_FIG01_GWELEV_ANALY_2011_Q2.mxd

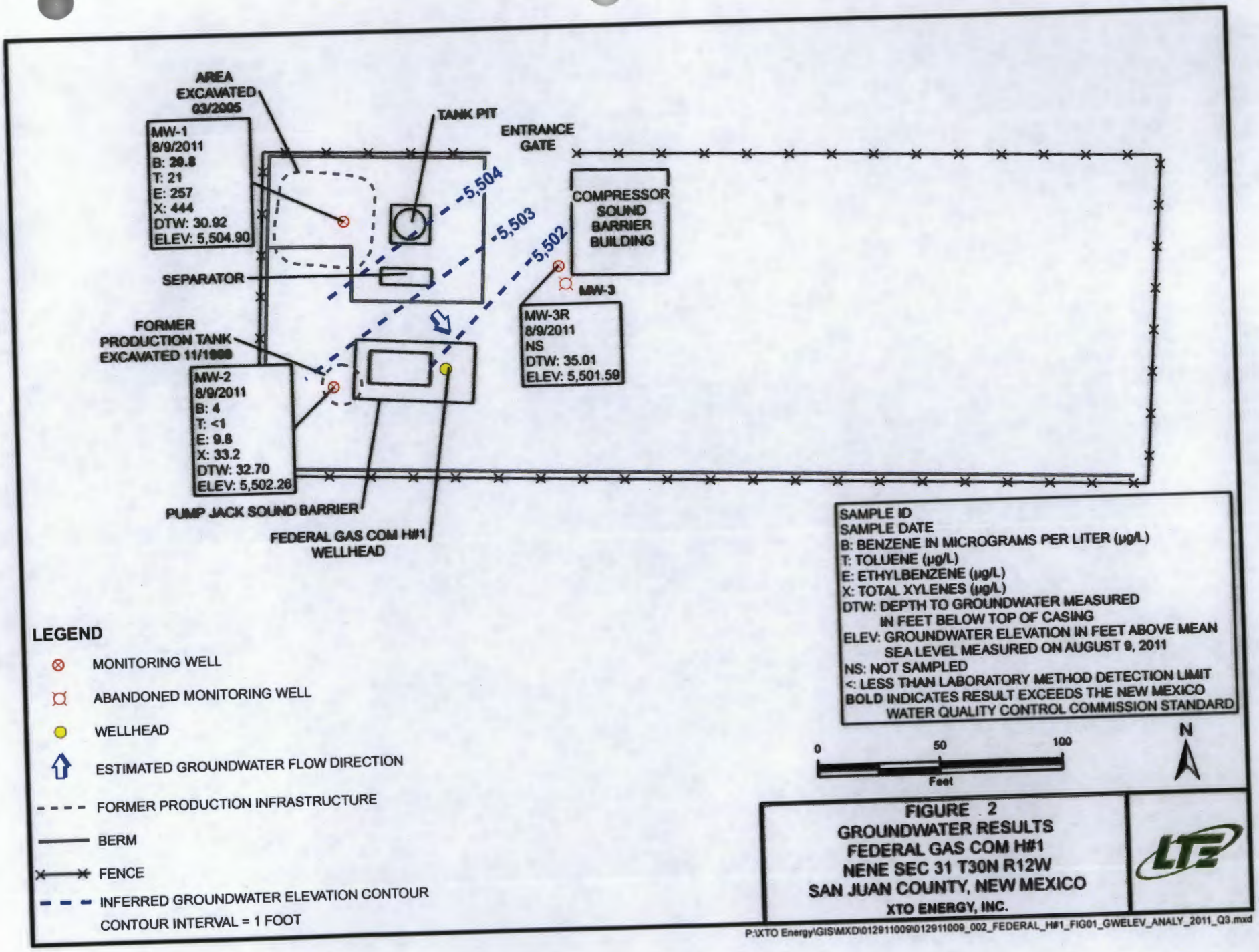
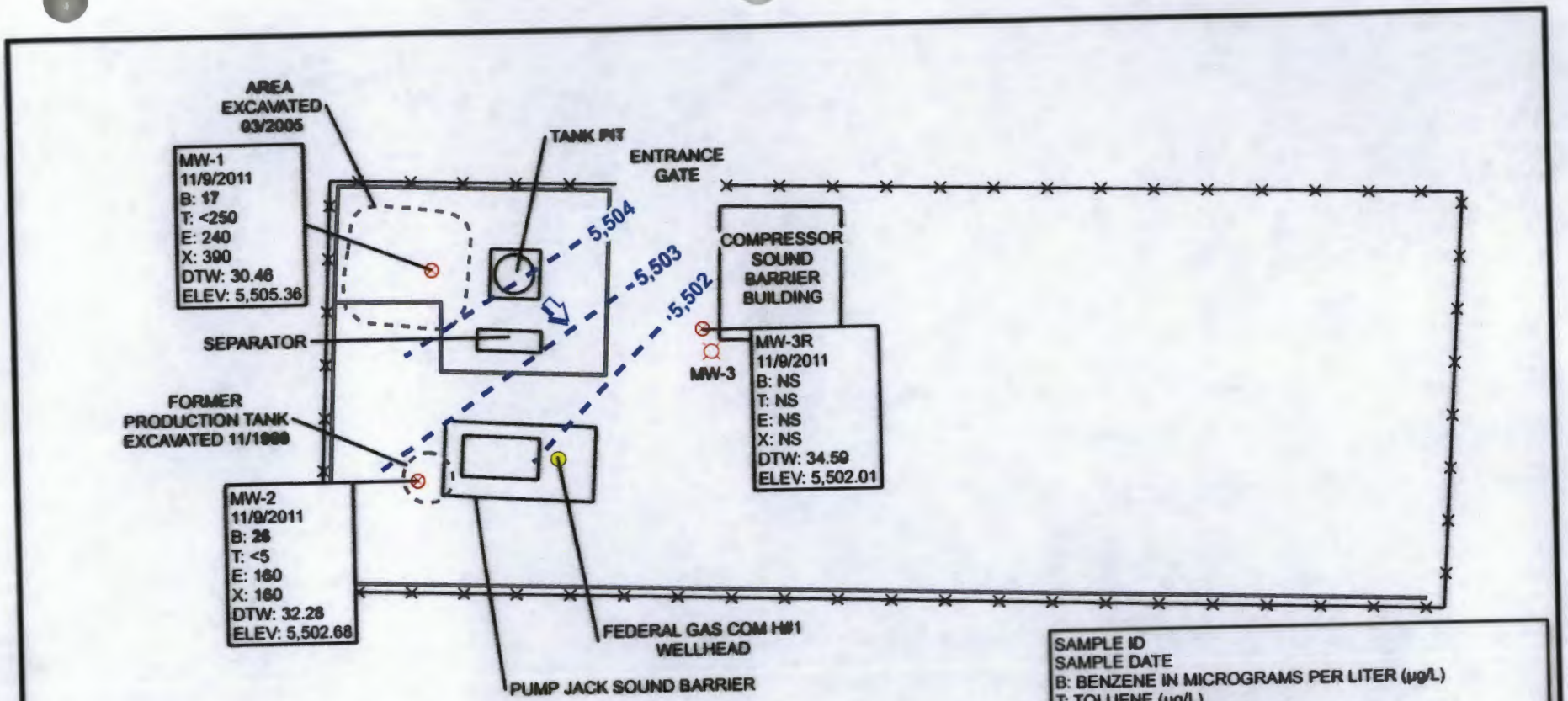


FIGURE 2
GROUNDWATER RESULTS
FEDERAL GAS COM H#1
NENE SEC 31 T30N R12W
SAN JUAN COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012911009\012911009_002_FEDERAL_H#1_FIG01_GWELEV_ANALY_2011_Q3.mxd



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

LEGEND

- MONITORING WELL
- ABANDONED MONITORING WELL
- WELLHEAD
- ESTIMATED GROUNDWATER FLOW DIRECTION
- FORMER PRODUCTION INFRASTRUCTURE
- BERM
- FENCE
- INFERRED GROUNDWATER ELEVATION CONTOUR
  CONTOUR INTERVAL = 1 FOOT

0 50 100
Feet

N

FIGURE 2
GROUNDWATER RESULTS
FEDERAL GAS COM H#1
NENE SEC 31 T30N R12W
SAN JUAN COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012911009\012911009_002_FEDERAL_H#1_FIG01_GWELEV_ANALY_2011_Q4.mxd

Figure 3-5

Completion Diagrams
And
Borehole Logs

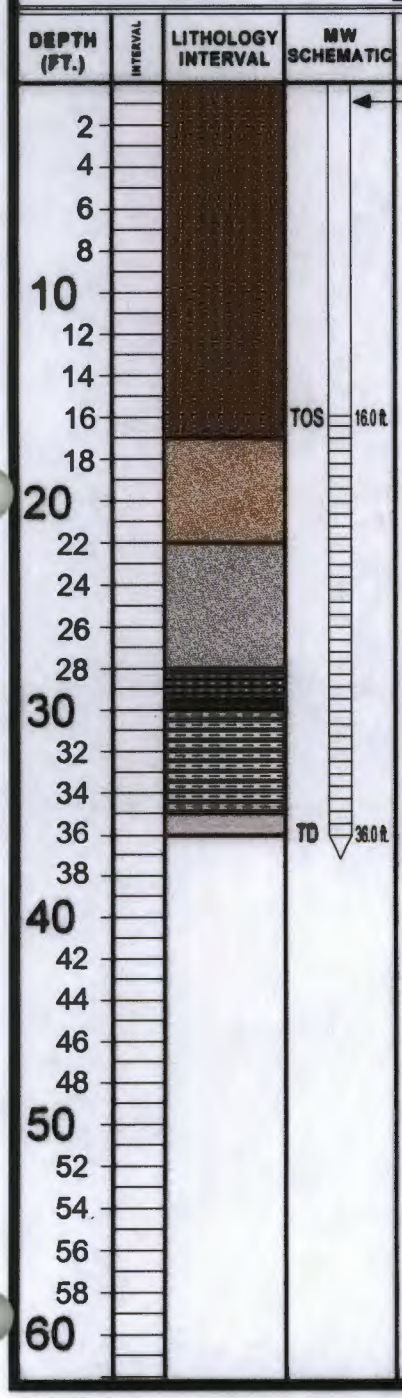
BLAGG ENGINEERING, Inc.

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

BORE / TEST HOLE REPORT

CLIENT:	XTO ENERGY INC.
LOCATION NAME:	FEDERAL GC H # 1 UNIT C, SEC. 31, T30N, R12W
CONTRACTOR:	BLAGG ENGINEERING, INC./ENVIROTECH
EQUIPMENT USED:	MOBILE DRILL RIG SIMILAR TO CME 75
BORING LOCATION:	171 FEET, N61.5W FROM WELL HEAD.

BORING #.....	BH - 1
MW #.....	1
PAGE #.....	1
DATE STARTED	03/14/05
DATE FINISHED	03/14/05
OPERATOR.....	KP
PREPARED BY	NJV



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 4.00 FEET ABOVE GRADE.

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 - 17.0 FT. BELOW GRADE).

DARK YELLOWISH BROWN SAND, NON COHESIVE, LOOSE TO FIRM, MOIST, NO APPARENT HC ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (17.0 - 22.0 FT. BELOW GRADE).

SAME AS ABOVE EXCEPT MEDIUM GRAY TO BLACK, WET (22.0 - 28.0 FT. BELOW GRADE).

LIGHT MEDIUM GRAY SILTY CLAY TO CLAY, MEDIUM PLASTIC, STIFF, MOIST TO WET, APPARENT HC ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (30.5 - 35.0 FT. BELOW GRADE).

SAMPLE COLLECTED FROM SPLIT SPOON SAMPLER BH-2 @ 30.5 FT. OVM READING - 18.1 ppm, COLLECTED - 3/14/05, TIME - 9:30 am, blow count = 11/2 ft.

LIGHT MEDIUM GRAY SILTY CLAY TO CLAY, MEDIUM PLASTIC, STIFF, MOIST TO WET, APPARENT HC ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (30.5 - 35.0 FT. BELOW GRADE).

LIGHT GRAY BEDROCK (SANDSTONE), DRY, FINE GRAIN, WELL CONSOLIDATED, WELL CEMENTED, COMPETENT, HC ODOR DETECTED PHYSICALLY WITHIN AUGER CUTTINGS (35.0 - 36.0 FT. BELOW GRADE).

NOTES:

- IMPORTED SAND & ROCK AGGREGATE.
- SAND (IMPACTED).
- SILTY CLAY TO CLAY (IMPACTED).

TOS - Top of screen of monitor well.
TD - Total depth/bottom extent of monitor well.
OVM - Organic Vapor Meter or Photoionization Detector (PID).
TPH - Total Petroleum Hydrocarbon US EPA method modified 8015B.
ppm - Parts per million or milligrams per liter (mg/L).

Monitor well consist of 2 inch PVC piping - casing from 4.0 ft. above grade to 16.0 ft. below grade, 0.010 slotted screen between 16.0 to 36.0 feet below grade, sand packed annular to 13 ft. below grade, bentonite plugged to 5 ft. below grade, then finished to surface with clean soil.

DRAWING: FED-GC-H1-MW1. SKF | DATE: 03/14/05 | DWN BY: NJV

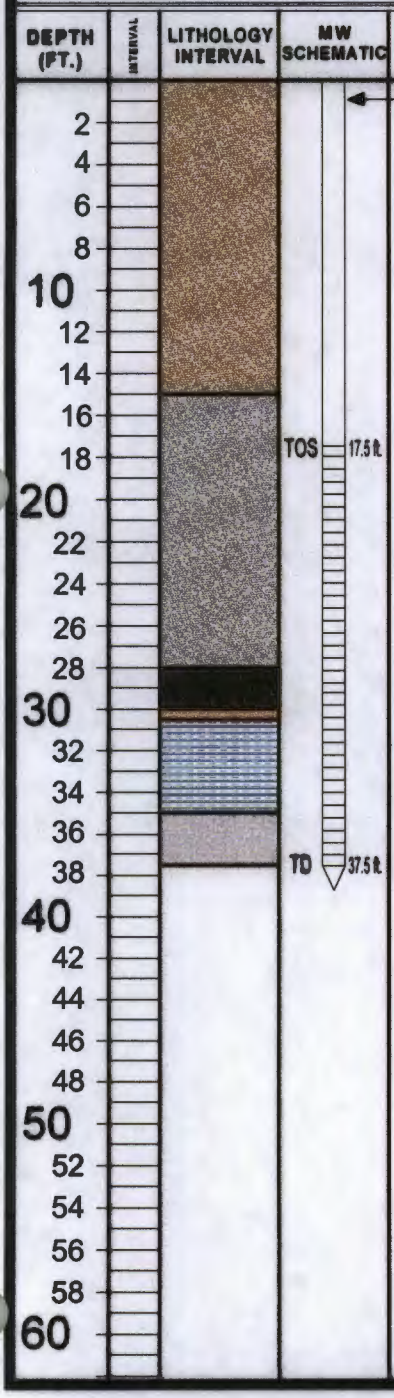
BLAGG ENGINEERING, Inc.

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

BORE / TEST HOLE REPORT

BORING #.....	BH - 2
MW #.....	2
PAGE #.....	2
DATE STARTED	03/14/05
DATE FINISHED	03/14/05
OPERATOR.....	KP
PREPARED BY	NJV

CLIENT: **XTO ENERGY INC.**
LOCATION NAME: FEDERAL GC H # 1 UNIT C, SEC. 31, T30N, R12W
CONTRACTOR: **BLAGG ENGINEERING, INC./ENVIROTECH**
EQUIPMENT USED: **MOBILE DRILL RIG SIMILAR TO CME 75**
BORING LOCATION: **156** FEET, **N82W** FROM WELL HEAD.



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 2.50 FEET ABOVE GRADE.

MODERATE TO DARK YELLOWISH BROWN SAND, NON COHESIVE, SLIGHTLY MOIST, LOOSE TO FIRM, APPARENT HC ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (0.0 - 15.0 FT. BELOW GRADE).

DARK YELLOWISH BROWN TO MEDIUM GRAY SAND, NON COHESIVE, MOIST, STRONG HC ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (15.0 - 28.0 FT. BELOW GRADE).

SAME AS ABOVE EXCEPT BLACK AND SATURATED (28.0 - 30.0 FT. BELOW GRADE).

SAME AS ABOVE EXCEPT DARK YELLOWISH ORANGE (30.0 - 30.5 FT. BELOW GRADE).

LIGHT MEDIUM GRAY SILTY CLAY TO CLAY, MEDIUM PLASTIC, STIFF, MOIST, APPARENT HC ODOR DETECTED PHYSICALLY WITHIN CUTTINGS (30.5 - 35.0 FT. BELOW GRADE).

LIGHT GRAY BEDROCK (SANDSTONE), DRY, FINE GRAIN, WELL CONSOLIDATED, WELL CEMENTED, COMPETENT, HC ODOR DETECTED PHYSICALLY WITHIN SPLIT SPOON SAMPLER (35.0 - 37.5 FT. BELOW GRADE).

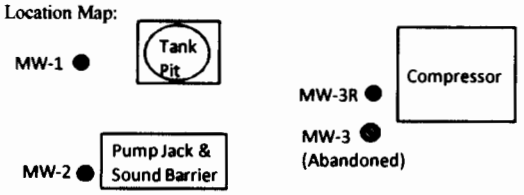
NOTES:
- SAND.
- SAND (IMPACTED).
- SILTY CLAY TO CLAY (IMPACTED).

TOS - Top of screen of monitor well.
TD - Total depth/bottom extent of monitor well.

Monitor well consist of 2 inch PVC piping - casing from 2.5 ft. above grade to 17.5 ft. below grade, 0.010 slotted screen between 17.5 to 37.5 feet below grade, sand packed annular to 13 ft. below grade, bentonite plugged to 5 ft. below grade, then finished to surface with clean soil.

DRAWING: FED-GC-H1-MW2. SKF | DATE: 03/14/05 | DWN BY: NJV

Location Map:



Compliance • Engineering • Remediation
LT Environmental, Inc.
2243 Main Avenue, Suite 3
Durango, Colorado 81301

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: MW-3R			Project: XTO Groundwater Monitoring
Site Name: Federal H#1	Date: 1/7/2011		Project Number: XTO1002
Location: 36.774886; -108.142525	Logged By: D. Hencmann		Drilled By: EnviroDrill, Inc.
Elevation: 5536.6	Detector: N/A	Drilling Method: Hollow Stem Auger	Sampling Method: N/A
Gravel Pack: 10/20 Colorado Silica Sand		Seal: Bentonite Pellets	Grout: Neat Cement
Casing Type: Schedule 40 PVC		Diameter: 2 inch / Length: 28 feet	Hole Diameter: / Depth to Liquid: None
Screen Type: Schedule 40 PVC	Slot: 0.010 inch	Diameter: 2 inch / Length: 15 feet	Total Depth: 40 feet / Depth to Water: 34 feet

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
					0			Not Logged (replacement well)	
					4				
					8				
					12				
					16				
					20				
					24				
					28				
					32				
					36				
					40				

Attachment 1

Blagg Engineering, Inc.
Spill Cleanup Report (1999)

BLAGG ENGINEERING, INC.
P.O. Box 87, Bloomfield, New Mexico 87413
Phone: (505) 632-1199 Fax: (505) 632-3903

January 28, 2000

Mr. Denny G. Foust -Environmental Geologist
New Mexico Oil Conservation Division - (NMOCD)
1000 Rio Brazos Road
Aztec, New Mexico 87410

RE: Cross Timbers Oil Co. Federal GC H # 1 Spill Cleanup Report
Unit C, SEC. 31, T30N, R12W, San Juan County, New Mexico

Dear Mr. Foust:

On behalf of Cross Timbers Oil Company, Blagg Engineering, Inc. (BEI) respectfully submits the attached report affiliated with the Federal GC H # 1 spill release (approximately 69 barrels) which occurred on approximately November 25, 1999.

In briefly summarizing the cleanup effort which took place between November 26th and 29th, 1999, approximately 304 cubic yards of impacted soil was removed (refer to Figure 1) and transported to Envirotech, Inc.'s Soil Remediation Facility (NMOCD rule 7/11 permit for commercial facility - Landfarm #2) located in NW/4, Sec. 6, T26N, R10W, NMPM, San Juan County, NM. The excavation perimeter was arbitrarily and judgmentally sampled during and upon completion of the excavation activity (refer to Figure 2 for sample locations and result summary). In reviewing the field and analytical results, it appears that vertical extent has been established utilizing the PB @ 12 ft. and PB5 @ 14 ft. data and that lateral extent of contamination appears to have met state closure standards with the exception of the 2A sample point area (point of release). It was then suggested and agreed upon between BEI and NMOCD to remediate the remaining contamination passively (estimated to be 20-30 cubic yards) utilizing vertical vent piping (refer to Figure 3) and a 50% Nitrogen, 0% Phosphorus, 0% Potassium fertilizer application (installed and introduced on January 25, 2000 by BEI).

Based upon the attached information given, Cross Timbers Oil Company is requesting closure based on risk that the remaining soil contamination does not appear to pose a present or future threat to groundwater (estimated at a depth greater than 30 feet), health, or the environment.

If you have any questions or comments concerning this report, please contact myself or Jeff Blagg at the address or phone number listed above. Thank you for your cooperation.

Respectfully submitted,
Blagg Engineering, Inc.

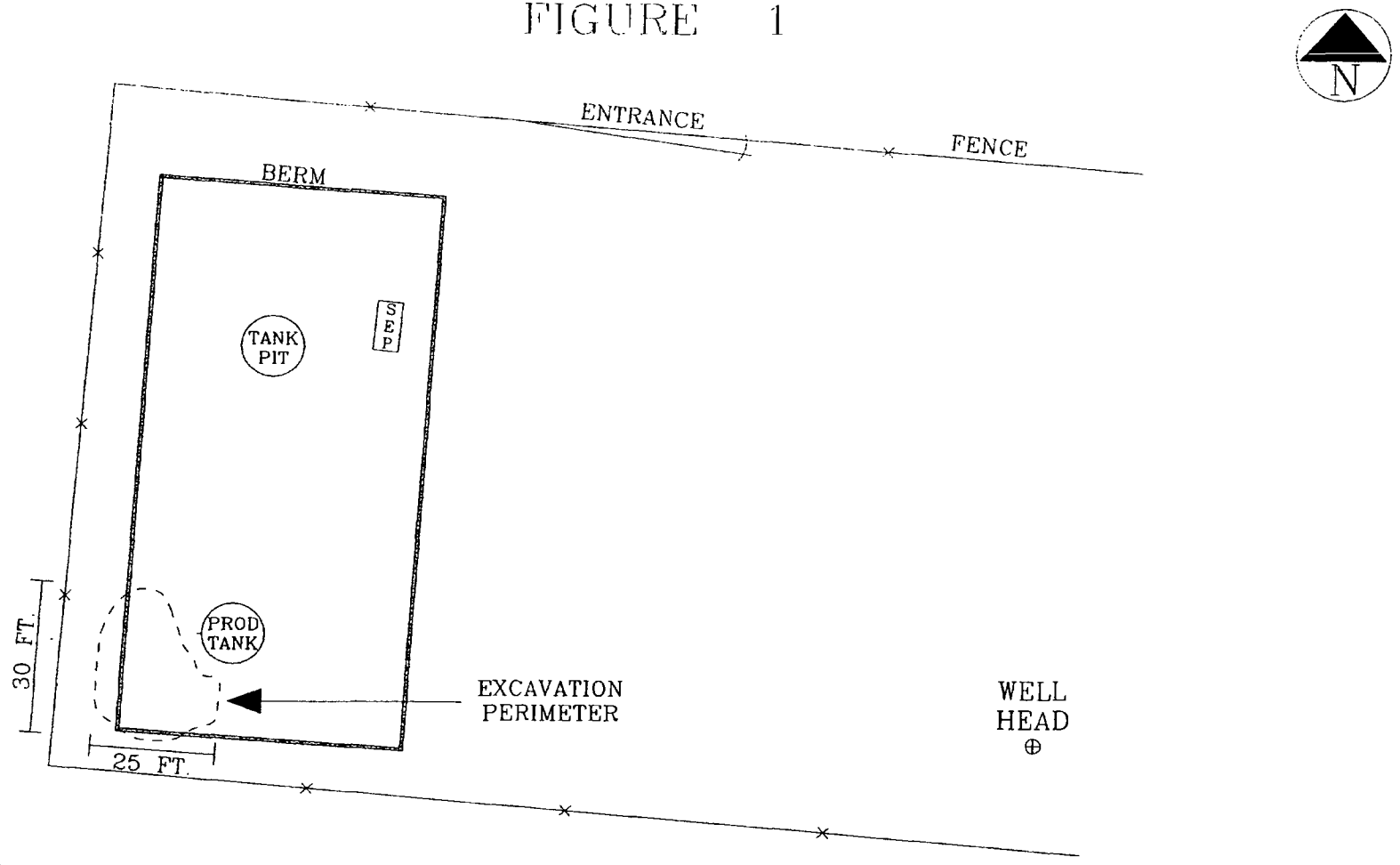
Nelson J. Velez
Staff Geologist

Attachments: Spill Cleanup Report

xc: Bill Olson, Hydrologist, NMOCD, Santa Fe Office, NM
Rueben Sanchez, Environmental Team Lead, BLM, Farmington, NM (2 copies)
Terry Matthews, Regional Supervisor, Cross Timbers Oil Co., Farmington, NM

NJV/njv FED-H1.CVL

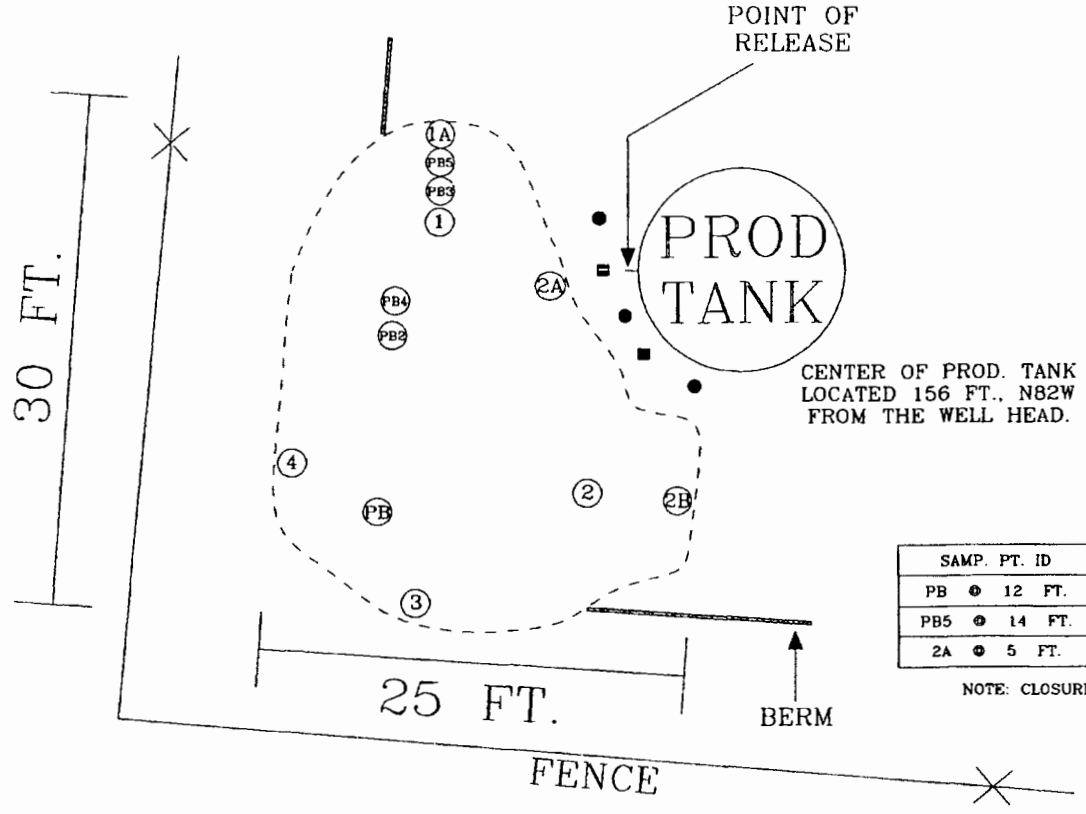
FIGURE 1



PRODUCTION TANK & SEPARATOR LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE AND BEARING FROM THE WELL HEAD (BRUNTON COMPASS AND LASER RANGE FINDER). ALL OTHER STRUCTURES DISPLAYED ON THE SITE MAP ARE SOLELY FOR REFERENCE AND ARE NOT TO SCALE.

CROSS TIMBERS OIL COMPANY FEDERAL GC H #1 NE/4 NW/4 SEC. 31, T30N, R12W SAN JUAN COUNTY, NEW MEXICO	BLAGG ENGINEERING, INC. CONSULTING PETROLEUM / RECLAMATION SERVICES P.O. BOX 87 BLOOMFIELD, NEW MEXICO 87413 PHONE: (505) 632-1199	PROJECT: SPILL CLEAN UP DRAWN BY: NJV FILENAME: FED-MAP.SKD	SITE MAP 11/99

FIGURE 2



NOV. 29, 1999

SAMP. PT. ID	OVM READING (ppm)
1 @ 6 FT.	219
1A @ 6 FT.	131.6
2 @ 5 FT.	242
2A @ 5 FT.	248
2B @ 5 FT.	126.7
3 @ 6 FT.	115.2
4 @ 6 FT.	97.1
PB @ 12 FT.	78.3
PB2 @ 11 FT.	275
PB3 @ 11 FT.	510
PB4 @ 12 FT.	121.9
PB5 @ 14 FT.	142.1

NOTE: CLOSURE STANDARD – OVM < 100 ppm.

SAMP. PT. ID	TPH (ppm)	BENZENE (ppb)	TOTAL BTEX (ppb)
PB @ 12 FT.	19.7	–	–
PB5 @ 14 FT.	12.0	820	5,240
2A @ 5 FT.	3,540	12,130	41,460

NOTE: CLOSURE STANDARDS – TPH < 100 ppm, benzene < 10,000 ppb, & total BTEX < 50,000 ppb.

LEGEND:
- ■ DENOTES BORING LOCATION OF FERTILIZER APPLICATION.
- ● DENOTES BORING LOCATION OF VERTICAL PASSIVE VENT PIPING.

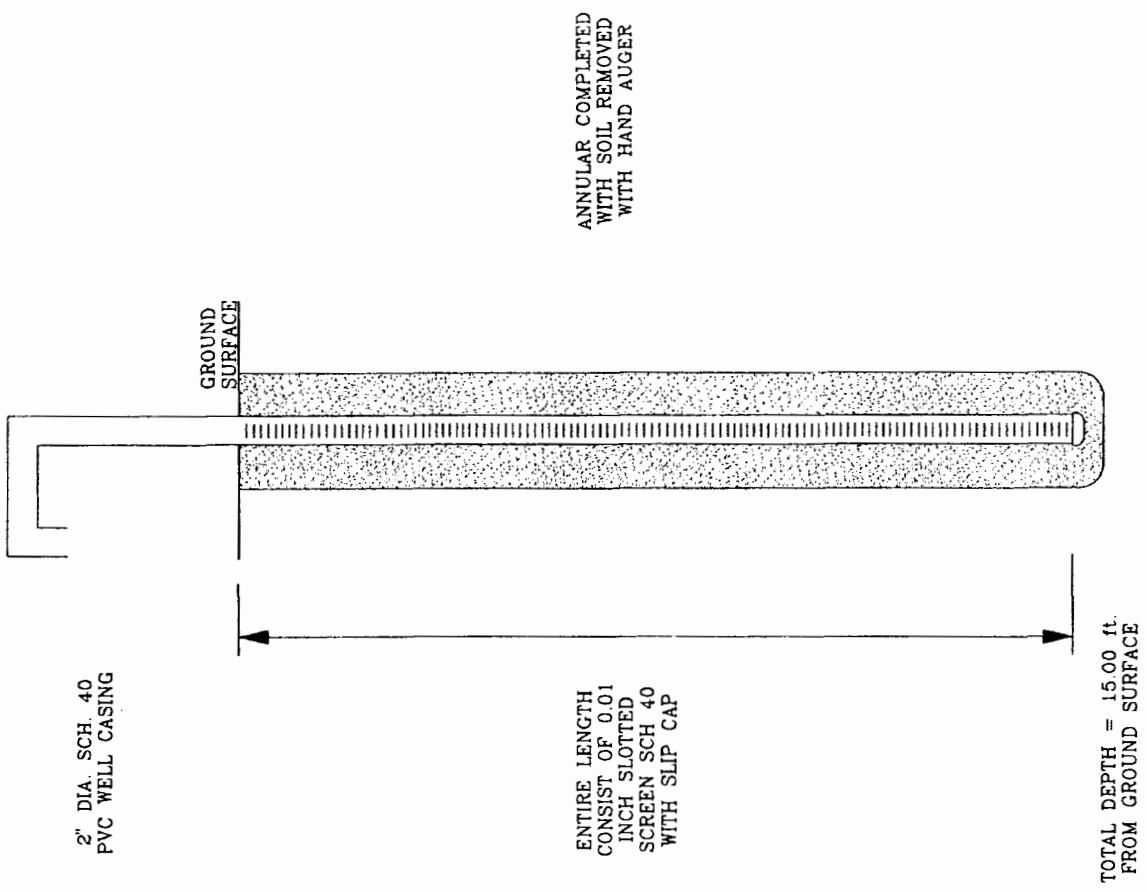
CROSS TIMBERS OIL COMPANY
FEDERAL GC H #1
NE/4 NW/4 SEC. 31, T30N, R12W
SAN JUAN COUNTY, NEW MEXICO

BLAGG ENGINEERING, INC.
CONSULTING PETROLEUM / RECLAMATION SERVICES
P.O. BOX 87
BLOOMFIELD, NEW MEXICO 87413
PHONE: (505) 632-1199

PROJECT: SPILL CLEAN UP
DRAWN BY: NJV
FILENAME: FED-MAP2.SKD

SITE MAP
11/99

FIGURE 3



CROSS TIMBERS OIL COMPANY

FEDERAL GC H # 1

MONITOR WELL CONSTRUCTION & COMPLETION

INSTALLED WITH HAND AUGER

BLAGG ENGINEERING, INC.

CONSULTING PETROLEUM / RECLAMATION SERVICES

P.O. BOX 87

BLOOMFIELD, NEW MEXICO 87413

PHONE: (505) 632-1199

VENT PIPING SCHEMATIC

DRAFTED BY: NJV

DATE: JAN. '00

FILENAME: FED-PVP.SKD

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / Cross Timbers	Project #:	403410
Sample ID:	PB @ 12'	Date Reported:	11-30-99
Laboratory Number:	G509	Date Sampled:	11-29-99
Chain of Custody No:	7443	Date Received:	11-30-99
Sample Matrix:	Soil	Date Extracted:	11-30-99
Preservative:	Cool	Date Analyzed:	11-30-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**0.6**	**0.2**
Diesel Range (C10 - C28)	**19.1**	**0.1**
Total Petroleum Hydrocarbons	**19.7**	**0.2**

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Federal GC H #1 Tank Spill.**

Analyst

Review

5796 U.S. Highway 64 • Farmington, NM 87401 • Tel 505 • 632 • 0615 • Fax 505 • 632 • 1865

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / Cross Timbers	Project #:	403410
Sample ID:	PB5 @ 14'	Date Reported:	11-30-99
Laboratory Number:	G510	Date Sampled:	11-29-99
Chain of Custody No:	7443	Date Received:	11-30-99
Sample Matrix:	Soil	Date Extracted:	11-30-99
Preservative:	Cool	Date Analyzed:	11-30-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**8.2**	**0.2**
Diesel Range (C10 - C28)	**3.8**	**0.1**
Total Petroleum Hydrocarbons	**12.0**	**0.2**

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Federal GC H #1 Tank Spill.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / Cross Timbers	Project #:	403410
Sample ID:	2A @ 5'	Date Reported:	11-30-99
Laboratory Number:	G511	Date Sampled:	11-29-99
Chain of Custody No:	7443	Date Received:	11-30-99
Sample Matrix:	Soil	Date Extracted:	11-30-99
Preservative:	Cool	Date Analyzed:	11-30-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**3,170**	**0.2**
Diesel Range (C10 - C28)	**372**	**0.1**
Total Petroleum Hydrocarbons	**3,540**	**0.2**

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Federal GC H #1 Tank Spill.**

Analyst

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Blagg / Cross Timbers	Project #:	403410
Sample ID:	PB5 @ 14'	Date Reported:	11-30-99
Laboratory Number:	G510	Date Sampled:	11-29-99
Chain of Custody:	7443	Date Received:	11-30-99
Sample Matrix:	Soil	Date Analyzed:	11-30-99
Preservative:	Cool	Date Extracted:	11-30-99
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**820**	**10.4**
Toluene	**506**	**10.4**
Ethylbenzene	**159**	**10.4**
p,m-Xylene	**3,280**	**10.4**
o-Xylene	**475**	**5.2**
Total BTEX	**5,240**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	**100 %**
	Bromofluorobenzene	**100 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Federal GC H #1 Tank Spill.**

Analyst

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Blagg / Cross Timbers	Project #:	403410
Sample ID:	2A @ 5'	Date Reported:	11-30-99
Laboratory Number:	G511	Date Sampled:	11-29-99
Chain of Custody:	7443	Date Received:	11-30-99
Sample Matrix:	Soil	Date Analyzed:	11-30-99
Preservative:	Cool	Date Extracted:	11-30-99
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**12,130**	**10.4**
Toluene	**4,690**	**10.4**
Ethylbenzene	**15,590**	**10.4**
p,m-Xylene	**5,860**	**10.4**
o-Xylene	**3,190**	**5.2**
Total BTEX	**41,460**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	**100 %**
	Bromofluorobenzene	**100 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Federal GC H #1 Tank Spill.**

Analyst

Review

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CHAIN OF CUSTODY RECORD

7443

Client / Project Name	Project Location	ANALYSIS / PARAMETERS
BLAGG/CROSS TIMBERS	TANK SPILL FEDERAL GC H #1	
Sampler: NJV	Client No. 403410	

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH (8015)	BTEX (8021)					Remarks
PB @ 12'	11/29/99	1205	G509	SOIL	1	✓						PRESERV. - COOL
PB5 @ 14'	11/29/99	1540	G510	SOIL	1	✓	✓					PRESERV. - COOL
2A @ 5'	11/29/99	1520	G511	SOIL	1	✓	✓					PRESERV. - COOL

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Nelson Velez	11/30/99	0722	Dena L. Ojeman	11.30.99	0722
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

ENVIROTECH INC.

5796 U.S. Highway 64
Farmington, New Mexico 87401
(505) 632-0615

Sample Receipt	Y	N	N/A
Received Intact	✓		
Cool - Ice/Blue Ice	✓		

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	11-30-TPH QA/QC	Date Reported:	11-30-99
Laboratory Number:	G509	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	11-30-99
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	%Difference	Accept. Range
Gasoline Range C5 - C10	06-17-99	2.6810E-002	2.6783E-002	0.10%	0 - 15%
Diesel Range C10 - C28	06-17-99	2.6962E-002	2.6908E-002	0.20%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept Range
Gasoline Range C5 - C10	0.6	0.6	0.0%	0 - 30%
Diesel Range C10 - C28	19.1	19.1	0.0%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	0.6	250	250	100%	75 - 125%
Diesel Range C10 - C28	19.1	250	269	100%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **QA/QC for samples G509 - G511.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS
QUALITY ASSURANCE REPORT

Client:	N/A	Project #:	N/A
Sample ID:	11-30-BTEX QA/QC	Date Reported:	11-30-99
Laboratory Number:	G503	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	11-30-99
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff. Accept. Range 0 - 15%	Blank Conc.	Detect. Limit
Benzene	7.0291E-002	7.0516E-002	0.32%	ND	0.2
Toluene	6.3951E-002	6.3963E-002	0.02%	ND	0.2
Ethylbenzene	5.2614E-002	5.2677E-002	0.12%	ND	0.2
p,m-Xylene	3.9700E-002	3.9708E-002	0.02%	ND	0.2
o-Xylene	6.5791E-003	6.5989E-003	0.30%	ND	0.1

Duplicate Conc. (ug/L)	Sample	Duplicate	%Diff.	Accept Limit
Benzene	ND	ND	0.0%	0 - 30%
Toluene	ND	ND	0.0%	0 - 30%
Ethylbenzene	ND	ND	0.0%	0 - 30%
p,m-Xylene	ND	ND	0.0%	0 - 30%
o-Xylene	ND	ND	0.0%	0 - 30%

Spike Conc. (ug/L)	Sample	Amount Spiked	Spiked Sample	%Recovery	Accept Limits
Benzene	ND	50.0	50.1	100%	39 - 150
Toluene	ND	50.0	50.0	100%	46 - 148
Ethylbenzene	ND	50.0	50.0	100%	32 - 160
p,m-Xylene	ND	100.0	100	100%	46 - 148
o-Xylene	ND	50.0	50.0	100%	46 - 148

ND - Parameter not detected at the stated detection limit.

* - Administrative level set at 80 - 120.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **QA/QC for samples G503 - G508 and G510 - G511.**

Analyst

Review

5796 U.S. Highway 64 • Farmington, NM 87401 • Tel 505 • 632 • 0615 • Fax 505 • 632 • 1865

Attachment 2

2011 Laboratory Reports

ESC
L·A·B S·C·I·E·N·C·E·S
YOUR LAB OF CHOICE

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 Road 3100
Aztec, NM 87410

Report Summary

Friday January 21, 2011

Report Number: L497900
Samples Received: 01/19/11
Client Project: XTO1002

Description: Federal H 1

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 - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002,NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,
TX - T104704245, OK-9915

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.
Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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

ESC
L·A·B S·C·I·E·N·C·E·S
YOUR LAB OF CHOICE

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

REPORT OF ANALYSIS

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

January 21, 2011

ESC Sample # : L497900-01

Date Received : January 19, 2011
Description : Federal H 1

Site ID : FEDERAL H 1

Sample ID : FEDERAL MW-1

Project # : XTO1002

Collected By :
Collection Date : 01/18/11 12:28

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.033	0.0025	mg/l	8021B	01/20/11	5
Toluene	0.050	0.025	mg/l	8021B	01/20/11	5
Ethylbenzene	0.30	0.0025	mg/l	8021B	01/20/11	5
Total Xylene	0.60	0.0075	mg/l	8021B	01/20/11	5
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	01/20/11	5

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

.
Reported: 01/21/11 14:54 Printed: 01/21/11 14:54

ESC
L·A·B S·C·I·E·N·C·E·S
YOUR LAB OF CHOICE

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

REPORT OF ANALYSIS

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

January 21, 2011

ESC Sample # : L497900-02

Site ID : FEDERAL H 1

Project # : XTO1002

Date Received : January 19, 2011
Description : Federal H 1

Sample ID : FEDERAL MW-2

Collected By :
Collection Date : 01/18/11 11:28

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.030	0.0050	mg/l	8021B	01/19/11	10
Toluene	BDL	0.050	mg/l	8021B	01/19/11	10
Ethylbenzene	0.16	0.0050	mg/l	8021B	01/19/11	10
Total Xylene	0.17	0.015	mg/l	8021B	01/19/11	10
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	107.		% Rec.	8021B	01/19/11	10

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

.
Reported: 01/21/11 14:54 Printed: 01/21/11 14:54

Summary of Remarks For Samples Printed
01/21/11 at 14:54:26

TSR Signing Reports: 288
R5 - Desired TAT

No Energy fee. Charge $10 Shipping Fee per Dave V 1/4/10 When transfering TS to a new dash # DO NOT charge a fee

Sample: L497900-01 Account: XTORNM Received: 01/19/11 08:15 Due Date: 01/26/11 00:00 RPT Date: 01/21/11 14:54

Sample: L497900-02 Account: XTORNM Received: 01/19/11 08:15 Due Date: 01/26/11 00:00 RPT Date: 01/21/11 14:54

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XTO Energy - San Juan Division
James McDaniel
382 Road 3100

Aztec, NM 87410

Quality Assurance Report
Level II

L497900

January 21, 2011

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Benzene	< .0005	mg/l			WG517835	01/19/11 14:19
Ethylbenzene	< .0005	mg/l			WG517835	01/19/11 14:19
Toluene	< .005	mg/l			WG517835	01/19/11 14:19
Total Xylene	< .0015	mg/l			WG517835	01/19/11 14:19
a,a,a-Trifluorotoluene(PID)		% Rec.	107.8	55-122	WG517835	01/19/11 14:19
Benzene	< .0005	mg/l			WG518010	01/20/11 12:52
Ethylbenzene	< .0005	mg/l			WG518010	01/20/11 12:52
Toluene	< .005	mg/l			WG518010	01/20/11 12:52
Total Xylene	< .0015	mg/l			WG518010	01/20/11 12:52
a,a,a-Trifluorotoluene(PID)		% Rec.	108.5	55-122	WG518010	01/20/11 12:52

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Benzene	mg/l	.05	0.0439	87.8	79-114	WG517835
Ethylbenzene	mg/l	.05	0.0485	97.0	80-116	WG517835
Toluene	mg/l	.05	0.0454	90.8	79-112	WG517835
Total Xylene	mg/l	.15	0.141	94.3	84-118	WG517835
a,a,a-Trifluorotoluene(PID)				105.8	55-122	WG517835
Benzene	mg/l	.05	0.0522	104.	79-114	WG518010
Ethylbenzene	mg/l	.05	0.0526	105.	80-116	WG518010
Toluene	mg/l	.05	0.0518	104.	79-112	WG518010
Total Xylene	mg/l	.15	0.152	101.	84-118	WG518010
a,a,a-Trifluorotoluene(PID)				107.1	55-122	WG518010

Laboratory Control Sample Duplicate

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
Benzene	mg/l	0.0468	0.0439	94.0	79-114	6.36	20	WG517835
Ethylbenzene	mg/l	0.0512	0.0485	102.	80-116	5.54	20	WG517835
Toluene	mg/l	0.0488	0.0454	98.0	79-112	7.19	20	WG517835
Total Xylene	mg/l	0.149	0.141	99.0	84-118	5.16	20	WG517835
a,a,a-Trifluorotoluene(PID)				107.0	55-122			WG517835
Benzene	mg/l	0.0545	0.0522	109.	79-114	4.35	20	WG518010
Ethylbenzene	mg/l	0.0551	0.0526	110.	80-116	4.82	20	WG518010
Toluene	mg/l	0.0536	0.0518	107.	79-112	3.38	20	WG518010
Total Xylene	mg/l	0.159	0.152	106.	84-118	4.97	20	WG518010
a,a,a-Trifluorotoluene(PID)				106.6	55-122			WG518010

Matrix Spike

Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Benzene	mg/l	0.0452	0	.05	90.4	35-147	L497858-09	WG517835
Ethylbenzene	mg/l	0.0496	0	.05	99.2	39-141	L497858-09	WG517835
Toluene	mg/l	0.0473	0	.05	94.6	35-148	L497858-09	WG517835
Total Xylene	mg/l	0.145	0	.15	97.0	33-151	L497858-09	WG517835
a,a,a-Trifluorotoluene(PID)					105.3	55-122		WG517835
Benzene	mg/l	0.0525	0	.05	105.	35-147	L497956-02	WG518010
Ethylbenzene	mg/l	0.0528	0	.05	106.	39-141	L497956-02	WG518010
Toluene	mg/l	0.0520	0	.05	104.	35-148	L497956-02	WG518010
Total Xylene	mg/l	0.152	0	.15	101.	33-151	L497956-02	WG518010

* 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
James McDaniel
382 Road 3100

Aztec, NM 87410

Quality Assurance Report
Level II

L497900

January 21, 2011

Analyte	Units	Matrix Spike MSD	Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
a,a,a-Trifluorotoluene(PID)				107.1	55-122				

Analyte	Units	Matrix Spike MSD	Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Benzene	mg/l	0.0458	0.0452	91.6	35-147	1.37	20	L497858-09	WG517835
Ethylbenzene	mg/l	0.0499	0.0496	99.8	39-141	0.620	20	L497858-09	WG517835
Toluene	mg/l	0.0473	0.0473	94.6	35-148	0.0200	20	L497858-09	WG517835
Total Xylene	mg/l	0.144	0.145	95.9	33-151	1.10	20	L497858-09	WG517835
a,a,a-Trifluorotoluene(PID)				106.4	55-122				WG517835
Benzene	mg/l	0.0578	0.0525	116.	35-147	9.60	20	L497956-02	WG518010
Ethylbenzene	mg/l	0.0593	0.0528	119.	39-141	11.7	20	L497956-02	WG518010
Toluene	mg/l	0.0577	0.0520	115.	35-148	10.3	20	L497956-02	WG518010
Total Xylene	mg/l	0.172	0.152	115.	33-151	12.4	20	L497956-02	WG518010
a,a,a-Trifluorotoluene(PID)				106.9	55-122				WG518010

Batch number /Run number / Sample number cross reference

WG517835: R1544349: L497900-02
WG518010: R1545509: L497900-01

* * 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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Aztec, NM 87410

Quality Assurance Report
Level II

L497900

January 21, 2011

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.

* ONLY 1 COC PER SITE *

Company Name/Address	Alternate Billing	Analysis/Container/Preservative	Chain of Custody
XTO Energy, Inc. **382 County Road 3100** **Aztec, NM 87410**	~~XTORNM0318105~~ ~~XTORNM0318105~~ XTORNM081910S Report to: James McDaniel E-mail to: James_McDaniel@xtoenergy.com	BTEX, 8021 NON-Preserved	Page 1 of 1 **F047** Prepared by: **ENVIRONMENTAL Science corp** 12065 Lebanon Road Mt. Juliet TN 37122 Phone (615)758-5858 Phone (800) 767-5859 FAX (615)758-5859

Project Description: (Well Name) FEDERAL H #1	City/State Collected: FARMINGTON, NM		
PHONE: 505-333-3701 FAX:	Client Project No.: XTO1002	Lab Project #	
Collected by: ~~James McDaniel~~ Brook Herb	Site/Facility ID# (Well Name) FEDERAL H #1	P.O.#	CoCode (lab use only): XTORNM Template/Prelogin
Collected by (signature):	Rush? (Lab MUST be Notified) _____Next Day.....100% _____Two Day.....50% _____Three Day.....25%	Date Results Needed Email?___No_X__Yes FAX?___No___Yes	No of Cntrs
Packed on Ice N__ (Y)			Shipped Via: Fed Ex

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No of Cntrs	BTEX, 8021 NON-Preserved	Remarks/contaminant	Sample # (lab only)
Federal MW-1	Grab	GW	N/A	1/18/11	1228	2	✓		L497900-01
Federal MW-2	Grab	GW	N/A	1/18/11	1128	2	✓		02

*Matrix: SS-Soil/Solid GW-Groundwater WW-Wastewater DW-Drinking Water OT- Other_____ pH_____ Temp_____

Remarks: NON-Preserved VOA's 4341 9815 610 Flow_____ Other_____

Relinquisher by:(Signature)	Date: 1/18/11	Time: 1330	Received by:(Signature)	Samples returned via: FedEx_X_ UPS__Other__	Condition (lab use only): OK	
Relinquisher by:(Signature)	Date:	Time:	Received by: (Signature)	Temp: 2.7°C	Bottles Received: 4	CoC SI
Relinquisher by:(Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 1/19/11	Time: 0815	pH Checked: NCF:

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

Report Summary

Friday April 15, 2011

Report Number: L510958
Samples Received: 04/13/11
Client Project:

Description: Federal H 1

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 - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002,NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,
TX - T104704245, OK-9915

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.
Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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

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REPORT OF ANALYSIS

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

April 15, 2011

ESC Sample # : L510958-01

Date Received : April 13, 2011
Description : Federal H 1

Site ID : FEDERAL H1

Sample ID : MW-2

Project # :

Collected By : Julie Linn
Collection Date : 04/12/11 10:52

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.025	0.0025	mg/l	8021B	04/14/11	5
Toluene	BDL	0.025	mg/l	8021B	04/14/11	5
Ethylbenzene	0.062	0.0025	mg/l	8021B	04/14/11	5
Total Xylene	0.10	0.0075	mg/l	8021B	04/14/11	5
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	04/14/11	5

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

.
Reported: 04/15/11 15:50 Printed: 04/15/11 15:50

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REPORT OF ANALYSIS

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

April 15, 2011

ESC Sample # : L510958-02

Site ID : FEDERAL H1

Project # :

Date Received : April 13, 2011
Description : Federal H 1

Sample ID : MW-1

Collected By : Julie Linn
Collection Date : 04/12/11 12:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.027	0.010	mg/l	8021B	04/14/11	20
Toluene	BDL	0.10	mg/l	8021B	04/14/11	20
Ethylbenzene	0.32	0.010	mg/l	8021B	04/14/11	20
Total Xylene	0.70	0.030	mg/l	8021B	04/14/11	20
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021B	04/14/11	20

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

.
Reported: 04/15/11 15:50 Printed: 04/15/11 15:50

Summary of Remarks For Samples Printed
04/15/11 at 15:50:48

TSR Signing Reports: 288
R5 - Desired TAT

drywt

Sample: L510958-01 Account: XTORNM Received: 04/13/11 09:00 Due Date: 04/20/11 00:00 RPT Date: 04/15/11 15:50

Sample: L510958-02 Account: XTORNM Received: 04/13/11 09:00 Due Date: 04/20/11 00:00 RPT Date: 04/15/11 15:50

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XTO Energy - San Juan Division
James McDaniel
382 Road 3100

Aztec, NM 87410

Quality Assurance Report
Level II

L510958

April 15, 2011

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Benzene	< .0005	mg/l			WG530993	04/14/11 12:30
Ethylbenzene	< .0005	mg/l			WG530993	04/14/11 12:30
Toluene	< .005	mg/l			WG530993	04/14/11 12:30
Total Xylene	< .0015	mg/l			WG530993	04/14/11 12:30
a,a,a-Trifluorotoluene(PID)		% Rec.	106.7	55-122	WG530993	04/14/11 12:30

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Benzene	mg/l	.05	0.0488	97.7	79-114	WG530993
Ethylbenzene	mg/l	.05	0.0494	98.8	80-116	WG530993
Toluene	mg/l	.05	0.0482	96.3	79-112	WG530993
Total Xylene	mg/l	.15	0.144	96.1	84-118	WG530993
a,a,a-Trifluorotoluene(PID)				104.4	55-122	WG530993

Laboratory Control Sample Duplicate

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
Benzene	mg/l	0.0489	0.0488	98.0	79-114	0.170	20	WG530993
Ethylbenzene	mg/l	0.0497	0.0494	99.0	80-116	0.620	20	WG530993
Toluene	mg/l	0.0489	0.0482	98.0	79-112	1.43	20	WG530993
Total Xylene	mg/l	0.144	0.144	96.0	84-118	0.110	20	WG530993
a,a,a-Trifluorotoluene(PID)				107.0	55-122			WG530993

Matrix Spike

Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Benzene	mg/l	0.0495	0.000800	.05	97.5	35-147	L511038-03	WG530993
Ethylbenzene	mg/l	0.0492	0	.05	98.5	39-141	L511038-03	WG530993
Toluene	mg/l	0.0489	0	.05	97.8	35-148	L511038-03	WG530993
Total Xylene	mg/l	0.144	0	.15	95.9	33-151	L511038-03	WG530993
a,a,a-Trifluorotoluene(PID)					105.3	55-122		WG530993

Matrix Spike Duplicate

Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Benzene	mg/l	0.0511	0.0495	101.	35-147	3.20	20	L511038-03	WG530993
Ethylbenzene	mg/l	0.0510	0.0492	102.	39-141	3.57	20	L511038-03	WG530993
Toluene	mg/l	0.0516	0.0489	103.	35-148	5.24	20	L511038-03	WG530993
Total Xylene	mg/l	0.149	0.144	99.6	33-151	3.78	20	L511038-03	WG530993
a,a,a-Trifluorotoluene(PID)				105.7	55-122				WG530993

Batch number /Run number / Sample number cross reference

WG530993: R1651009: L510958-01 02

* * 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

L510958

April 15, 2011

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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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.

G017

Chain of Custody
Page 1 of 1

Company Name/Address	Alternate Billing
XTO Energy, Inc. **382 County Road 3100** **Aztec, NM 87410**	XTORNM031810S Report to: James McDaniel E-mail to: james_mcdaniel@xtoenergy.com

Prepared by:

ENVIRONMENTAL Science corp
12065 Lebanon Road
Mt. Juliet TN 37122
Phone (615)758-5858
Phone (800) 767-5859
FAX (615)758-5859

Project Description: FEDERAL H #1	City/State Collected: Farmington, NM
PHONE: 505-333-3701 FAX:	Client Project No. —	Lab Project #
Collected by: Julie Linn	Site/Facility ID# FEDERAL H #1	P.O.#
Collected by(signature): Julie Linn Packed on Ice N__ Y X	Rush? (Lab MUST be Notified) _____Next Day.....100% _____Two Day.....50% _____Three Day.....25%	Date Results Needed Email? No X Yes FAX? No Yes

CoCode (lab use only)
XTORNM
Template/Prelogin
Shipped Via: Fed Ex

Sample ID	Comp/Grab	Matrix	Depth	Date	Time	No of Cntrs	BTEX 8021B (NON-Preserved)	Remarks/contaminant	Sample # (lab only)
MW-2	Grab	GW	N/A	4/12/11	1052	3	X		L510958-01
MW-1	Grab	GW	N/A	4/12/11	1200	3	X		02

Matrix: SS-Soil/Solid GW-Groundwater WW-Wastewater DW-Drinking Water OT- Other_____

pH_____ Temp_____

Remarks: "ONLY 1 COC Per Site!!"

Flow_____ Other_____

Relinquisher by:(Signature)	Date:	Time:	Received by:(Signature)	Samples returned via: FedEx_X_ UPS__Other__	Condition (lab use only)
Julie Linn	4/12/11	1530		4134 1081 4 1685	OK
Relinquisher by:(Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.4 / Bottles Received: 6V	
Relinquisher by:(Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 4/13/11 / Time: 0900	pH Checked: / NCF:

Gulf Coast ACCUTEST LABORATORIES

08/29/11

Technical Report for

LT Environmental

LT: XTO Energy

Federal H #1,Farmington NM

Accutest Job Number: T83904

Sampling Date: 08/09/11

Report to:

LT Environmental
2243 Main Ave S.
Durango, CO 87301
jlinn@ltenv.com

ATTN: Julie Linn

Total number of pages in report: **17**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Paul K Canevaro

Paul Canevaro
Laboratory Director

Client Service contact: Georgia Jones 713-271-4700

Certifications: TX (T104704220-10-3) AR (88-0756) AZ (AZ0769) FL (E87628) KS (E-10366) LA (85695/04004) OK (9103)

Sections: 1 2 3 4

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Accutest Laboratories

Sample Summary

LT Environmental

Job No: T83904

LT: XTO Energy
Project No: Federal H #1,Farmington NM

Sample Number	Collected Date	Time By	Received	Matrix Code	Matrix Type	Client Sample ID
T83904-1	08/09/11	16:05	08/10/11	AQ	Ground Water	MW-1
T83904-2	08/09/11	15:32	08/10/11	AQ	Ground Water	MW-2

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	T83904-1	**Date Sampled:**	08/09/11
Matrix:	AQ - Ground Water	**Date Received:**	08/10/11
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	LT: XTO Energy		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	TT000919.D	2	08/12/11	WV	n/a	n/a	GTT39
Run #2	TT000959.D	2	08/15/11	WV	n/a	n/a	GTT40

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	20.8	2.0	ug/l	
108-88-3	Toluene	21.0	2.0	ug/l	
100-41-4	Ethylbenzene	257	2.0	ug/l	
1330-20-7	Xylenes (total)	444	6.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	272% [a]	263% [a]	58-125%
98-08-8	aaa-Trifluorotoluene	98%	97%	73-139%

(a) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-2		
Lab Sample ID:	T83904-2	**Date Sampled:**	08/09/11
Matrix:	AQ - Ground Water	**Date Received:**	08/10/11
Method:	SW846 8021B	**Percent Solids:**	n/a
Project:	LT: XTO Energy		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	TT000960.D	1	08/15/11	WV	n/a	n/a	GTT40
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

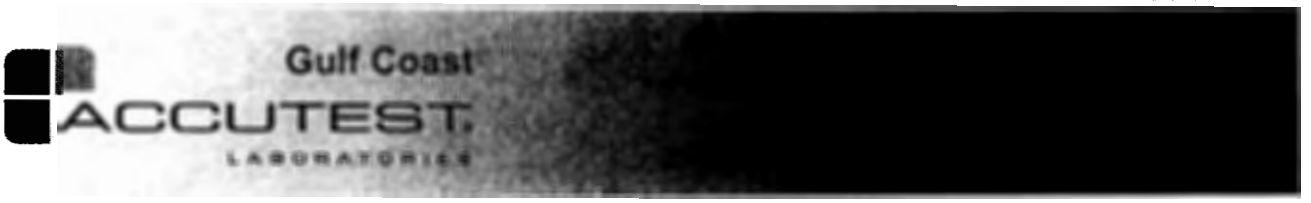
Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	4.0	1.0	ug/l	
108-88-3	Toluene [a]	ND	1.0	ug/l	
100-41-4	Ethylbenzene	9.8	1.0	ug/l	
1330-20-7	Xylenes (total)	33.2	3.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	109%		58-125%
98-08-8	aaa-Trifluorotoluene	98%		73-139%

(a) More than 40% RPD for detected concentrations between two GC columns.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

T83904

Company Name/Address	Alternate Billing	Analysis/Container/Preservative	Chain of Custody
XTO Energy, Inc. **382 County Road 3100** **Aztec, NM 87410**	XTORNM031810S Report to: James McDaniel E-mail to: james_mcdaniel@xtoenergy.com		Page 1 of 1 Prepared by: ENVIRONMENTAL Science corp 12065 Lebanon Road Mt. Juliet TN 37122 Phone (615)758-5858 Phone (800) 767-5859 FAX (615)758-5859

Project Description: Federal H#1	City/State Collected: Farmington, NM		
PHONE: 505-333-3701 FAX:	Client Project No.	Lab Project #	
Collected by: Brooke Herb	Site/Facility ID# federal H#1	P.O.#	CoCode (lab use only) XTORNM Template/Prelogin Shipped Via: Fed Ex
Collected by(signature): Brooke Herb Packed on Ice N__ Y_X	Rush? (Lab MUST be Notified) _____Next Day.....100% _____Two Day.....50% _____Three Day.....25%	Date Results Needed Email?___No_X__Yes FAX?___No___Yes	No of Cntrs

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	Cntrs	BTEX 8021	Remarks/contaminant	Sample # (lab only)
MW-1	Grab	GW		8/9/11	1605	3	X		
MW-2	Grab	GW		8/9/11	1532	3	X		

*Matrix: SS-Soil/Solid GW-Groundwater WW-Wastewater DW-Drinking Water OT- Other_____ pH_____ Temp 5.1

Remarks: "ONLY 1 COC Per Site!!" Flow_____ Other_____

Relinquisher by:(Signature)	Date:	Time:	Received by:(Signature)	Samples returned via: FedEx_X_ UPS__Other__		Condition (lab use only)
Brooke Herb	8/9/11	1900	Fedex			
Relinquisher by:(Signature) Fedex	Date: 8/10/11	Time: 915	Received by: (Signature)	Temp:	Bottles Received:	
Relinquisher by:(Signature)	Date:	Time:	Received for lab by: (Signature)	Date:	Time:	pH Checked: NCF:

T83904: Chain of Custody
Page 1 of 3

ACCUTEST LABORATORIES

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: T83904 **Client:** XTO ENERGY **Project:** FEDERAL H#1

Date / Time Received: 8/10/2011 **Delivery Method:** **Airbill #'s:** 854263473292

No. Coolers: 1 **Therm ID:** IRGUN4; **Temp Adjustment Factor:** -0.1;

Cooler Temps (Initial/Adjusted): #1: (5.2/5.1);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		

Quality Control Preservation	Y	or	N	N/A	WTB	STB
1. Trip Blank present / cooler:	☐		☑	☐	☐	☐
2. Trip Blank listed on COC:	☐		☑	☐		
3. Samples preserved properly:	☑		☐			
4. VOCs headspace free:	☑		☐	☐		

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

6/10/11

Accutest Laboratories
V:713.271.4700

10165 Herwin Drive
F: 713.271.4770

Houston, TX 77036
www/accutest.com

T83904: Chain of Custody
Page 2 of 3

ACCUTEST LABORATORIES

Sample Receipt Log

Job #: T83904 **Date / Time Received:** 8/10/2011 9:15:00 AM **Initials:** VG

Client: XTO ENERGY

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	T83904-1	40 ml	1	VR	N/P	Note #2 - Preservative check not applicable.	IRGUN4	5.2	-0.1	5.1
1	T83904-1	40 ml	2	VR	N/P	Note #2 - Preservative check not applicable.	IRGUN4	5.2	-0.1	5.1
1	T83904-1	40 ml	3	VR	N/P	Note #2 - Preservative check not applicable.	IRGUN4	5.2	-0.1	5.1
1	T83904-2	40 ml	1	VR	N/P	Note #2 - Preservative check not applicable.	IRGUN4	5.2	-0.1	5.1
1	T83904-2	40 ml	2	VR	N/P	Note #2 - Preservative check not applicable.	IRGUN4	5.2	-0.1	5.1
1	T83904-2	40 ml	3	VR	N/P	Note #2 - Preservative check not applicable.	IRGUN4	5.2	-0.1	5.1

T83904: Chain of Custody
Page 3 of 3

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: T83904
Account: LTENCOD LT Environmental
Project: LT: XTO Energy

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GTT39-MB	TT000905.D	1	08/12/11	WV	n/a	n/a	GTT39

The QC reported here applies to the following samples: **Method:** SW846 8021B

T83904-1

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	90%	58-125%
98-08-8	aaa-Trifluorotoluene	93%	73-139%

Method Blank Summary

Job Number: T83904
Account: LTENCOD LT Environmental
Project: LT: XTO Energy

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GTT40-MB	TT000941.D	1	08/15/11	WV	n/a	n/a	GTT40

The QC reported here applies to the following samples: **Method:** SW846 8021B

T83904-1, T83904-2

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	92%	58-125%
98-08-8	aaa-Trifluorotoluene	95%	73-139%

Blank Spike Summary

Job Number: T83904
Account: LTENCOD LT Environmental
Project: LT: XTO Energy

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GTT39-BS	TT000904.D	1	08/12/11	WV	n/a	n/a	GTT39

The QC reported here applies to the following samples: **Method:** SW846 8021B

T83904-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	18.0	90	86-121
100-41-4	Ethylbenzene	20	18.2	91	81-116
108-88-3	Toluene	20	18.2	91	87-117
1330-20-7	Xylenes (total)	60	55.0	92	85-115

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	91%	58-125%
98-08-8	aaa-Trifluorotoluene	93%	73-139%

Blank Spike Summary

Job Number: T83904
Account: LTENCOD LT Environmental
Project: LT: XTO Energy

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GTT40-BS	TT000940.D	1	08/15/11	WV	n/a	n/a	GTT40

The QC reported here applies to the following samples: **Method:** SW846 8021B

T83904-1, T83904-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	18.9	95	86-121
100-41-4	Ethylbenzene	20	18.9	95	81-116
108-88-3	Toluene	20	18.9	95	87-117
1330-20-7	Xylenes (total)	60	56.9	95	85-115

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	92%	58-125%
98-08-8	aaa-Trifluorotoluene	94%	73-139%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T83904
Account: LTENCOD LT Environmental
Project: LT: XTO Energy

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T83996-4MS	TT000910.D	1	08/12/11	WV	n/a	n/a	GTT39
T83996-4MSD	TT000911.D	1	08/12/11	WV	n/a	n/a	GTT39
T83996-4	TT000912.D	1	08/12/11	WV	n/a	n/a	GTT39
T83996-4	TT000931.D	20	08/12/11	WV	n/a	n/a	GTT39

The QC reported here applies to the following samples: **Method:** SW846 8021B

T83904-1

CAS No.	Compound	T83996-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	40.2		20	58.3	91	58.3	91	0	86-121/19
100-41-4	Ethylbenzene	1150 [b]		20	1170	100	1180	150* [a]	1	81-116/14
108-88-3	Toluene	29.7		20	49.0	97	49.3	98	1	87-117/16
1330-20-7	Xylenes (total)	556 [b]		60	637	135* [a]	643	145* [a]	1	85-115/12

CAS No.	Surrogate Recoveries	MS	MSD	T83996-4	T83996-4	Limits
460-00-4	4-Bromofluorobenzene	499%*	503%*	515%* [c]	111%	58-125%
98-08-8	aaa-Trifluorotoluene	283%*	279%*	274%* [c]	103%	73-139%

(a) Outside control limits due to high level in sample relative to spike amount.
(b) Result is from Run #2.
(c) Outside control limits due to matrix interference. Confirmed by reanalysis.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T83904
Account: LTENCOD LT Environmental
Project: LT: XTO Energy

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T84176-1MS	TT000943.D	1	08/15/11	WV	n/a	n/a	GTT40
T84176-1MSD	TT000944.D	1	08/15/11	WV	n/a	n/a	GTT40
T84176-1	TT000942.D	1	08/15/11	WV	n/a	n/a	GTT40
T84176-1	TT000948.D	20	08/15/11	WV	n/a	n/a	GTT40

The QC reported here applies to the following samples: **Method:** SW846 8021B

T83904-1, T83904-2

CAS No.	Compound	T84176-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	2010 [b]		20	1840	-850* [a]	1800	-1050* [a]	2	86-121/19
100-41-4	Ethylbenzene	22.2		20	42.5	102	43.9	109	3	81-116/14
108-88-3	Toluene	21.5		20	40.4	95	39.0	88	4	87-117/16
1330-20-7	Xylenes (total)	1280 [b]		60	1420	233* [a]	1390	183* [a]	2	85-115/12

CAS No.	Surrogate Recoveries	MS	MSD	T84176-1	T84176-1	Limits
460-00-4	4-Bromofluorobenzene	143%*	166%*	143%* [c]	99%	58-125%
98-08-8	aaa-Trifluorotoluene	124%	122%	127%	99%	73-139%

(a) Outside control limits due to high level in sample relative to spike amount.
(b) Result is from Run #2.
(c) Outside control limits due to matrix interference. Confirmed by reanalysis.

ESC
L·A·B S·C·I·E·N·C·E·S
YOUR LAB OF CHOICE

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 Road 3100
Aztec, NM 87410

Report Summary

Wednesday November 16, 2011

Report Number: L546125
Samples Received: 11/10/11
Client Project:

Description: FEDERAL H 1

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 - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002,NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,
TX - T104704245, OK-9915, PA - 68-02979

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.
Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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

ESC
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Est. 1970

REPORT OF ANALYSIS

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

November 16, 2011

ESC Sample # : L546125-01

Site ID : FEDERAL H 1

Project # :

Date Received : November 10, 2011
Description : FEDERAL H 1

Sample ID : MW-1

Collected By : Brooke Herb
Collection Date : 11/09/11 15:10

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.017	0.0050	mg/l	8021B	11/15/11	10
Toluene	BDL	0.25	mg/l	8021B	11/12/11	50
Ethylbenzene	0.24	0.025	mg/l	8021B	11/12/11	50
Total Xylene	0.39	0.075	mg/l	8021B	11/12/11	50
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	93.7		% Rec.	8021B	11/12/11	50

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

.
Reported: 11/16/11 09:41 Printed: 11/16/11 09:41

ESC
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Mt. Juliet, TN 37122
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Est. 1970

REPORT OF ANALYSIS

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

November 16, 2011

ESC Sample # : L546125-02

Date Received : November 10, 2011
Description : FEDERAL H 1

Site ID : FEDERAL H 1

Sample ID : MW-2

Project # :

Collected By : Brooke Herb
Collection Date : 11/09/11 14:42

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.026	0.00050	mg/l	8021B	11/12/11	1
Toluene	BDL	0.0050	mg/l	8021B	11/12/11	1
Ethylbenzene	0.16	0.00050	mg/l	8021B	11/12/11	1
Total Xylene	0.16	0.0015	mg/l	8021B	11/12/11	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	89.5		% Rec.	8021B	11/12/11	1

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

.
Reported: 11/16/11 09:41 Printed: 11/16/11 09:41

Summary of Remarks For Samples Printed
11/16/11 at 09:41:33

TSR Signing Reports: 288
R5 - Desired TAT

drywt

Sample: L546125-01 Account: XTORNM Received: 11/10/11 09:00 Due Date: 11/17/11 00:00 RPT Date: 11/16/11 09:41

Sample: L546125-02 Account: XTORNM Received: 11/10/11 09:00 Due Date: 11/17/11 00:00 RPT Date: 11/16/11 09:41

ESC LAB SCIENCES
YOUR LAB OF CHOICE

12065 Lebanon Rd.
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Tax I.D. 62-0814289

Est. 1970

XTO Energy - San Juan Division
James McDaniel
382 Road 3100

Aztec, NM 87410

Quality Assurance Report
Level II

L546125

November 16, 2011

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Benzene	< .0005	mg/l			WG565205	11/11/11 22:37
Ethylbenzene	< .0005	mg/l			WG565205	11/11/11 22:37
Toluene	< .005	mg/l			WG565205	11/11/11 22:37
Total Xylene	< .0015	mg/l			WG565205	11/11/11 22:37
a,a,a-Trifluorotoluene(PID)		% Rec.	94.33	55-122	WG565205	11/11/11 22:37
Benzene	< .0005	mg/l			WG565661	11/15/11 14:54
a,a,a-Trifluorotoluene(PID)		% Rec.	97.43	55-122	WG565661	11/15/11 14:54

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Benzene	mg/l	.05	0.0428	85.5	79-114	WG565205
Ethylbenzene	mg/l	.05	0.0468	93.6	80-116	WG565205
Toluene	mg/l	.05	0.0460	91.9	79-112	WG565205
Total Xylene	mg/l	.15	0.139	92.7	84-118	WG565205
a,a,a-Trifluorotoluene(PID)				91.58	55-122	WG565205
Benzene	mg/l	.05	0.0417	83.4	79-114	WG565661
a,a,a-Trifluorotoluene(PID)				101.0	55-122	WG565661

Laboratory Control Sample Duplicate

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
Benzene	mg/l	0.0436	0.0428	87.0	79-114	2.03	20	WG565205
Ethylbenzene	mg/l	0.0485	0.0468	97.0	80-116	3.61	20	WG565205
Toluene	mg/l	0.0465	0.0460	93.0	79-112	1.15	20	WG565205
Total Xylene	mg/l	0.143	0.139	95.0	84-118	2.70	20	WG565205
a,a,a-Trifluorotoluene(PID)				91.83	55-122			WG565205
Benzene	mg/l	0.0420	0.0417	84.0	79-114	0.570	20	WG565661
a,a,a-Trifluorotoluene(PID)				97.73	55-122			WG565661

Matrix Spike

Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Benzene	mg/l	0.0443	0.0260	.05	36.6	35-147	L546128-01	WG565205
Ethylbenzene	mg/l	0.0492	0.00230	.05	93.8	39-141	L546128-01	WG565205
Toluene	mg/l	0.0474	0.0160	.05	62.9	35-148	L546128-01	WG565205
Total Xylene	mg/l	0.148	0.0200	.15	85.1	33-151	L546128-01	WG565205
a,a,a-Trifluorotoluene(PID)					94.16	55-122		WG565205
Benzene	mg/l	0.0401	0.000700	.05	78.8	35-147	L546585-32	WG565661
a,a,a-Trifluorotoluene(PID)					98.84	55-122		WG565661

Matrix Spike Duplicate

Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Benzene	mg/l	0.0420	0.0443	32.0*	35-147	5.34	20	L546128-01	WG565205
Ethylbenzene	mg/l	0.0465	0.0492	88.5	39-141	5.57	20	L546128-01	WG565205
Toluene	mg/l	0.0444	0.0474	56.8	35-148	6.60	20	L546128-01	WG565205
Total Xylene	mg/l	0.139	0.148	79.1	33-151	6.21	20	L546128-01	WG565205
a,a,a-Trifluorotoluene(PID)				92.47	55-122				WG565205

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

ESC
L·A·B S·C·I·E·N·C·E·S
YOUR LAB OF CHOICE

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

XTO Energy - San Juan Division
James McDaniel
382 Road 3100

Aztec, NM 87410

Quality Assurance Report
Level II

L546125

November 16, 2011

Analyte	Units	Matrix Spike MSD	Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Benzene	mg/l	0.0417	0.0401	82.0	35-147	3.99	20	L546585-32	WG565661
a,a,a-Trifluorotoluene(PID)				101.4	55-122				WG565661

Batch number /Run number / Sample number cross reference

WG565205: R1931252: L546125-01 02
WG565661: R1932732: L546125-01

* * 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
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Quality Assurance Report
Level II

L546125

November 16, 2011

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.

F227

Chain of Custody
Page 1 of 1

Company Name/Address

XTO Energy, Inc.
382 County Road 3100
Aztec, NM 87410

Alternate Billing

XTORNM031810S

Report to: James McDaniel

E-mail to: james_mcdaniel@xtoenergy.com

Analysis/Container/Preservative

Prepared by:

ENVIRONMENTAL
Science corp
12065 Lebanon Road
Mt. Juliet TN 37122
Phone (615)758-5858
Phone (800) 767-5859
FAX (615)758-5859

Project Description: Federal H #1

City/State Collected: Farmington, NM

PHONE: 505-333-3701
FAX:

Client Project No.

Lab Project # j

Collected by: Brooke Herb

Site/Facility ID# Federal H #1

P.O.#

Collected by(signature): Brooke Herb

Packed on Ice N__ Y X

Rush? (Lab MUST be Notified)
_____Next Day.....100%
_____Two Day.....50%
_____Three Day.....25%

Date Results Needed

Email?___No_X__Yes
FAX?___No___Yes

CoCode (lab use only)
XTORNM
Template/Prelogin

Shipped Via: Fed Ex

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No of Cntrs	BTEX 8021	Remarks/contaminant	Sample # (lab only)
MW-1	G	GW		11/9/11	15:10	3	✓	non-preserved	654612541
MW-2	G	GW		11/9/11	14:42	3	✓	non-preserved	02

*Matrix: SS-Soil/Solid GW-Groundwater WW-Wastewater DW-Drinking Water OT- Other_____

pH_____ Temp_____

Remarks: "ONLY 1 COC Per Site!!"

Flow_____ Other_____

Relinquisher by:(Signature)	Date:	Time:	Received by:(Signature)	Samples returned via: FedEx_X_ UPS__Other__	Condition (lab use only)
Brooke Herb	11/9/11	1600		454198165 7163	OK
Relinquisher by:(Signature	Date:	Time:	Received by: (Signature)	Temp: 2.1°c / Bottles Received: 6V	
Relinquisher by:(Signature	Date:	Time:	Received for lab by: (Signature) Kim Wilson	Date: 11/10/11 / Time: 0900	pH Checked: / NCF:

Attachment 3

Field Notes

SAMPLING PURGE LOG

Project Name: XTO Groundwater | Location: Federal H #1 | Well No: MW-1
Client: XTO Energy, Inc. | Date: 1/18/2011 | Time: 11:43
Project Manager: Julie Linn | Sampler's Name: Brooke Herb

Measuring Point: TOC | Depth to Water: 30.56 ft | Depth to Product: NA ft
Well Diameter: 2" | Total Depth: 38 ft | Product Thickness: NA ft
Water Column Height: 7.44 ft

Sampling Method: ☐ Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other _____
☑ Bottom Valve Bailer ☐ Double Check Valve Bailer

Criteria: ☑ 3 to 5 Casing Volumes of Water Removal ☑ Stabilization of Indicator Parameters ☐ Other _____

Water Volume in Well			
Gallons of water per foot	Feet of water in well	Gallons of water in well	3 casing volumes to be removed
0.1631	7.44	1.213464	3.64

Time (military)	pH (su)	EC (ms)	Temp (°C)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. Gallons	Comments/Flow Rate
11:58	6.72	4.33	14.9				0.25	Clear, very strong HC odor
11:59	6.74	4.35	14.7				0.5	no change
12:00	6.72	4.57	16.0				0.75	gray to clear with black specks, slighlty cloudy, strong HC odor
12:02	6.73	4.57	15.5				1	more turbid
12:04	6.70	4.57	15.4				1.5	no change
12:08	6.74	4.49	15.3				2	no change
12:12	6.72	4.41	15.1				2.5	no change
12:14	6.71	4.54	15.6				3	slightly more turbid
12:16	6.73	4.41	15.3				3.25	no change
12:18	6.69	4.52	15.6				3.5	no change
12:21	6.69	4.46	15.4				3.75	cloudy gray, strong odor
12:23	6.7	4.50	15.5				4	no change
Final: 12:25	6.69	4.46	15.5				4.25	no change

COMMENTS: Replaced old bailing twine.

Instrumentation: ☑ pH Meter ☐ DO Monitor ☑ Conductivity Meter ☑ Temperature Meter ☐ Other _____

Water Disposal: on site sump

Sample ID: MW-1 | Sample Time: 12:28

Analysis Requested: ☑ BTEX ☐ VOCs ☐ Alkalinity ☐ TDS ☐ Cations ☐ Anions ☐ Nitrate ☐ Nitrite ☐ Metals
☐ Other _____

Trip Blank: No | Duplicate Sample: No

SAMPLING PURGE LOG

Project Name: XTO Groundwater | Location: Federal H #1 | Well No: MW-2
Client: XTO Energy, Inc. | Date: 1/18/2011 | Time: 11:00
Project Manager: Julie Linn | Sampler's Name: Brooke Herb

Measuring Point: TOC | Depth to Water: 32.33 ft | Depth to Product: NA ft
Well Diameter: 2" | Total Depth: 38.35 ft | Product Thickness: NA ft
Water Column Height: 6.02 ft

Sampling Method: ☐ Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other _____
☑ Bottom Valve Bailer ☐ Double Check Valve Bailer

Criteria: ☑ 3 to 5 Casing Volumes of Water Removal ☑ Stabilization of Indicator Parameters ☐ Other _____

Water Volume in Well			
Gallons of water per foot	Feet of water in well	Gallons of water in well	3 casing volumes to be removed
0.1631	6.02	0.981862	2.95

Time (military)	pH (su)	EC (ms)	Temp (°C)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. Gallons	Comments/Flow Rate
11:05	6.66	3.67	14.6				0.25	Light gray to clear, very strong HC odor
11:06	6.74	3.67	14.5				0.5	same as above with black specks
11:07	6.76	3.78	15.0				0.75	no change
11:08	6.83	3.83	14.7				1	no change
11:10	6.86	3.83	14.5				1.25	slightly more turbid/ cloudy
11:13	6.85	3.72	14.5				1.75	no change
11:17	6.76	3.76	14.2				2.25	no change
11:19	6.79	3.92	14.5				2.5	no change - bailing down
11:20	6.77	3.83	14.6				2.75	no change
11:22	6.77	3.85	14.5				3	no change
Final: 11:24	6.78	3.86	14.6				3.25	no change

COMMENTS:

Instrumentation: ☑ pH Meter ☐ DO Monitor ☑ Conductivity Meter ☑ Temperature Meter ☐ Other _____

Water Disposal: on site sump

Sample ID: MW-2 | Sample Time: 11:28

Analysis Requested: ☑ BTEX ☐ VOCs ☐ Alkalinity ☐ TDS ☐ Cations ☐ Anions ☐ Nitrate ☐ Nitrite ☐ Metals
☐ Other _____

Trip Blank: No | Duplicate Sample: No

SAMPLING PURGE LOG

Project Name: XTO Groundwater
Client: XTO Energy, Inc.
Project Manager: Julie Linn
Location: Federal H #1
Date: 4/12/2011
Sampler's Name: J. Linn/M. Spearman
Well No: MW-1
Time: 11:07

Measuring Point: TOC
Well Diameter: 2"
Depth to Water: 30.83 ft
Total Depth: 38.1 ft
Water Column Height: 7.27 ft
Depth to Product: NA ft
Product Thickness: NA ft

Sampling Method: ☐ Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other _____
☑ Bottom Valve Bailer ☐ Double Check Valve Bailer

Criteria: ☑ 3 to 5 Casing Volumes of Water Removal ☑ Stabilization of Indicator Parameters ☐ Other _____

Water Volume in Well			
Gallons of water per foot	Feet of water in well	Gallons of water in well	3 casing volumes to be removed
0.1631	7.27	1.185737	3.56

Time (military)	pH (su)	EC (ms)	Temp (°C)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. Gallons	Comments/Flow Rate
11:14	6.76	4.61	15.3				0.25	clear, H2S odor, sheen
11:18	6.81	4.71	15.2				0.5	No change
11:21	6.88	4.77	15.1				0.75	pale orange color, odor
11:25	6.79	4.74	15.0				1	No change
11:30	6.87	4.79	16.6				2	No change
11:38	6.82	4.80	16.5				3	No change
11:42	6.88	4.82	15.7				3.25	darker grey color, odor
11:47	6.70	4.80	15.8				3.5	No change
11:50	6.84	4.82	15.4				3.7	No change
11:55	6.82	4.77	15.1				3.95	No change
11:58	6.81	4.76	15.1				4.2	No change
Final:	6.81	4.76	15.1				4.2	

COMMENTS:

Instrumentation: ☑ pH Meter ☐ DO Monitor ☑ Conductivity Meter ☑ Temperature Meter ☐ Other _____

Water Disposal: on site sump

Sample ID: MW-1
Sample Time: 12:00

Analysis Requested: ☑ BTEX ☐ VOCs ☐ Alkalinity ☐ TDS ☐ Cations ☐ Anions ☐ Nitrate ☐ Nitrite ☐ Metals
☐ Other _____

Trip Blank: No
Duplicate Sample: No

SAMPLING PURGE LOG

Project Name: XTO Groundwater | Location: Federal H #1 | Well No: MW-2
Client: XTO Energy, Inc. | Date: 4/12/2011 | Time: 10:15
Project Manager: Julie Linn | Sampler's Name: J. Linn/M. Spearman

Measuring Point: TOC | Depth to Water: 32.55 ft | Depth to Product: NA ft
Well Diameter: 2" | Total Depth: 38.46 ft | Product Thickness: NA ft
Water Column Height: 5.91 ft

Sampling Method: ☐ Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other _____
☑ Bottom Valve Bailer ☐ Double Check Valve Bailer

Criteria: ☑ 3 to 5 Casing Volumes of Water Removal ☑ Stabilization of Indicator Parameters ☐ Other _____

Water Volume in Well			
Gallons of water per foot	Feet of water in well	Gallons of water in well	3 casing volumes to be removed
0.1631	5.91	0.963921	2.89

Time (military)	pH (su)	EC (ms)	Temp (°C)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. Gallons	Comments/Flow Rate
10:23	6.58	3.94	15.6				0.25	clear, H2S odor
10:25	6.77	3.97	15.2				0.5	no change
10:26	6.63	3.97	15.2				0.75	no change
10:28	6.86	4.00	15.0				1	less odor
10:31	6.83	4.05	14.9				1.5	stronger odor, light grey/brown tint
10:35	6.87	4.06	15.0				2	no change
10:36	6.70	4.04	15.1				2.2	no change
10:38	6.82	4.04	14.9				2.4	no change
10:40	6.73	4.02	15.1				2.6	bailing down
10:42	6.83	4.05	14.8				2.8	bailing down
10:44	6.76	4.04	15.2				3	bailing down
10:46	6.85	4.06	15.1				3.2	bailing down
10:48	6.75	4.04	15.0				3.4	bailing down
Final:	6.75	4.04	15.0				3.4	

COMMENTS:

Instrumentation: ☑ pH Meter ☐ DO Monitor ☑ Conductivity Meter ☑ Temperature Meter ☐ Other _____

Water Disposal: on site sump

Sample ID: MW-2 | Sample Time: 10:52

Analysis Requested: ☑ BTEX ☐ VOCs ☐ Alkalinity ☐ TDS ☐ Cations ☐ Anions ☐ Nitrate ☐ Nitrite ☐ Metals
☐ Other _____

Trip Blank: No | Duplicate Sample: No

SAMPLING PURGE LOG

Project Name: XTO Groundwater | Location: Federal | Well No: MW-1
Client: XTO Energy, Inc. | Date: 8/9/2011 | Time: 15:40
Project Manager: Julie Linn | Sampler's Name: Brooke Herb

Measuring Point: TOC | Depth to Water: 30.92 ft | Depth to Product: NA ft
Well Diameter: 2" | Total Depth: 38 ft | Product Thickness: NA ft
Water Column Height: 7.08 ft

Sampling Method: ☐ Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other
☑ Bottom Valve Bailer ☐ Double Check Valve Bailer

Criteria: ☑ 3 to 5 Casing Volumes of Water Removal ☑ Stabilization of Indicator Parameters ☐ Other

Water Volume in Well			
Gallons of water per foot	Feet of water in well	Gallons of water in well	3 casing volumes to be removed
0.1631	7.08	1.154748	3.46

Time (military)	pH (su)	EC (ms)	Temp (°C)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. Gallons	Comments/Flow Rate
15:45	6.56	4.74	14.0				0.25	Clear, very strong HC odor
15:48	6.58	4.81	18.3				0.50	same as above, with black particles
15:50	6.58	4.87	18.5				0.75	no change
15:51	6.59	4.88	18.3				1.00	light gray
15:53	6.58	4.93	17.8				2.00	no change
15:55	6.57	4.87	17.5				2.50	no change
15:57	6.52	4.90	17.1				2.75	no change
15:59	6.52	4.99	17.2				3.00	no change
16:03	6.52	4.96	17.0				3.25	very minor sheen
16:05	6.50	4.94	17.0				3.50	cloudier
Final:	6.50	4.94	17.0				3.50	

COMMENTS:

Instrumentation: ☑ pH Meter ☐ DO Monitor ☑ Conductivity Meter ☑ Temperature Meter ☐ Other

Water Disposal: on site sump

Sample ID: MW-1 | Sample Time: 16:05

Analysis Requested: ☑ BTEX ☐ VOCs ☐ Alkalinity ☐ TDS ☐ Cations ☐ Anions ☐ Nitrate ☐ Nitrite ☐ Metals
☐ Other

Trip Blank: No | Duplicate Sample: No

SAMPLING PURGE LOG

Project Name: XTO Groundwater | Location: Federal | Well No: MW-2
Client: XTO Energy, Inc. | Date: 8/9/2011 | Time: 15:05
Project Manager: Julie Linn | Sampler's Name: Brooke Herb

Measuring Point: TOC | Depth to Water: 32.7 ft | Depth to Product: NA ft
Well Diameter: 2" | Total Depth: 38.36 ft | Product Thickness: NA ft
Water Column Height: 5.66 ft

Sampling Method: ☐ Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other
☑ Bottom Valve Bailer ☐ Double Check Valve Bailer

Criteria: ☑ 3 to 5 Casing Volumes of Water Removal ☑ Stabilization of Indicator Parameters ☐ Other

Water Volume in Well			
Gallons of water per foot	Feet of water in well	Gallons of water in well	3 casing volumes to be removed
0.1631	5.66	0.923146	2.77

Time (military)	pH (su)	EC (ms)	Temp (°C)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. Gallons	Comments/Flow Rate
15:08	6.54	3.88	18.2				0.25	Clear, very strong HC odor, no sheen
15:09	6.50	3.88	17.8				0.50	no change
15:10	6.56	3.88	17.9				0.75	no change
15:13	6.61	3.99	16.7				1.00	very slight yellow/grey tint
15:15	6.58	3.92	17.3				2.00	slightly cloudier
15:17	6.56	3.97	17.5				2.25	no change
15:20	6.59	3.93	17.4				2.50	no change
15:26	6.57	4.00	17.3				2.75	no change
15:30	6.59	4.01	17.2				3.00	no change
Final:	6.59	4.01	17.2				3.00	

COMMENTS:

Instrumentation: ☑ pH Meter ☐ DO Monitor ☑ Conductivity Meter ☑ Temperature Meter ☐ Other

Water Disposal: on site sump

Sample ID: MW-2 | Sample Time: 15:32

Analysis Requested: ☑ BTEX ☐ VOCs ☐ Alkalinity ☐ TDS ☐ Cations ☐ Anions ☐ Nitrate ☐ Nitrite ☐ Metals
☐ Other

Trip Blank: No | Duplicate Sample: No

SAMPLING PURGE LOG

Project Name: XTO Groundwater | Location: Federal | Well No: MW-1
Client: XTO Energy, Inc. | Date: 11/9/2011 | Time: 14:49 PM
Project Manager: Julie Linn | Sampler's Name: Brooke Herb

Measuring Point: TOC | Depth to Water: 30.46 ft | Depth to Product: NA ft
Well Diameter: 2" | Total Depth: 38.05 ft | Product Thickness: NA ft
Water Column Height: 7.59 ft

Sampling Method: ☐ Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other
☑ Bottom Valve Bailer ☐ Double Check Valve Bailer

Criteria: ☑ 3 to 5 Casing Volumes of Water Removal ☑ Stabilization of Indicator Parameters ☐ Other

Water Volume in Well			
Gallons of water per foot	Feet of water in well	Gallons of water in well	3 casing volumes to be removed
0.1631	7.59	1.237929	3.71

Time (military)	pH (su)	EC (ms)	Temp (°C)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. Gallons	Comments/Flow Rate
14:51	6.88	5.32	15.3				0.25	Clear, very strong HC odor
14:53	6.91	5.26	15.3				0.50	same as above, with black particles
14:55	6.87	5.42	15.3				0.75	no change
14:57	6.91	5.41	15.2				1.00	no change
14:59	6.86	5.39	15.3				2.00	no change
15:01	6.86	5.36	15.3				2.75	no change
15:02	6.82	5.36	15.3				3.00	no change
15:04	6.80	5.41	15.4				3.25	no change
15:06	6.83	5.38	15.3				3.50	no change
Final: 15:08	6.83	5.40	15.4				3.75	no change

COMMENTS:

Instrumentation: ☑ pH Meter ☐ DO Monitor ☑ Conductivity Meter ☑ Temperature Meter ☐ Other

Water Disposal: on site sump

Sample ID: MW-1 | Sample Time: 15:10

Analysis Requested: ☑ BTEX ☐ VOCs ☐ Alkalinity ☐ TDS ☐ Cations ☐ Anions ☐ Nitrate ☐ Nitrite ☐ Metals
☐ Other

Trip Blank: No | Duplicate Sample: No

SAMPLING PURGE LOG

Project Name: XTO Groundwater | Location: Federal | Well No: MW-2
Client: XTO Energy, Inc. | Date: 11/9/2011 | Time: 14:18
Project Manager: Julie Linn | Sampler's Name: Brooke Herb

Measuring Point: TOC | Depth to Water: 32.28 ft | Depth to Product: NA ft
Well Diameter: 2" | Total Depth: 38.45 ft | Product Thickness: NA ft
Water Column Height: 6.17 ft

Sampling Method: ☐ Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Other
☑ Bottom Valve Bailer ☐ Double Check Valve Bailer

Criteria: ☑ 3 to 5 Casing Volumes of Water Removal ☑ Stabilization of Indicator Parameters ☐ Other

Water Volume in Well			
Gallons of water per foot	Feet of water in well	Gallons of water in well	3 casing volumes to be removed
0.1631	6.17	1.006327	3.02

Time (military)	pH (su)	EC (ms)	Temp (°C)	ORP (millivolts)	D.O. (mg/L)	Turbidity (NTU)	Vol Evac. Gallons	Comments/Flow Rate
14:21	6.68	4.67	15.1				0.25	Clear, very strong HC odor
14:23	6.82	4.80	15.3				0.50	light gray with black particles, HC odor
14:25	6.81	4.89	15.3				0.75	no change
14:30	6.84	4.89	15.3				1.00	no change
14:32	6.78	4.89	15.0				2.00	no change
14:34	6.80	4.89	14.9				2.25	no change
14:36	6.79	4.90	15.0				2.50	no change
14:38	6.81	4.88	15.1				2.75	no change
Final: 14:40	6.79	4.87	14.9				3.00	no change

COMMENTS:

Instrumentation: ☑ pH Meter ☐ DO Monitor ☑ Conductivity Meter ☑ Temperature Meter ☐ Other

Water Disposal: on site sump

Sample ID: MW-2 | Sample Time: 14:42

Analysis Requested: ☑ BTEX ☐ VOCs ☐ Alkalinity ☐ TDS ☐ Cations ☐ Anions ☐ Nitrate ☐ Nitrite ☐ Metals
☐ Other

Trip Blank: No | Duplicate Sample: No

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, June 08, 2011

James McDaniel
XTO Energy
382 County Road 3100
Aztec, NM 87410

TEL: (505) 787-0519
FAX (505) 333-3280

RE: Scott E' Federal #3

Order No.: 1106111

Dear James McDaniel:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 6/2/2011 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag.

All samples are reported as received unless otherwise indicated.

Please do not hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Laboratory Manager

NM Lab # NM9425 NM0901
AZ license # AZ0682

Hall Environmental Analysis Laboratory, Inc.

Date: *08-Jun-11*

CLIENT:	XTO Energy	**Client Sample ID:**	BGT closure comp.
Lab Order:	1106111	**Collection Date:**	6/1/2011 7:58:00 AM
Project:	Scott E' Federal #3	**Date Received:**	6/2/2011
Lab ID:	1106111-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JB**
Diesel Range Organics (DRO)	18	9.7		mg/Kg	1	6/5/2011 7:29:55 PM
Surr: DNOP	98.0	73.4-123		%REC	1	6/5/2011 7:29:55 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/3/2011 4:01:38 PM
Surr: BFB	110	89.7-125		%REC	1	6/3/2011 4:01:38 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.050		mg/Kg	1	6/3/2011 4:01:38 PM
Toluene	ND	0.050		mg/Kg	1	6/3/2011 4:01:38 PM
Ethylbenzene	ND	0.050		mg/Kg	1	6/3/2011 4:01:38 PM
Xylenes, Total	ND	0.099		mg/Kg	1	6/3/2011 4:01:38 PM
Surr: 4-Bromofluorobenzene	107	85.3-139		%REC	1	6/3/2011 4:01:38 PM
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	ND	7.5		mg/Kg	5	6/6/2011 11:50:56 AM
EPA METHOD 418.1: TPH						Analyst: **JB**
Petroleum Hydrocarbons, TR	48	20		mg/Kg	1	6/7/2011

Qualifiers:

*	Value exceeds Maximum Contaminant Level
E	Estimated value
J	Analyte detected below quantitation limits
NC	Non-Chlorinated
PQL	Practical Quantitation Limit
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit
S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

ient: XTO Energy
Project: Scott E' Federal #3 **Work Order:** 1106111

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions											
Sample ID: MB-27061		*MBLK*				Batch ID:	**27061**	Analysis Date:		6/6/2011 10:06:26 AM	
Chloride	ND	mg/Kg	1.5								
Sample ID: LCS-27061		*LCS*				Batch ID:	**27061**	Analysis Date:		6/6/2011 10:23:51 AM	
Chloride	14.31	mg/Kg	1.5	15	0	95.4	90	110			
Method: EPA Method 418.1: TPH											
Sample ID: MB-27069		*MBLK*				Batch ID:	**27069**	Analysis Date:		6/7/2011	
Petroleum Hydrocarbons, TR	ND	mg/Kg	20								
Sample ID: LCS-27069		*LCS*				Batch ID:	**27069**	Analysis Date:		6/7/2011	
Petroleum Hydrocarbons, TR	97.86	mg/Kg	20	100	0	97.9	81.4	118			
Sample ID: LCSD-27069		*LCSD*				Batch ID:	**27069**	Analysis Date:		6/7/2011	
Petroleum Hydrocarbons, TR	100.7	mg/Kg	20	100	0	101	81.4	118	2.82	8.58	
Method: EPA Method 8015B: Diesel Range Organics											
Sample ID: MB-27064		*MBLK*				Batch ID:	**27064**	Analysis Date:		6/5/2011 4:38:19 PM	
Motor Oil Range Organics (MRO)	ND	mg/Kg	50								

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	NC	Non-Chlorinated
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name XTO ENERGY | Date Received: 6/2/2011

Work Order Number 1106111 | Received by: LNM

Checklist completed by: Signature 6/2/11 Date | Sample ID labels checked by: Initials NM

Matrix: | Carrier name: Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		Number of preserved bottles checked for pH:
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	*<2 >12 unless noted below.*
Container/Temp Blank temperature?	**2.0°**	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: XTO

Mailing Address: 382 Road 3100
Aztec, NM 87410

Phone #: 505-787-0519

email or Fax#: james_mcdaniel@xtoenergy.com

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

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: Scott E' Federal #3

Project #: BGT Closure composite

Project Manager: James Mcdaniel

Sampler: Walt Howard

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 110611	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	CHLORIDES				Air Bubbles (Y or N)
6/1	0758	soil	BGT Closure comp.	1 402	Cool	-1	X		X	X								X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
6/1/11	1142	Walt Howard	Christine Walker	6/1/11	1142
6/1/11	1527	Christine Walker		6/2/11	830

Remarks:

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