3R - 412

2007 AGWMR

MAR 2008

XTO ENERGY INC.

ANNUAL GROUNDWATER REPORT

2007

HARE GAS COM I #1
(E) SECTION 23 – T29N – R11W, NMPM
SAN JUAN COUNTY, NEW MEXICO

PREPARED FOR:
MR. GLENN VON GONTEN
NEW MEXICO OIL CONSERVATION DIVISION

January 2008

TABLE OF CONTENTS

2007 XTO GROUNDWATER REPORT

HARE GAS COM I #1

SITE DETAILS

LEGALS - TWN: 29N **RNG:** 11W **SEC:** 23 **UNIT:** E
NMOCD HAZARD RANKING: 20 **LAND TYPE:** FEE

PREVIOUS ACTIVITIES

Excavation: Feb-04 (55 cy) **Monitoring Well:** Mar-04
Additional Monitoring Wells: May-05 **Quarterly Sampling Initiated:** Dec-06

SITE MAP

A site map is presented as Figure 1.

SUMMARY TABLES

A summary of laboratory results from historical and current groundwater monitoring is presented as Table 1. Copies of the laboratory data sheets and associated quality assurance/quality control data for 2006 and 2007 are presented as Attachment 1.

POTENTIOMETRIC SURFACE DIAGRAMS

Field data collected from site monitoring activities indicate a groundwater gradient that trends towards the south with a slight southwest component. Figures 2 - 5 illustrate the estimated groundwater gradients for 2006 and 2007.

ANNUAL GROUNDWATER REMEDIATION REPORTS

The 2006 annual groundwater report was submitted to New Mexico Oil Conservation Division (NMOCD) in February 2007, proposing quarterly sampling of the groundwater monitoring wells, in accordance with the NMOCD approved Groundwater Management Plan.

2007 ACTIVITIES

Quarterly groundwater samples were collected from monitoring wells MW-1, MW-2, and MW-3 during the first, second and third quarters of 2007. Analytical results demonstrate benzene, toluene, ethyl benzene and total xylenes (BTEX) constituents in groundwater are not detectable for four (4) consecutive quarters in 2006 and 2007.

GEOLOGIC LOGS AND WELL COMPLETION DIAGRAMS

Bore/Test Hole Report is presented as Figure 6 representing drilling that occurred on site in October 1999 for MW-1 at the Hare GC B #1E location and is currently being shared with Hare GC I #1. Figure 7 represents drilling that occurred on site in May 2005 for MW-3.

DISPOSITION OF GENERATED WASTES

Waste generated (groundwater) during monitoring well sampling and development was placed in the produced water tank located on the well site.

2007 XTO GROUNDWATER REPORT

CONCLUSIONS

January 1998 XTO Energy Inc. (XTO) acquired the Hare Gas Com I #1. In February 2004, after removal of a 21 barrel steel tank, hydrocarbon impact soil was encountered. After excavation of the underlying pit monitoring well MW-2 was installed at the center of the source area. MW-3 was installed in May 2006 to further delineate the extent of hydrocarbon impact to groundwater.

Groundwater analytical data from MW-1, MW-2, and MW-3 for four (4) consecutive quarters have demonstrated no detectable levels of BTEX constituents and New Mexico Water Quality Control Commission (NMWQCC) standards have been met. The quarterly sampling has confirmed no rebound of BTEX constituents has occurred, therefore, XTO requests closure of this site.

RECOMMENDATIONS

- XTO requests closure of this site.
- Following OCD approval for closure, all monitoring well locations will be abandoned in accordance with the monitoring well abandonment plan.

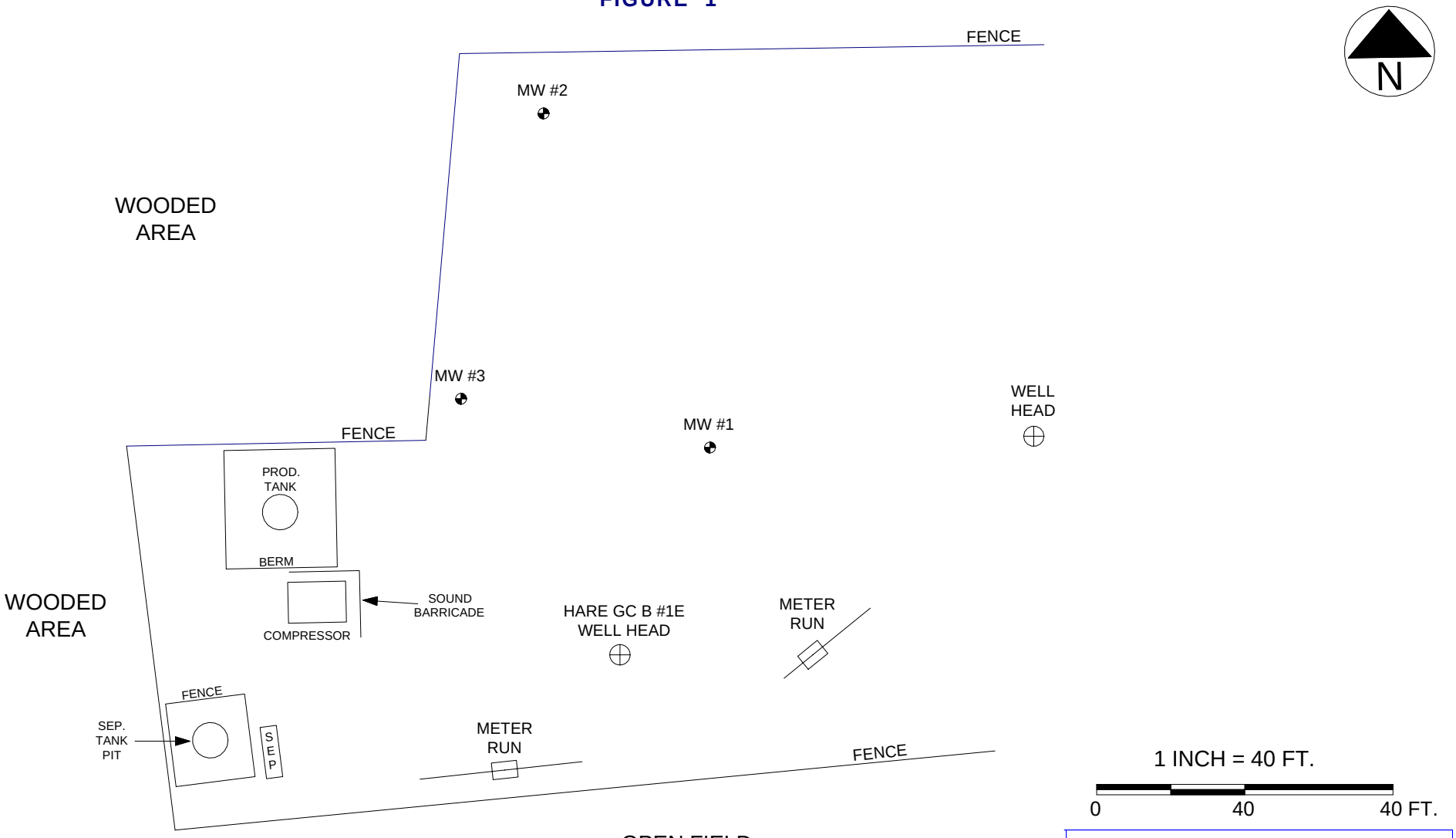
TABLE 1

XTO ENERGY INC. GROUNDWATER LAB RESULTS

HARE GC I #1
UNIT E, SEC. 23, T29N, R11W

					BTEX EPA Method 801 (PPB)			
Sample Date	Monitor Well No.	DTW (ft)	TD (ft)	Product (ft)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylene (ug/L)
7-Dec-06	MW #1	4.83	12.28		ND	ND	ND	ND
27-Mar-07		5.38	13.65		ND	ND	ND	ND
12-Jun-07		4.6	13.65		ND	ND	ND	ND
25-Sep-07		3.31	13.65		ND	ND	ND	ND
30-Mar-04	MW #2				15	35	5.2	58
28-Sep-04					ND	ND	ND	ND
30-Dec-04					ND	ND	ND	ND
24-Mar-05					8.5	ND	ND	ND
28-Jun-05					0.86	ND	ND	ND
7-Dec-06		5	15.16		ND	ND	ND	ND
27-Mar-07		5.72	15.15		ND	ND	ND	ND
12-Jun-07		4.02	15.15		ND	ND	ND	ND
25-Sep-07		3.2	15.15		ND	ND	ND	ND
7-Dec-06	MW #3	5.35	12.46		ND	ND	ND	ND
27-Mar-07		6.83	12.3		ND	ND	ND	ND
12-Jun-07		4.66	12.3		ND	ND	ND	ND
25-Sep-07		3.44	12.3		ND	ND	ND	ND
NMWQCC GROUNDWATER STANDARDS					10	750	750	620

FIGURE 1



MONITOR WELL 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 MAY NOT BE TO SCALE.

XTO ENERGY INC.

HARE GC I #1

SW/4 NW/4 SEC. 23, T29N, R11W

SAN JUAN COUNTY, NEW MEXICO

BLAGG ENGINEERING, INC.

CONSULTING PETROLEUM / RECLAMATION SERVICES

P.O. BOX 87

BLOOMFIELD, NEW MEXICO 87413

PHONE: (505) 632-1199

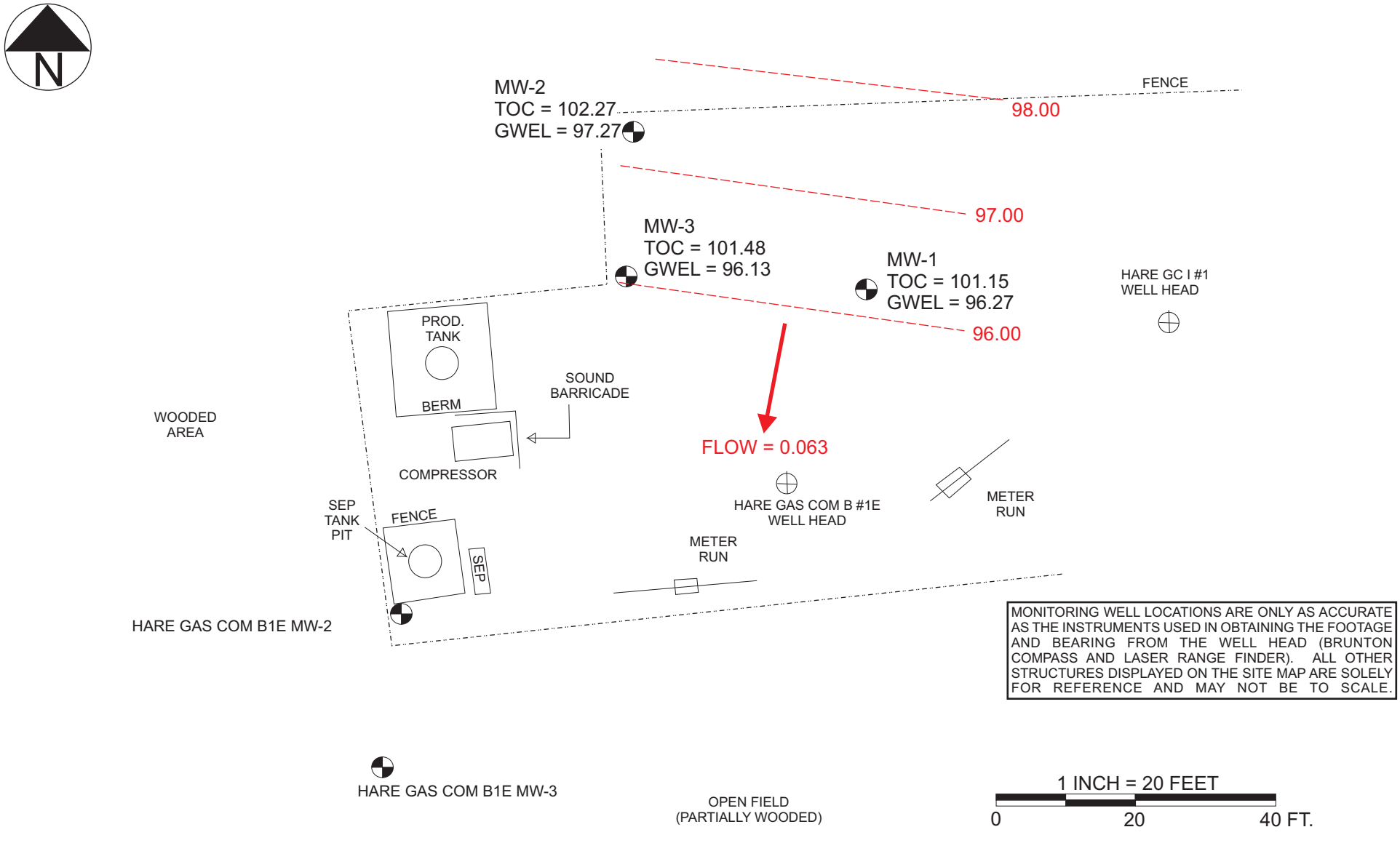
PROJECT: MW INSTALL.

DRAWN BY: NJV

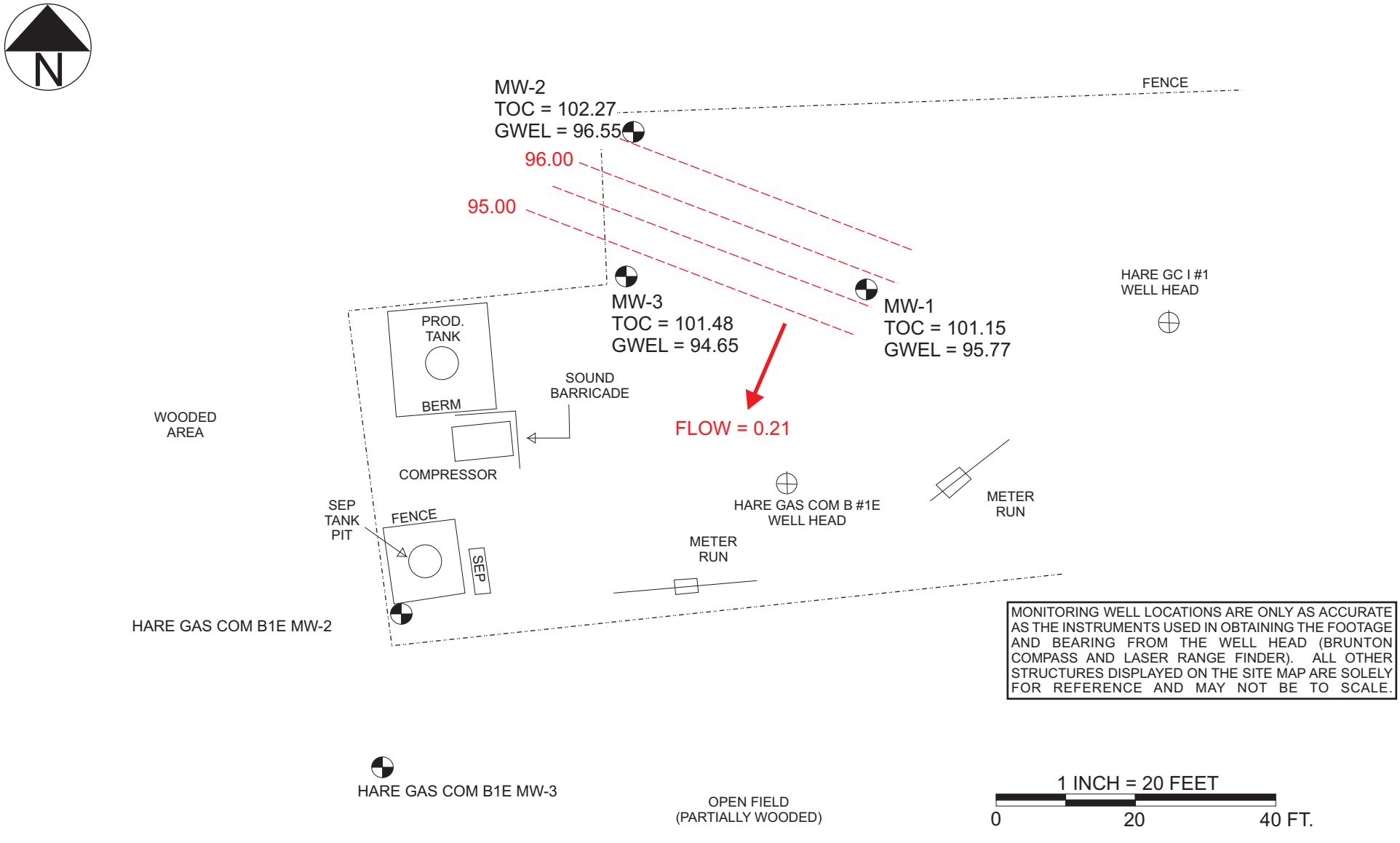
FILENAME: HARE GC I1-SM.SKF

SITE MAP

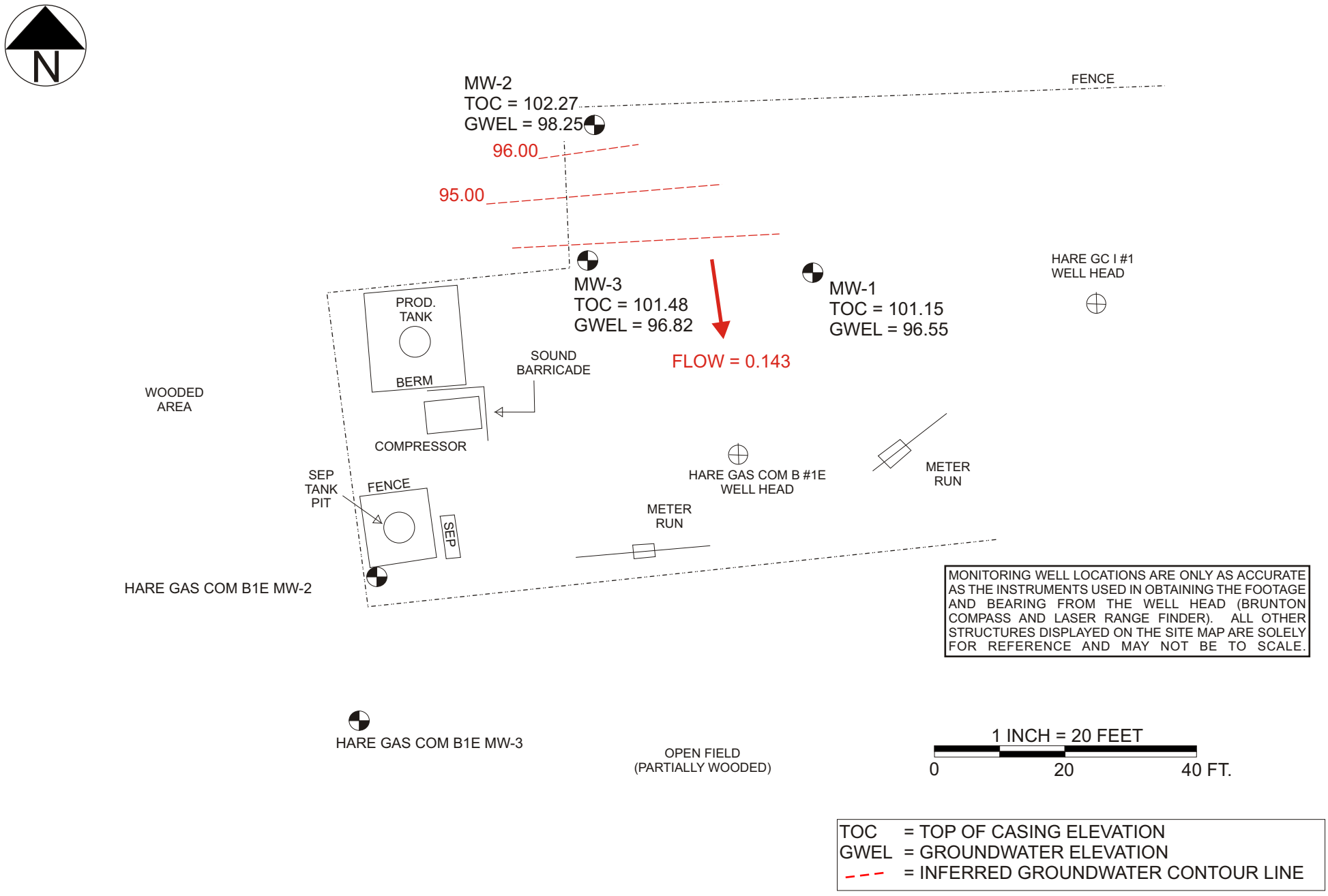
05/06



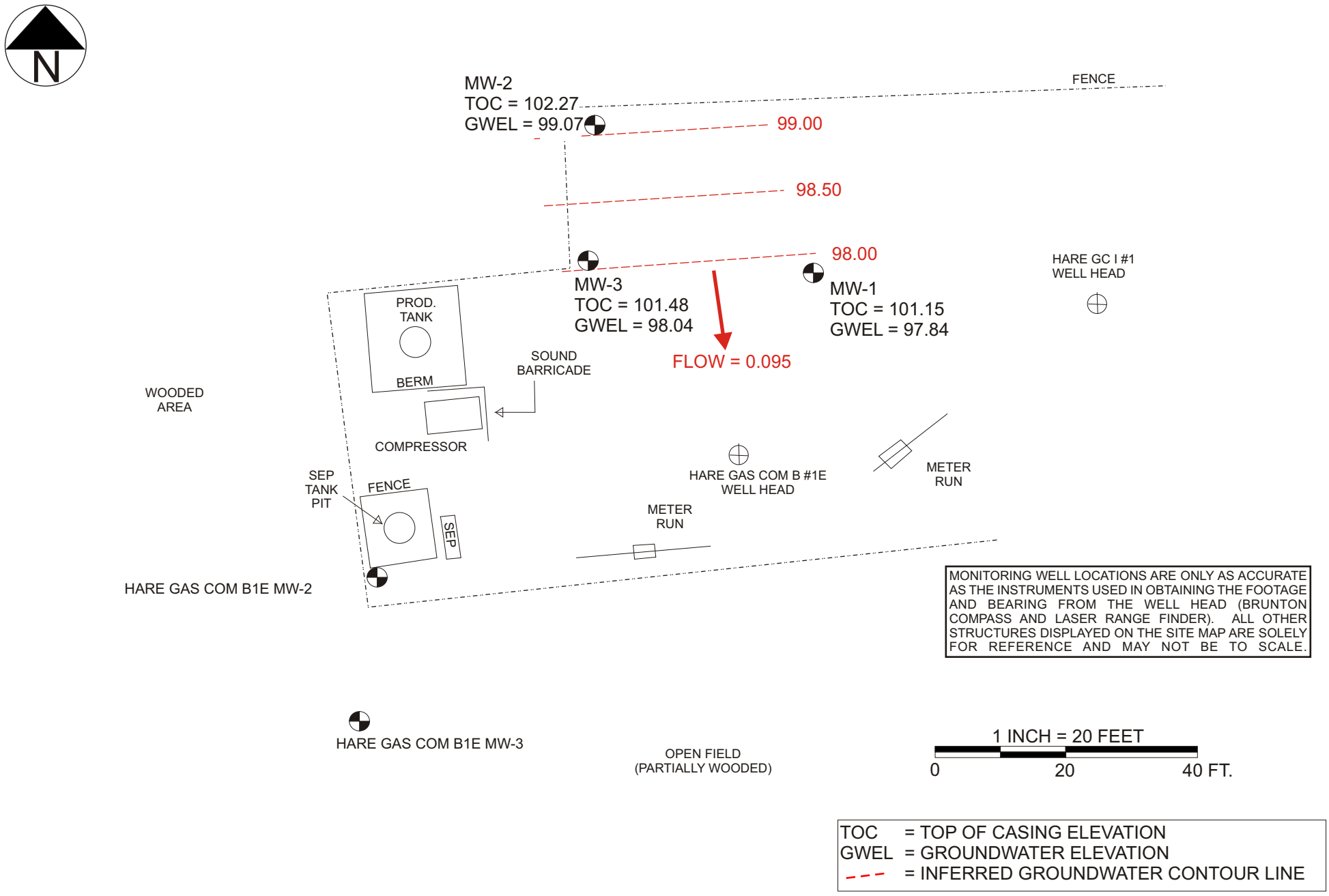
Lodestar Services, Inc PO Box 3861 Farmington, NM 87499	HARE GAS COM I #1 SW/4 NW/4 SEC. 23, T29N, R11W SAN JUAN COUNTY, NEW MEXICO	PROJECT: XTO GROUND WATER DRAWN BY: ALA REVISED: 12/11/06	GROUNDWATER GRADIENT MAP 12/07/2006 FIGURE 2



Lodestar Services, Inc PO Box 3861 Farmington, NM 87499	HARE GAS COM I #1 SW/4 NW/4 SEC. 23, T29N, R11W SAN JUAN COUNTY, NEW MEXICO	PROJECT: XTO GROUND WATER DRAWN BY: ALA REVISED: 03/30/07	GROUNDWATER GRADIENT MAP 03/27/07 FIGURE 3



Lodestar Services, Inc PO Box 3861 Farmington, NM 87499	HARE GAS COM I #1 SW/4 NW/4 SEC. 23, T29N, R11W SAN JUAN COUNTY, NEW MEXICO	PROJECT: XTO GROUND WATER DRAWN BY: ALA REVISED: 06/21/07	GROUNDWATER GRADIENT MAP 06/13/07 FIGURE 4



MONITORING WELL 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 MAY NOT BE TO SCALE.

TOC = TOP OF CASING ELEVATION
GWEL = GROUNDWATER ELEVATION
- - - = INFERRED GROUNDWATER CONTOUR LINE

Lodestar Services, Inc PO Box 3861 Farmington, NM 87499	HARE GAS COM I #1 SW/4 NW/4 SEC. 23, T29N, R11W SAN JUAN COUNTY, NEW MEXICO	PROJECT: XTO GROUND WATER DRAWN BY: ALA REVISED: 09/28/07	GROUNDWATER GRADIENT MAP 09/27/07 FIGURE 5

FIGURE 6

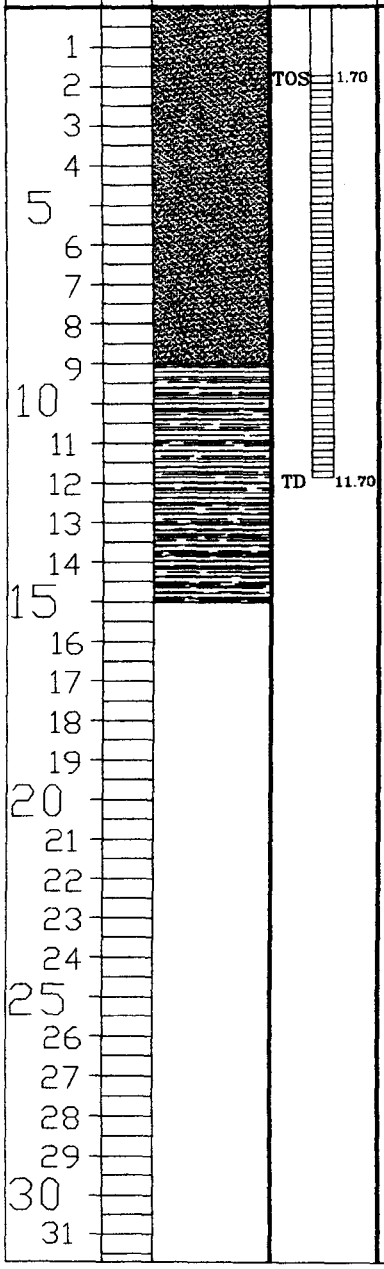
BLAGG ENGINEERING, Inc.

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

BORE / TEST HOLE REPORT

BORING #..... BH - 1
MW #..... 1
PAGE #..... 1
DATE STARTED 10/8/99
DATE FINISHED 10/8/99
OPERATOR..... REP
PREPARED BY NJV

CLIENT: XTO ENERGY INC.
LOCATION NAME: HARE GC B #1E
CONTRACTOR: BLAGG ENGINEERING, INC.
EQUIPMENT USED: MOBILE DRILL RIG (EARTHPROBE)
BORING LOCATION: 61 FT., N23.5E FEET FROM WELL HEAD.



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 2.30 FT. ABOVE GROUND SURFACE.

▼ GW DEPTH ON 1/5/00 = 2.73 FT. (APPROX.) FROM GROUND SURFACE.

MODERATE YELLOWISH BROWN SAND TO SILTY SAND, NON COHESIVE, SLIGHTLY MOIST TO SATURATED, FIRM, NO APPARENT DISCOLORATION OBSERVED OR HYDROCARBON ODOR DETECTED PHYSICALLY (0.0 – 9.50 FT. INTERVAL).

DARK YELLOWISH BROWN SILTY CLAY TO CLAY, COHESIVE TO SLIGHTLY PLASTIC, SATURATED, FIRM TO LOOSE, NO APPARENT DISCOLORATION OBSERVED OR HYDROCARBON ODOR DETECTED PHYSICALLY (9.50 – 15.0 FT. INTERVAL).

NOTE: ▒ – SAND TO SILTY SAND.
▬ – SILTY CLAY TO CLAY.

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

DRAWING: BH-1.SKD	DATE: 1/17/00	DWN BY: NJV

FIGURE 7

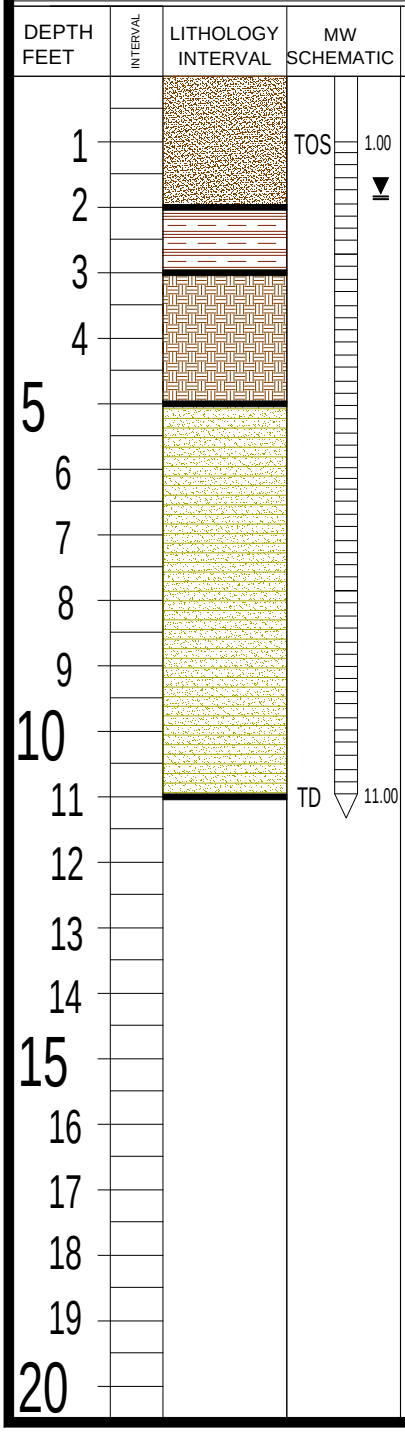
BLAGG ENGINEERING, INC.

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

BORE / TEST HOLE REPORT

CLIENT:	XTO ENERGY INC.
LOCATION NAME:	HARE GC I #1 - COMPRESSOR PIT, UNIT E, SEC. 23, T29N, R11W
CONTRACTOR:	BLAGG ENGINEERING, INC. / ENVIROTECH, INC.
EQUIPMENT USED:	MOBILE DRILL RIG (CME 75)
BORING LOCATION:	155 FT., N86E FROM WELL HEAD.

BORING #.....	BH-2
MW #.....	3
PAGE #.....	2
DATE STARTED	5/10/06
DATE FINISHED	5/10/06
OPERATOR.....	DP
PREPARED BY	NJV



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 2.30 FT. ABOVE GROUND SURFACE.

DARK YELLOWISH BROWN SAND WITH SOME GRAVEL (@ SURFACE), NON COHESIVE, LOOSE TO FIRM, SLIGHTLY MOIST, NO APPARENT HC ODOR DETECTED PHYSICALLY IN AUGER CUTTINGS (0.0 - 2.0 FT. BELOW GRADE).

DEPTH TO WATER APPROX. 1.95 FT. BELOW GRADE, MEASURED 5/15/06.

DARK YELLOWISH BROWN SILTY CLAY TO CLAY, MEDIUM TO HIGHLY PLASTIC, STIFF, SLIGHTLY MOIST, NO APPARENT HC ODOR DETECTED PHYSICALLY IN AUGER CUTTINGS (2.0 - 3.0 FT. BELOW GRADE).

DARK YELLOWISH BROWN SILTY CLAY TO SILTY SAND, SLIGHTLY PLASTIC TO COHESIVE, FIRM, SLIGHTLY MOIST TO WET, NO APPARENT HC ODOR DETECTED PHYSICALLY IN AUGER CUTTINGS (3.0 - 5.0 FT. BELOW GRADE).

OLIVE GRAY SILTY SAND, NON COHESIVE, FIRM TO LOOSE, SATURATED TO SUPERSATURATED, NO APPARENT HC ODOR DETECTED PHYSICALLY IN AUGER CUTTINGS (5.0 - 11.0 FT. BELOW GRADE).

NOTE:

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

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

Monitor well consist of 2 inch PVC piping - casing from 2.50 ft. above grade to 1.00 ft. below grade, 0.010 slotted screen between 1.00 to 11.00 feet below grade, sanded annular to grade, locking cap at monitor well casing top and secured with padlock.

DRAWING: HARE GC I 1-MW3.SKF | DATE: 05/10/06 | DWN BY: NJV

Hall Environmental Analysis Laboratory, Inc.

Date: *15-Dec-06*

CLIENT: XTO Energy
Project: Ground Water
Lab Order: 0612122

Lab ID: 0612122-04
Collection Date: 12/7/2006 1:42:00 PM
Client Sample ID: ~~Hare Gas Com B1 MW-2~~
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		µg/L	1	12/13/2006 8:33:52 PM
Toluene	ND	1.0		µg/L	1	12/13/2006 8:33:52 PM
Ethylbenzene	ND	1.0		µg/L	1	12/13/2006 8:33:52 PM
Xylenes, Total	ND	3.0		µg/L	1	12/13/2006 8:33:52 PM
Surr: 4-Bromofluorobenzene	79.7	70.2-105		%REC	1	12/13/2006 8:33:52 PM

Lab ID: 0612122-05
Collection Date: 12/7/2006 2:45:00 PM
Client Sample ID: Hare Gas Com I1 MW-1
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		µg/L	1	12/13/2006 9:03:58 PM
Toluene	ND	1.0		µg/L	1	12/13/2006 9:03:58 PM
Ethylbenzene	ND	1.0		µg/L	1	12/13/2006 9:03:58 PM
Xylenes, Total	ND	3.0		µg/L	1	12/13/2006 9:03:58 PM
Surr: 4-Bromofluorobenzene	79.4	70.2-105		%REC	1	12/13/2006 9:03:58 PM

Lab ID: 0612122-06
Collection Date: 12/7/2006 2:30:00 PM
Client Sample ID: Hare Gas Com I1 MW-3
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		µg/L	1	12/13/2006 9:33:55 PM
Toluene	ND	1.0		µg/L	1	12/13/2006 9:33:55 PM
Ethylbenzene	ND	1.0		µg/L	1	12/13/2006 9:33:55 PM
Xylenes, Total	ND	3.0		µg/L	1	12/13/2006 9:33:55 PM
Surr: 4-Bromofluorobenzene	80.7	70.2-105		%REC	1	12/13/2006 9:33:55 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *15-Dec-06*

CLIENT: XTO Energy
Project: Ground Water

Lab Order: 0612122

Lab ID: 0612122-07
Collection Date: 12/7/2006 2:50:00 PM
Client Sample ID: Hare Gas Com I1 MW-2
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	10		µg/L	10	12/13/2006 10:06:39 PM
Toluene	ND	10		µg/L	10	12/13/2006 10:06:39 PM
Ethylbenzene	ND	10		µg/L	10	12/13/2006 10:06:39 PM
Xylenes, Total	ND	30		µg/L	10	12/13/2006 10:06:39 PM
Surr: 4-Bromofluorobenzene	81.0	70.2-105		%REC	10	12/13/2006 10:06:39 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

QA/QC SUMMARY REPORT

Client: XTO Energy
Project: Ground Water **Work Order:** 0612122

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8021									
Sample ID: 5ML REAGENT BLA		*MBLK*			Batch ID: **R21800**		Analysis Date:	12/13/2006 8:26:25 AM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	3.0						
Sample ID: 100NG BTEX LCS		*LCS*			Batch ID: **R21800**		Analysis Date:	12/13/2006 4:33:03 PM	
Benzene	18.09	µg/L	1.0	90.4	85.9	113			
Toluene	17.99	µg/L	1.0	89.9	86.4	113			
Ethylbenzene	17.55	µg/L	1.0	87.7	83.5	118			
Xylenes, Total	52.58	µg/L	3.0	87.6	83.4	122			

Qualifiers:

- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *05-Apr-07*

CLIENT: XTO Energy
Project: Ground Water
Lab Order: 0703474

Lab ID: 0703474-01 **Collection Date:** 3/27/2007 1:48:00 PM
Client Sample ID: Hare GCI #1 MW-3 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		µg/L	1	4/2/2007 10:30:37 AM
Toluene	ND	1.0		µg/L	1	4/2/2007 10:30:37 AM
Ethylbenzene	ND	1.0		µg/L	1	4/2/2007 10:30:37 AM
Xylenes, Total	ND	2.0		µg/L	1	4/2/2007 10:30:37 AM
Surr: 4-Bromofluorobenzene	91.4	70.2-105		%REC	1	4/2/2007 10:30:37 AM

Lab ID: 0703474-02 **Collection Date:** 3/27/2007 2:32:00 PM
Client Sample ID: Hare GCI #1 MW-2 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		µg/L	1	4/2/2007 11:00:46 AM
Toluene	ND	1.0		µg/L	1	4/2/2007 11:00:46 AM
Ethylbenzene	ND	1.0		µg/L	1	4/2/2007 11:00:46 AM
Xylenes, Total	ND	2.0		µg/L	1	4/2/2007 11:00:46 AM
Surr: 4-Bromofluorobenzene	92.7	70.2-105		%REC	1	4/2/2007 11:00:46 AM

Lab ID: 0703474-03 **Collection Date:** 3/27/2007 2:48:00 PM
Client Sample ID: Hare GCI #1 MW-1 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		µg/L	1	4/2/2007 11:30:56 AM
Toluene	ND	1.0		µg/L	1	4/2/2007 11:30:56 AM
Ethylbenzene	ND	1.0		µg/L	1	4/2/2007 11:30:56 AM
Xylenes, Total	ND	2.0		µg/L	1	4/2/2007 11:30:56 AM
Surr: 4-Bromofluorobenzene	91.4	70.2-105		%REC	1	4/2/2007 11:30:56 AM

Qualifiers:
- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

1 / 10

QA/QC SUMMARY REPORT

Client: XTO Energy
Project: Ground Water
Work Order: 0703474

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8021									
Sample ID: 0703474-01A MSD		*MSD*			Batch ID: **R23096**		Analysis Date:		4/3/2007 10:37:09 AM
Benzene	19.32	µg/L	1.0	96.6	85.9	113	2.09	27	
Toluene	19.77	µg/L	1.0	98.8	86.4	113	1.70	19	
Ethylbenzene	19.98	µg/L	1.0	99.9	83.5	118	2.36	10	
Xylenes, Total	59.32	µg/L	2.0	98.9	83.4	122	2.06	13	
Sample ID: 5ML REAGENT BLA		*MBLK*			Batch ID: **R23076**		Analysis Date:		4/2/2007 8:45:02 AM
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	2.0						
Sample ID: 5ML RB-II		*MBLK*			Batch ID: **R23076**		Analysis Date:		4/3/2007 12:13:23 AM
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	2.0						
Sample ID: 5ML REAGENT BLA		*MBLK*			Batch ID: **R23096**		Analysis Date:		4/3/2007 8:06:11 AM
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	2.0						
Sample ID: 5ML REAGENT BLA		*MBLK*			Batch ID: **R23114**		Analysis Date:		4/4/2007 8:09:19 AM
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	2.0						
Sample ID: 100NG BTEX LCS		*LCS*			Batch ID: **R23076**		Analysis Date:		4/2/2007 5:37:16 PM
Benzene	23.32	µg/L	1.0	117	85.9	113			S
Toluene	22.53	µg/L	1.0	111	86.4	113			
Ethylbenzene	20.71	µg/L	1.0	104	83.5	118			
Xylenes, Total	62.13	µg/L	2.0	103	83.4	122			
Sample ID: 100NG BTEX LCS-II		*LCS*			Batch ID: **R23076**		Analysis Date:		4/3/2007 12:43:23 AM
Benzene	19.86	µg/L	1.0	97.6	85.9	113			
Toluene	20.09	µg/L	1.0	99.8	86.4	113			
Ethylbenzene	20.01	µg/L	1.0	100	83.5	118			
Xylenes, Total	59.59	µg/L	2.0	99.0	83.4	122			
Sample ID: 100NG BTEX LCS		*LCS*			Batch ID: **R23096**		Analysis Date:		4/3/2007 4:13:33 PM
Benzene	20.24	µg/L	1.0	99.1	85.9	113			
Toluene	20.61	µg/L	1.0	102	86.4	113			
Ethylbenzene	20.85	µg/L	1.0	104	83.5	118			
Xylenes, Total	62.10	µg/L	2.0	103	83.4	122			
Sample ID: 100NG BTEX LCS		*LCS*			Batch ID: **R23114**		Analysis Date:		4/4/2007 12:30:51 PM
Benzene	19.85	µg/L	1.0	99.2	85.9	113			
Toluene	20.02	µg/L	1.0	100	86.4	113			

Qualifiers:

- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: XTO Energy
Project: Ground Water
Work Order: 0703474

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8021									
Sample ID: 100NG BTEX LCS		*LCS*			Batch ID: **R23114**		Analysis Date:		4/4/2007 12:30:51 PM
Ethylbenzene	20.43	µg/L	1.0	102	83.5	118			
Xylenes, Total	60.81	µg/L	2.0	101	83.4	122			
Sample ID: 100NG BTEX LCSD-I		*LCSD*			Batch ID: **R23076**		Analysis Date:		4/3/2007 1:13:30 AM
Benzene	19.77	µg/L	1.0	97.2	85.9	113	0.474	27	
Toluene	19.93	µg/L	1.0	99.0	86.4	113	0.809	19	
Ethylbenzene	19.91	µg/L	1.0	99.6	83.5	118	0.511	10	
Xylenes, Total	59.20	µg/L	2.0	98.3	83.4	122	0.657	13	
Sample ID: 100NG BTEX LCSD		*LCSD*			Batch ID: **R23114**		Analysis Date:		4/4/2007 1:01:01 PM
Benzene	19.57	µg/L	1.0	97.8	85.9	113	1.42	27	
Toluene	19.76	µg/L	1.0	98.8	86.4	113	1.32	19	
Ethylbenzene	20.00	µg/L	1.0	100	83.5	118	2.11	10	
Xylenes, Total	59.61	µg/L	2.0	99.3	83.4	122	1.99	13	
Sample ID: 0703474-01A MS		*MS*			Batch ID: **R23096**		Analysis Date:		4/3/2007 10:06:58 AM
Benzene	18.92	µg/L	1.0	94.6	85.9	113			
Toluene	19.43	µg/L	1.0	97.2	86.4	113			
Ethylbenzene	19.52	µg/L	1.0	97.6	83.5	118			
Xylenes, Total	58.11	µg/L	2.0	96.8	83.4	122			

Qualifiers:

- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jun-07*

CLIENT: XTO Energy
Project: Ground Water

Lab Order: 0706237

Lab ID: 0706237-22
Client Sample ID: ~~Hare GCBI MW-4~~

Collection Date: 6/13/2007 2:50:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		µg/L	1	6/19/2007 10:13:44 PM
Toluene	ND	1.0		µg/L	1	6/19/2007 10:13:44 PM
Ethylbenzene	ND	1.0		µg/L	1	6/19/2007 10:13:44 PM
Xylenes, Total	ND	2.0		µg/L	1	6/19/2007 10:13:44 PM
Surr: 4-Bromofluorobenzene	82.2	70.2-105		%REC	1	6/19/2007 10:13:44 PM

Lab ID: 0706237-23
Client Sample ID: Hare GCI/MW-2

Collection Date: 6/13/2007 3:32:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		µg/L	1	6/20/2007 7:06:41 AM
Toluene	ND	1.0		µg/L	1	6/20/2007 7:06:41 AM
Ethylbenzene	ND	1.0		µg/L	1	6/20/2007 7:06:41 AM
Xylenes, Total	ND	2.0		µg/L	1	6/20/2007 7:06:41 AM
Surr: 4-Bromofluorobenzene	90.0	70.2-105		%REC	1	6/20/2007 7:06:41 AM

Lab ID: 0706237-24
Client Sample ID: Hare GCI/MW-3

Collection Date: 6/13/2007 3:53:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		µg/L	1	6/20/2007 7:36:47 AM
Toluene	ND	1.0		µg/L	1	6/20/2007 7:36:47 AM
Ethylbenzene	ND	1.0		µg/L	1	6/20/2007 7:36:47 AM
Xylenes, Total	ND	2.0		µg/L	1	6/20/2007 7:36:47 AM
Surr: 4-Bromofluorobenzene	82.0	70.2-105		%REC	1	6/20/2007 7:36:47 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

8 / 12

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jun-07*

CLIENT: XTO Energy
Project: Ground Water

Lab Order: 0706237

Lab ID: 0706237-25
Client Sample ID: Hare GCI/MW-1

Collection Date: 6/13/2007 4:22:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	6/20/2007 8:23:01 PM
Toluene	ND	1.0		µg/L	1	6/20/2007 8:23:01 PM
Ethylbenzene	ND	1.0		µg/L	1	6/20/2007 8:23:01 PM
Xylenes, Total	ND	2.0		µg/L	1	6/20/2007 8:23:01 PM
Surr: 4-Bromofluorobenzene	93.1	70.2-105		%REC	1	6/20/2007 8:23:01 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

QA/QC SUMMARY REPORT

Client: XTO Energy
Project: Ground Water
Work Order: 0706237

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8021									
Sample ID: 0706237-12A MSD		*MSD*			Batch ID:	**R24017**	Analysis Date:	6/18/2007 12:21:32 PM	
Benzene	18.72	µg/L	1.0	93.6	85.9	113	4.52	27	
Toluene	18.79	µg/L	1.0	94.0	86.4	113	4.64	19	
Ethylbenzene	18.60	µg/L	1.0	93.0	83.5	118	4.77	10	
Xylenes, Total	55.68	µg/L	2.0	92.8	83.4	122	3.58	13	
Sample ID: 0706237-25A MSD		*MSD*			Batch ID:	**R24049**	Analysis Date:	6/20/2007 9:23:49 PM	
Benzene	19.29	µg/L	1.0	96.5	85.9	113	2.88	27	
Toluene	18.77	µg/L	1.0	93.9	86.4	113	2.82	19	
Ethylbenzene	18.77	µg/L	1.0	93.8	83.5	118	2.60	10	
Xylenes, Total	54.62	µg/L	2.0	91.0	83.4	122	2.24	13	
Sample ID: 5ML REAGENT BLA		*MBLK*			Batch ID:	**R24013**	Analysis Date:	6/15/2007 8:56:45 AM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	2.0						
Sample ID: 5ML REAGENT BLA		*MBLK*			Batch ID:	**R24017**	Analysis Date:	6/18/2007 10:56:56 AM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	2.0						
Sample ID: 5ML REAGENT BLA		*MBLK*			Batch ID:	**R24036**	Analysis Date:	6/19/2007 9:56:41 AM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	2.0						
Sample ID: 5ML REAGENT BLA		*MBLK*			Batch ID:	**R24049**	Analysis Date:	6/20/2007 10:05:12 AM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	2.0						
Sample ID: 100NG BTEX LCS		*LCS*			Batch ID:	**R24013**	Analysis Date:	6/15/2007 11:42:55 PM	
Benzene	19.24	µg/L	1.0	96.2	85.9	113			
Toluene	18.67	µg/L	1.0	93.4	86.4	113			
Ethylbenzene	18.36	µg/L	1.0	91.8	83.5	118			
Xylenes, Total	54.32	µg/L	2.0	90.5	83.4	122			
Sample ID: 100NG BTEX LCS		*LCS*			Batch ID:	**R24017**	Analysis Date:	6/18/2007 12:51:39 PM	
Benzene	18.99	µg/L	1.0	94.9	85.9	113			
Toluene	19.05	µg/L	1.0	95.3	86.4	113			
Ethylbenzene	18.69	µg/L	1.0	93.4	83.5	118			
Xylenes, Total	56.17	µg/L	2.0	93.6	83.4	122			
Sample ID: 100NG BTEX LCS		*LCS*			Batch ID:	**R24036**	Analysis Date:	6/19/2007 11:27:18 AM	
Benzene	19.95	µg/L	1.0	99.7	85.9	113			
Toluene	20.29	µg/L	1.0	101	86.4	113			

Qualifiers:

- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: XTO Energy
Project: Ground Water
Work Order: 0706237

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8021									
Sample ID: 100NG BTEX LCS		*LCS*			Batch ID: **R24036**		Analysis Date:	6/19/2007 1127:18 AM	
Ethylbenzene	20.10	µg/L	1.0	101	83.5	118			
Xylenes, Total	59.83	µg/L	2.0	99.7	83.4	122			
Sample ID: 100NG BTEX LCS		*LCS*			Batch ID: **R24049**		Analysis Date:	6/20/2007 954:18 PM	
Benzene	18.97	µg/L	1.0	94.9	85.9	113			
Toluene	18.46	µg/L	1.0	92.3	86.4	113			
Ethylbenzene	18.62	µg/L	1.0	93.1	83.5	118			
Xylenes, Total	54.86	µg/L	2.0	91.4	83.4	122			
Sample ID: 0706237-12A MS		*MS*			Batch ID: **R24017**		Analysis Date:	6/18/2007 1151:22 AM	
Benzene	19.59	µg/L	1.0	98.0	85.9	113			
Toluene	19.68	µg/L	1.0	98.4	86.4	113			
Ethylbenzene	19.51	µg/L	1.0	97.5	83.5	118			
Xylenes, Total	57.71	µg/L	2.0	96.2	83.4	122			
Sample ID: 0706237-25A MS		*MS*			Batch ID: **R24049**		Analysis Date:	6/20/2007 853:24 PM	
Benzene	18.74	µg/L	1.0	93.7	85.9	113			
Toluene	18.25	µg/L	1.0	91.2	86.4	113			
Ethylbenzene	18.29	µg/L	1.0	91.4	83.5	118			
Xylenes, Total	53.41	µg/L	2.0	89.0	83.4	122			

Qualifiers:

- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *08-Oct-07*

CLIENT:	XTO Energy	**Client Sample ID:**	Hare GC I1 MW-2
Lab Order:	0709406	**Collection Date:**	9/27/2007 10:17:00 AM
Project:	Ground Water	**Date Received:**	9/28/2007
Lab ID:	0709406-22	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	10/3/2007 6:33:56 PM
Toluene	ND	1.0		µg/L	1	10/3/2007 6:33:56 PM
Ethylbenzene	ND	1.0		µg/L	1	10/3/2007 6:33:56 PM
Xylenes, Total	ND	2.0		µg/L	1	10/3/2007 6:33:56 PM
Surr: 4-Bromofluorobenzene	83.6	70.2-105		%REC	1	10/3/2007 6:33:56 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *08-Oct-07*

CLIENT:	XTO Energy	**Client Sample ID:**	Hare GC I1 MW-3
Lab Order:	0709406	**Collection Date:**	9/27/2007 10:33:00 AM
Project:	Ground Water	**Date Received:**	9/28/2007
Lab ID:	0709406-23	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	10/3/2007 9:06:03 PM
Toluene	ND	1.0		µg/L	1	10/3/2007 9:06:03 PM
Ethylbenzene	ND	1.0		µg/L	1	10/3/2007 9:06:03 PM
Xylenes, Total	ND	2.0		µg/L	1	10/3/2007 9:06:03 PM
Surr: 4-Bromofluorobenzene	83.6	70.2-105		%REC	1	10/3/2007 9:06:03 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *08-Oct-07*

CLIENT:	XTO Energy	**Client Sample ID:**	Hare GC I1 MW-1
Lab Order:	0709406	**Collection Date:**	9/27/2007 10:45:00 AM
Project:	Ground Water	**Date Received:**	9/28/2007
Lab ID:	0709406-24	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	10/3/2007 9:36:02 PM
Toluene	ND	1.0		µg/L	1	10/3/2007 9:36:02 PM
Ethylbenzene	ND	1.0		µg/L	1	10/3/2007 9:36:02 PM
Xylenes, Total	ND	2.0		µg/L	1	10/3/2007 9:36:02 PM
Surr: 4-Bromofluorobenzene	88.3	70.2-105		%REC	1	10/3/2007 9:36:02 PM

Qualifiers:				
	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
	ND	Not Detected at the Reporting Limit	RL	Reporting Limit
	S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *08-Oct-07*

CLIENT:	XTO Energy	**Client Sample ID:**	Trip Blank
Lab Order:	0709406	**Collection Date:**	
Project:	Ground Water	**Date Received:**	9/28/2007
Lab ID:	0709406-28	**Matrix:**	TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		µg/L	1	10/3/2007 11:35:56 PM
Toluene	ND	1.0		µg/L	1	10/3/2007 11:35:56 PM
Ethylbenzene	ND	1.0		µg/L	1	10/3/2007 11:35:56 PM
Xylenes, Total	ND	2.0		µg/L	1	10/3/2007 11:35:56 PM
Surr: 4-Bromofluorobenzene	82.7	70.2-105		%REC	1	10/3/2007 11:35:56 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

QA/QC SUMMARY REPOR

Client: XTO Energy
Project: Ground Water **Work Order:** 0709406

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8021									
Sample ID: 0709406-01A MSD		*MSD*			Batch ID:	**R25409**	Analysis Date:		10/3/2007 3:45:13 AM
Benzene	20.98	µg/L	1.0	105	85.9	113	0.580	27	
Toluene	19.97	µg/L	1.0	99.6	86.4	113	0.764	19	
Ethylbenzene	19.95	µg/L	1.0	99.3	83.5	118	1.13	10	
Xylenes, Total	59.14	µg/L	2.0	98.1	83.4	122	0.764	13	
Sample ID: 0709406-20A MSD		*MSD*			Batch ID:	**R25420**	Analysis Date:		10/3/2007 8:05:57 PM
Benzene	20.94	µg/L	1.0	102	85.9	113	1.15	27	
Toluene	19.97	µg/L	1.0	98.4	86.4	113	1.23	19	
Ethylbenzene	19.95	µg/L	1.0	99.2	83.5	118	2.10	10	
Xylenes, Total	58.87	µg/L	2.0	96.8	83.4	122	1.12	13	
Sample ID: 5ML RB		*MBLK*			Batch ID:	**R25409**	Analysis Date:		10/2/2007 8:14:55 AM
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	2.0						
Sample ID: 5ML RB		*MBLK*			Batch ID:	**R25420**	Analysis Date:		10/3/2007 9:00:15 AM
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	2.0						
Sample ID: 100NG BTEX LCS		*LCS*			Batch ID:	**R25409**	Analysis Date:		10/2/2007 8:15:26 PM
Benzene	20.25	µg/L	1.0	101	85.9	113			
Toluene	19.54	µg/L	1.0	97.3	86.4	113			
Ethylbenzene	19.60	µg/L	1.0	97.4	83.5	118			
Xylenes, Total	58.14	µg/L	2.0	96.2	83.4	122			
Sample ID: 100NG BTEX LCS		*LCS*			Batch ID:	**R25420**	Analysis Date:		10/3/2007 11:00:56 AM
Benzene	20.65	µg/L	1.0	103	85.9	113			
Toluene	20.04	µg/L	1.0	99.8	86.4	113			
Ethylbenzene	20.04	µg/L	1.0	99.6	83.5	118			
Xylenes, Total	60.00	µg/L	2.0	99.5	83.4	122			
Sample ID: 0709406-01A MS		*MS*			Batch ID:	**R25409**	Analysis Date:		10/3/2007 3:15:09 AM
Benzene	21.10	µg/L	1.0	105	85.9	113			
Toluene	19.82	µg/L	1.0	98.8	86.4	113			
Ethylbenzene	19.73	µg/L	1.0	98.2	83.5	118			
Xylenes, Total	58.69	µg/L	2.0	97.4	83.4	122			
Sample ID: 0709406-20A MS		*MS*			Batch ID:	**R25420**	Analysis Date:		10/3/2007 7:35:52 PM
Benzene	20.70	µg/L	1.0	101	85.9	113			
Toluene	19.73	µg/L	1.0	97.2	86.4	113			
Ethylbenzene	19.53	µg/L	1.0	97.1	83.5	118			
Xylenes, Total	58.22	µg/L	2.0	95.7	83.4	122			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPOR

Client: XTO Energy
Project: Ground Water **Work Order:** 0709406

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: E160.1									
Sample ID: 0709406-08B MSD		*MSD*			Batch ID: **13963**		Analysis Date:		10/1/2007
Total Dissolved Solids	3202	mg/L	20	104	80	120	0.627	20	
Sample ID: MB-13963		*MBLK*			Batch ID: **13963**		Analysis Date:		10/1/2007
Total Dissolved Solids	ND	mg/L	20						
Sample ID: LCS-13963		*LCS*			Batch ID: **13963**		Analysis Date:		10/1/2007
Total Dissolved Solids	1001	mg/L	20	100	80	120			
Sample ID: 0709406-08B MS		*MS*			Batch ID: **13963**		Analysis Date:		10/1/2007
Total Dissolved Solids	3182	mg/L	20	102	80	120			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits