

3RP-413



Annual Groundwater Remediation
Reports

Volume 1

January 2007



RECEIVED

MAR 05 2007

March 2, 2007

Oil Conservation Division
Environmental Bureau

Mr. Glenn von Gonten
Hydrologist-Groundwater Remediation
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Annual Groundwater Remediation Reports

Dear Mr. von Gonten,

XTO Energy Inc. (XTO) is submitting the Annual Groundwater Remediation Reports in accordance with the NMOCD approved Groundwater Management Plan (GMP). Enclosed are summary reports with analytical data, summary tables, site maps, potentiometric surface diagrams and recommendations/proposed actions for:

- | | | | |
|------------------------|--------|--------------------------|--------|
| • Baca Gas Com A #1A | 3R0104 | • Masden Gas Com #1E | 3R0120 |
| • Bruington Gas Com #1 | 3R0106 | • McDaniel Gas Com B #1E | 3R0121 |
| • Carson Gas Com #1E | 3R415 | • OH Randel #7 | 3R0386 |
| • EJ Johnson C #1E | 3R0385 | • PO Pipken #3E | 3R409 |
| • Federal Gas Com #H1 | 3R0110 | • Romero Gas Com A #1 | 3R0123 |
| • Frost, Jack B #2 | 3R416 | • Rowland Gas Com #1 | 3R124 |
| • Garcia Gas Com B #1 | 3R0111 | • Snyder Gas Com #1A | 3R0126 |
| • Haney Gas Com B #1E | 3R0113 | • Stedje Gas Com #1 | 3R0128 |
| • Hare Gas Com B #1 | 3R413 | • Sullivan Frame A #1A | 3R0131 |
| • Hare Gas Com B #1E | 3R0384 | • Sullivan Gas Com D #1 | 3R0134 |
| • Hare Gas Com I #1 | 3R412 | • Valdez A #1E | |

We have also enclosed an Annual Report for one site that meets the closure requirements outlined in the GMP. XTO respectfully requests closure of:

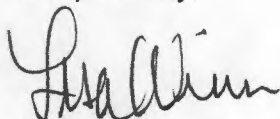
- | | |
|---------------|--------|
| • Abrams J #1 | 3R0100 |
|---------------|--------|

In previously submitted reports three sites met the closure requirements outlined in the GMP and XTO requested closure on those sites in January 2006. Per your request reports for the below listed sites are being submitted again.

- Armenta Gas Com #1E 3R0394
- Bergin Gas Com #1E 3R0105
- State Gas Com BS #1 3R0127

Thank you for your review of the reports. XTO looks forward to hearing from you regarding closure requests and proposed remediation actions. If you have any questions please do not hesitate to contact me at (505) 566-7942.

Respectfully,



Lisa Winn

Environmental Coordinator
San Juan Division

cc: Mr. Brandon Powell, Environmental, NMOCD District III Office, Aztec, NM
Mr. Martin Nee, Lodestar Services Inc.
File- San Juan Groundwater

HARE GC B #1

XTO ENERGY INC.

ANNUAL GROUNDWATER REPORT

2006

**HARE GAS COM B #1
(G) SECTION 23 – T29N – R11W, NMPM
SAN JUAN COUNTY, NEW MEXICO**

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

January 2007

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Appendices

Table 1:	Summary Groundwater Laboratory Results
Figure 1:	Site Map
Figure 2:	Potentiometric Surface Diagram
Figures 3 – 6:	Geologic Logs and Well Completion Diagrams
Attachment 1:	2006 Laboratory Reports
Attachment 2:	Pit Closure Report (05/95)
Attachment 3:	Spill Closure Report (06/05)

2006 XTO GROUNDWATER REPORT

HARE GAS COM B #1

Legals - Twn: 29N	<u>SITE DETAILS</u>		
NMOCD Hazard Ranking: 60	Rng: 11W	Sec: 23	Unit: G
		Land Type: FEE	

PREVIOUS ACTIVITIES

Excavation: May-95 (2000 cy)	Additional Excavation: June/Aug-05 (1600 cy)
Monitor Wells: Apr-06	Quarterly Sampling Initiated: Dec-06

SITE MAP

A site map is presented as Figure 1.

SUMMARY TABLES

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

POTENTIOMETRIC SURFACE DIAGRAMS

Field data collected from the site indicate a groundwater gradient that trends towards the south. Figure 2 illustrates the estimated groundwater gradient for December 2006, respectively.

2006 ACTIVITIES

Groundwater Monitoring – Groundwater monitoring wells were installed in April 2006 to evaluate impacts to groundwater. Groundwater samples were collected from monitor wells numbered MW-1 through MW-4. No detectable levels of benzene, toluene, ethyl benzene or total xylenes (BTEX) were observed in any of the four monitor wells.

GEOLOGIC LOGS AND WELL COMPLETION DIAGRAMS

Bore/Test Hole Reports are presented as Figures 3-6 representing drilling that occurred on site in April 2006.

DISPOSITION OF GENERATED WASTES

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

CONCLUSIONS

Historical records indicate a potential spill was from a production tank in May 1995 (Attachment 2). In January 1998 XTO Energy Inc. (XTO) acquired the Hare Gas Com B #1 from Amoco Production Company. In June 2005 XTO was notified by a contractor working within the area that discolored soil was observed. XTO conducted an evaluation of the area that included excavation of test holes to determine the extent of impacts to soil and removal of almost 1,600 cubic yards of hydrocarbon impacted soil. The field notes, analytical data and map summarizing the field notes are included (Attachment 3). In 2006 four groundwater monitoring wells were installed to delineate the extent of hydrocarbon impact to groundwater.

2006 XTO GROUNDWATER REPORT

Laboratory analytical results from groundwater samples collected from all four monitor wells in 2006 indicate no detectable levels of BTEX constituents. The quarterly sampling on all four monitor wells will continue until four (4) consecutive quarters have been analyzed for BTEX constituents.

RECOMMENDATIONS

- Quarterly sampling will continue at all monitor wells until analytical results show hydrocarbon constituents are below New Mexico groundwater standards for four (4) consecutive quarters.
- Following OCD approval for closure, all monitor well locations will be abandoned in accordance with the monitoring well abandonment plan.

TABLE 1
XTO ENERGY INC. GROUNDWATER LAB RESULTS

HARE GAS COM B #1
UNIT G, SEC. 23, T29N, R11W

Revised Date: January 29, 2007

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	9.49	16.36		ND	ND	ND	ND
7-Dec-06	MW #2	7.77	14.61		ND	ND	ND	ND
7-Dec-06	MW #3	5.15	17.48		ND	ND	ND	ND
7-Dec-06	MW #4	8.48	18.08		ND	ND	ND	ND
NMWQCC GROUNDWATER STANDARDS					10	750	750	620

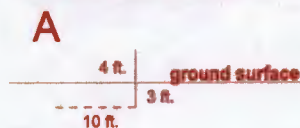
FIGURE 1



2 inch PVC casing (vertically) with slotted screen (horizontally). Wind turbines on each casing top. Slotted piping heading in the northern direction underneath tank pit.

HARE #3 P&A MARKER

MW # 1



SAMP. ID	TPH (ppm)	BENZENE (ppm)	TOT. BTEX (ppm)
4A @ 2.5'	28	NA	NA
2A @ 2'	231	ND	5.51
2B @ 6'	ND	ND	ND
3A @ 5'	ND	NA	NA

SAMP. ID	OVM (ppm)	TIME	DATE
TH-1 @ 2'	749	1510	06/06/05
1N @ 3'	0.0	0909	08/09/05
2 @ 3.5'	2,050	0952	08/09/05
3 @ 3'	79.0	0925	08/09/05
4 @ 1.5'	26.2	0857	08/09/05
4A @ 2.5'	15.8	1154	08/11/05
2A @ 2'	1,734	0905	08/18/05
2B @ 6'	61.0	0901	08/18/05
3A @ 5'	0.0	0920	08/18/05

NOTES: OVM - Organic Vapor Meter or Photo-ionization Detector (PID).
 TPH - Total Petroleum Hydrocarbon (USEPA Method 8015B).
 BTEX - Benzene, toluene, ethylbenzene, & total xylenes (USEPA Method 8021B).
 ppm - Parts per million or milligram per kilogram (mg/kg).

MONITOR WELL LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE & BEARING FROM THE WELL HEAD (TAPE MEASURE, LASER RANGE FINDER, & BRUNTON COMPASS). ALL OTHER STRUCTURES DISPLAYED ON THIS MAP ARE SOLELY FOR REFERENCE AND MAY NOT BE TO SCALE.

POND AREA

TH

FENCE

DEHY.

TH-1

TANK PIT

MW # 3

TRENCH 1

TH

2

MW # 2

TRENCH 2

AREA OF EXCAVATION

1,584 CUBIC YARDS TRANSPORTED TO JFJ LANDFARM FACILITY IN CROUCH MESA, NM.

MW # 4

CATTAILS/SWAMP AREA

WELL HEAD

1 INCH = 30 FT.

0 30 60 FT.

XTO ENERGY INC.

HARE GC B #1

SW/4 NE/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: SITE CLEAN-UP

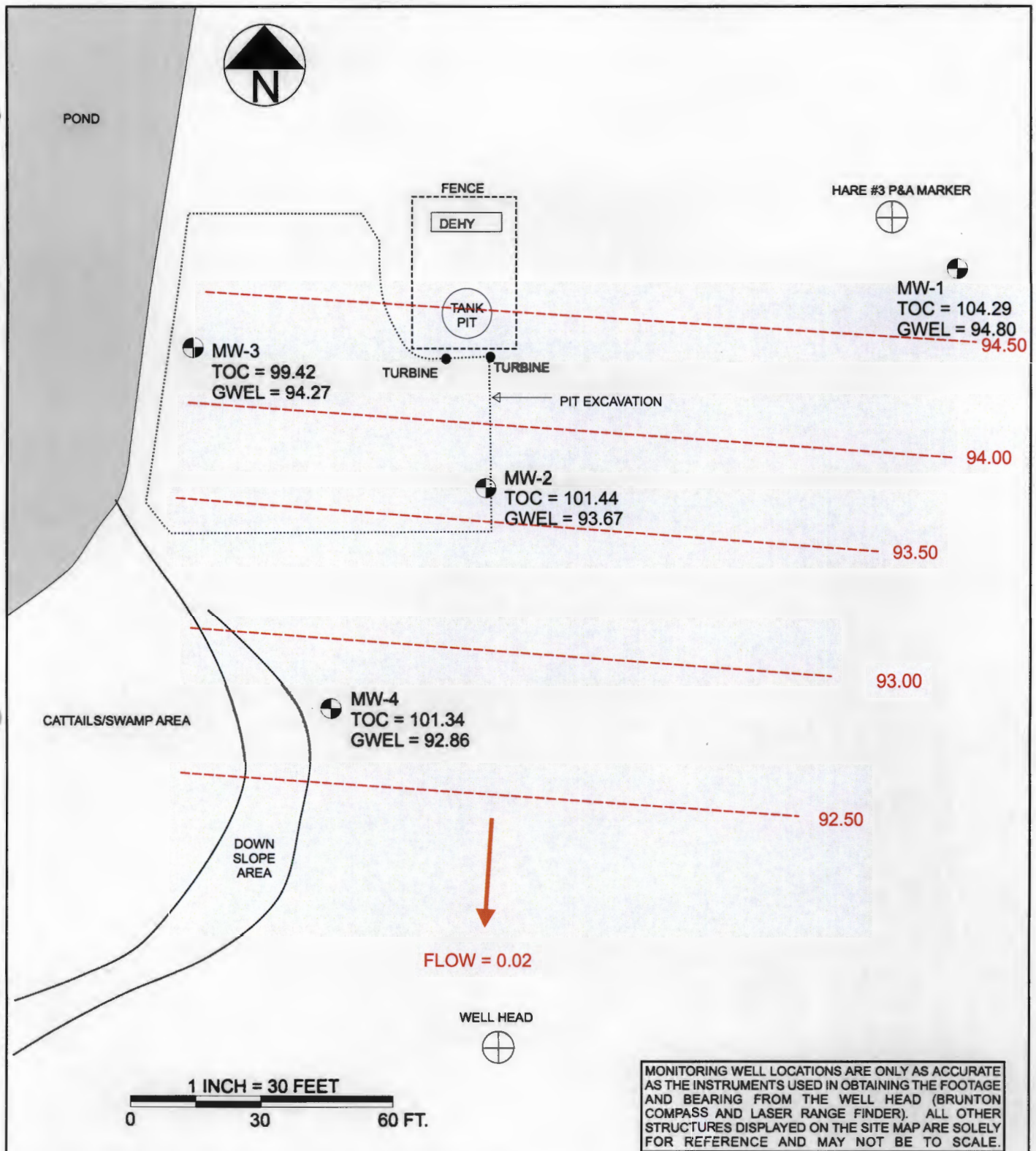
FILENAME: HARE-GC-B1-SM.SKF

DRAWN BY: NJV

REVISED: 4/27/06

SITE MAP

04/06



 Lodestar Services, Inc PO Box 3861 Farmington, NM 87499	HARE GAS COM B #1 SW/4 NE/4 SEC. 23, T29N, R11W SAN JUAN COUNTY, NEW MEXICO	PROJECT: XTO GROUND WATER DRAWN BY: ALA REVISED: 12/11/06	FIGURE 2 GROUNDWATER GRADIENT MAP 12/07/2006
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FIGURE 3

BLAGG ENGINEERING, INC.

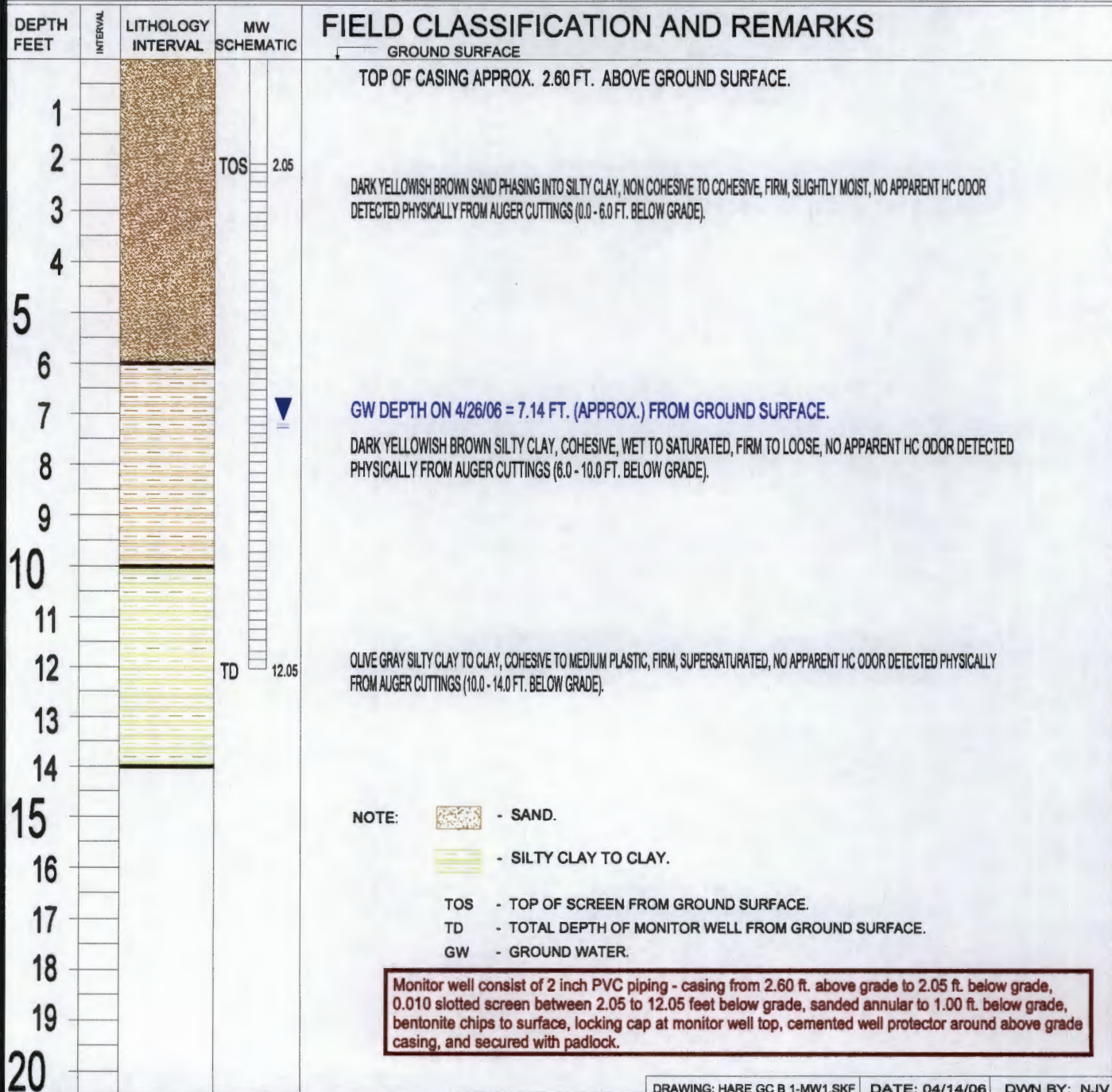
P.O. BOX 87
BLOOMFIELD, NM 87413

(505) 632-1199

BORE / TEST HOLE REPORT

CLIENT: **XTO ENERGY INC.**
LOCATION NAME: **HARE GC B #1 - DEHYDRATOR PIT, UNIT G, SEC. 23, T29N, R11W**
CONTRACTOR: **BLAGG ENGINEERING, INC. / ENVIROTECH, INC.**
EQUIPMENT USED: **MOBILE DRILL RIG (CME 75)**
BORING LOCATION: **200 FT., N31E FROM WELL HEAD.**

BORING #..... **BH-1**
MW #..... **1**
PAGE #..... **1**
DATE STARTED **4/14/06**
DATE FINISHED **4/14/06**
OPERATOR..... **DP**
PREPARED BY **NJV**



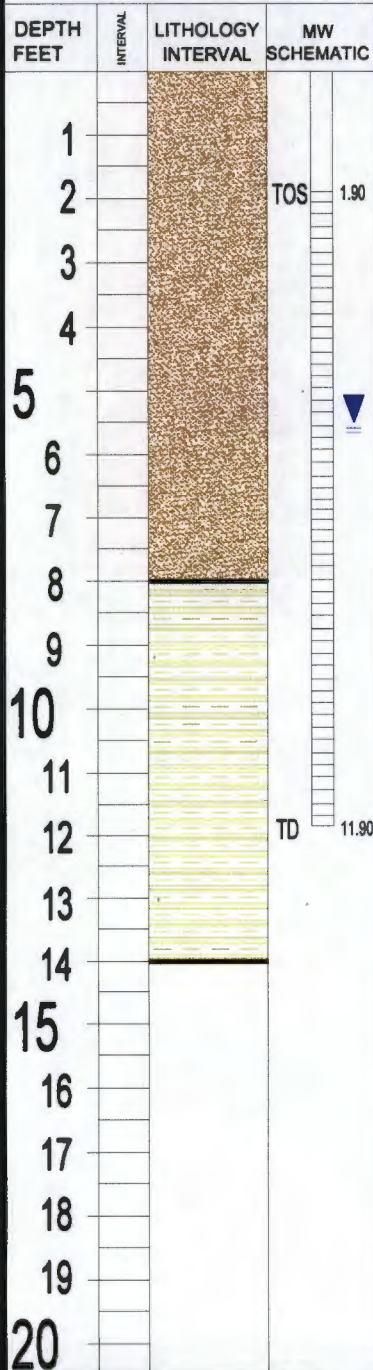
BLAGG ENGINEERING, INC.

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

BORE / TEST HOLE REPORT

CLIENT: **XTO ENERGY INC.**
LOCATION NAME: **HARE GC B #1 - DEHYDRATOR PIT, UNIT G, SEC. 23, T29N, R11W**
CONTRACTOR: **BLAGG ENGINEERING, INC. / ENVIROTECH, INC.**
EQUIPMENT USED: **MOBILE DRILL RIG (CME 75)**
BORING LOCATION: **122.5 FT., N1.5E FROM WELL HEAD.**

BORING #..... **BH-2**
MW #..... **2**
PAGE #..... **2**
DATE STARTED **4/14/06**
DATE FINISHED **4/14/06**
OPERATOR..... **DP**
PREPARED BY **NJV**



FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 2.50 FT. ABOVE GROUND SURFACE.

DARK YELLOWISH BROWN SAND (BACKFILL), NON COHESIVE, FIRM, SLIGHTLY MOIST TO SATURATED, NO APPARENT HC ODOR DETECTED PHYSICALLY FROM AUGER CUTTINGS (0.0 - 8.0 FT. BELOW GRADE).

GW DEPTH ON 4/26/06 = 5.45 FT. (APPROX.) FROM GROUND SURFACE.

OLIVE GRAY SILTY CLAY TO CLAY, COHESIVE TO MEDIUM PLASTIC, FIRM, SATURATED TO SUPERSATURATED, NO APPARENT HC ODOR DETECTED PHYSICALLY FROM AUGER CUTTINGS (8.0 - 14.0 FT. BELOW GRADE).

NOTE:  - SAND.

 - SILTY CLAY TO CLAY.

TOS - TOP OF SCREEN FROM GROUND SURFACE.

TD - TOTAL DEPTH OF MONITOR WELL FROM GROUND SURFACE.

GW - GROUND WATER.

Monitor well consist of 2 inch PVC piping - casing from 2.50 ft. above grade to 1.90 ft. below grade, 0.010 slotted screen between 1.90 to 11.90 feet below grade, sanded annular to 1.00 ft. below grade, bentonite chips to surface, locking cap at monitor well top, cemented well protector around above grade casing, and secured with padlock.

FIGURE 5

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 B #1 - DEHYDRATOR PIT, UNIT G, SEC. 23, T29N, R11W**
CONTRACTOR: **BLAGG ENGINEERING, INC. / ENVIROTECH, INC.**
EQUIPMENT USED: **MOBILE DRILL RIG (CME 75)**
BORING LOCATION: **168 FT., N24W FROM WELL HEAD.**

BORING #..... **BH-3**
MW #..... **3**
PAGE #..... **3**
DATE STARTED **4/27/06**
DATE FINISHED **4/27/06**
OPERATOR..... **DP**
PREPARED BY **NJV**

DEPTH
FEET

INTERVAL

LITHOLOGY
INTERVAL

MW
SCHEMATIC

FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 2.55 FT. ABOVE GROUND SURFACE.

GW DEPTH ON 4/26/06 = 2.73 FT. (APPROX.) FROM GROUND SURFACE.

DARK YELLOWISH BROWN SAND (BACKFILL), NON COHESIVE, FIRM, SLIGHTLY MOIST TO SATURATED, NO APPARENT HC ODOR DETECTED PHYSICALLY FROM AUGER CUTTINGS (0.0 - 7.0 FT. BELOW GRADE).

TOS 5.32

OLIVE GRAY SILTY CLAY TO CLAY, COHESIVE TO MEDIUM PLASTIC, FIRM, SATURATED TO SUPERSATURATED, NO APPARENT HC ODOR DETECTED PHYSICALLY FROM AUGER CUTTINGS (7.0 - 15.5 FT. BELOW GRADE).

TD 15.32

NOTE:  - SAND. - SILTY CLAY TO CLAY.

TOS - TOP OF SCREEN FROM GROUND SURFACE.

TD - TOTAL DEPTH OF MONITOR WELL FROM GROUND SURFACE.

GW - GROUND WATER.

Monitor well consist of 2 inch PVC piping - casing from 2.55 ft. above grade to 5.32 ft. below grade, 0.010 slotted screen between 5.32 to 15.32 feet below grade, sanded annular to 2.00 ft. below grade, bentonite chips to surface, locking cap at monitor well top, cemented well protector around above grade casing, and secured with padlock.

FIGURE 6

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 B #1 - DEHYDRATOR PIT, UNIT G, SEC. 23, T29N, R11W**
CONTRACTOR: **BLAGG ENGINEERING, INC. / ENVIROTECH, INC.**
EQUIPMENT USED: **MOBILE DRILL RIG (CME 75)**
BORING LOCATION: **83 FT., N26.5W FROM WELL HEAD.**

BORING #..... **BH-4**
MW #..... **4**
PAGE #..... **4**
DATE STARTED **4/27/06**
DATE FINISHED **4/27/06**
OPERATOR..... **DP**
PREPARED BY **NJV**

DEPTH
FEET

INTERVAL

LITHOLOGY
INTERVAL

MW
SCHEMATIC

FIELD CLASSIFICATION AND REMARKS

GROUND SURFACE

TOP OF CASING APPROX. 2.50 FT. ABOVE GROUND SURFACE.

DARK YELLOWISH BROWN SAND, NON COHESIVE, FIRM, SLIGHTLY MOIST TO WET, NO APPARENT HC ODOR DETECTED PHYSICALLY FROM AUGER CUTTINGS (0.0 - 7.0 FT. BELOW GRADE).

TOS 5.35

GW DEPTH ON 4/26/06 = 6.13 FT. (APPROX.) FROM GROUND SURFACE.

OLIVE GRAY SILTY CLAY TO CLAY, COHESIVE TO MEDIUM PLASTIC, FIRM, WET TO SUPERSATURATED, NO APPARENT HC ODOR DETECTED PHYSICALLY FROM AUGER CUTTINGS (7.0 - 15.5 FT. BELOW GRADE).

TD 15.35

NOTE:  - SAND.

 - SILTY CLAY TO CLAY.

TOS - TOP OF SCREEN FROM GROUND SURFACE.

TD - TOTAL DEPTH OF MONITOR WELL FROM GROUND SURFACE.

GW - GROUND WATER.

Monitor well consist of 2 inch PVC piping - casing from 2.50 ft. above grade to 5.35 ft. below grade, 0.010 slotted screen between 5.35 to 15.35 feet below grade, sanded annular to 2.50 ft. below grade, bentonite chips to 0.5 ft. below grade, locking cap at monitor well top, cemented well protector around above grade casing, and secured with padlock.

Hall Environmental Analysis Laboratory, Inc.

Date: 15-Dec-06

CLIENT: XTO Energy
Project: Ground Water

Lab Order: 0612122

Lab ID: 0612122-01

Collection Date: 12/7/2006 12:03:00 PM

Client Sample ID: Hare Gas Com B1 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 7:03:33 PM
Toluene	ND	1.0		µg/L	1	12/13/2006 7:03:33 PM
Ethylbenzene	ND	1.0		µg/L	1	12/13/2006 7:03:33 PM
Xylenes, Total	ND	3.0		µg/L	1	12/13/2006 7:03:33 PM
Surr: 4-Bromofluorobenzene	80.8	70.2-105		%REC	1	12/13/2006 7:03:33 PM

Lab ID: 0612122-02

Collection Date: 12/7/2006 12:34:00 PM

Client Sample ID: Hare Gas Com B1 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 7:33:43 PM
Toluene	ND	1.0		µg/L	1	12/13/2006 7:33:43 PM
Ethylbenzene	ND	1.0		µg/L	1	12/13/2006 7:33:43 PM
Xylenes, Total	ND	3.0		µg/L	1	12/13/2006 7:33:43 PM
Surr: 4-Bromofluorobenzene	82.2	70.2-105		%REC	1	12/13/2006 7:33:43 PM

Lab ID: 0612122-03

Collection Date: 12/7/2006 1:15:00 PM

Client Sample ID: Hare Gas Com B1 MW-4

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 8:03:49 PM
Toluene	ND	1.0		µg/L	1	12/13/2006 8:03:49 PM
Ethylbenzene	ND	1.0		µg/L	1	12/13/2006 8:03:49 PM
Xylenes, Total	ND	3.0		µg/L	1	12/13/2006 8:03:49 PM
Surr: 4-Bromofluorobenzene	82.5	70.2-105		%REC	1	12/13/2006 8:03:49 PM

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

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
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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 H1 MW-1~~

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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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 H1 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
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

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 12:26:25 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.

Sample Receipt Checklist

Client Name XTO ENERGY

Date and Time Received:

12/8/2006

Work Order Number 0612122

Received by TLS

Checklist completed by

[Signature] Dec 8 2006
Signature Date

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 ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☒	No ☐	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☒	

Container/Temp Blank temperature?

2°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

QA/QC Package: **Level 4** ☒

Faxmington, NM

Fax #:

Sampler: Ashley Ager

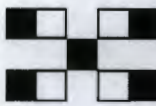
[illegible]

Received By: (Signature)

Date:	2-7-06	151	Time:
-------	--------	-----	-------

986

Remarks: *Copy results to aldo@lodes-far-services.com
only 2 vials filled for all samples, except
Have Gas Com B1 MW-1, which has 3.



**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87108
Tel. 505.345.3975 Fax 505.345.4100
www.hallenvironmental.com

ANALYSIS REQUEST

BTEX + MTBE + TMB's (B021)
BTEX + MTBE + TPH (Gasoline Only)
TPH Method B0158 (Gas/Diesel)
TPH (Method 418.1)
EDB (Method 504.1)
EDC (Method 8021)
8310 (PNA or PAH)
RCPA & Metals
Anions (F, Cl, NO ₂ , PO ₄ , SO ₄)
B081 Pesticides / PCB's (B082)
8260B (VOA)
8270 (Semi-VOA)
8021B BTEX
Air Bubbles or Headspace (Y or N)

District I
P.O. Box 1980, Hobbs, NM

District II
District Office, NM 88211

District III
DEPUTY OIL & GAS INSPECTOR
1000 Rio Grande Rd., Alamogordo, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

OK 80292
SUBMIT 1 COPY TO
APPROPRIATE
DISTRICT OFFICE
AND 1 COPY TO
SANTA FE OFFICE

TPH
water
cleaned

DEC 11 5 1995

PIT REMEDIATION AND CLOSURE REPORT

Approved - based on inspection

Operator: Amoco Production Company Telephone: (505) - 326-9200
Address: 200 Amoco Court, Farmington, New Mexico 87401
Facility Or: HARE GC B 1
Well Name
Location: Unit or Qtr/Qtr Sec G Sec 23 T 29N R 11W County SAN JUAN
Pit Type: Separator Dehydrator Other PROD. TANK
Land Type: BLM State, Fee X, Other

Pit Location: Pit dimensions: length 135', width 100', depth 4-8'
(Attach diagram) Reference: wellhead X, other
Footage from reference: 135
Direction from reference: 0 Degrees East North West South X

Depth To Ground Water:
(Vertical distance from
contaminants to seasonal
high water elevation of
ground water)

Less than 50 feet (20 points)
50 feet to 99 feet (10 points)
Greater than 100 feet (0 Points) 20

Wellhead Protection Area:
(Less than 200 feet from a private
domestic water source, or; less than
1000 feet from all other water sources)

RECEIVED
JUN 12 1995
OIL CON. DIV.
DIST. 3

Yes (20 points)
No (0 points) 0

Distance To Surface Water:
(Horizontal distance to perennial
lakes, ponds, rivers, streams, creeks,
irrigation canals and ditches)

Less than 200 feet (20 points)
200 feet to 1000 feet (10 points)
Greater than 1000 feet (0 points) 20

RANKING SCORE (TOTAL POINTS): 40

bei1005B.skf

Hall Environmental Analysis Laboratory

Date: 14-Jun-05

CLIENT: Blagg Engineering
Lab Order: 0506066
Project: HARE GC B #1
Lab ID: 0506066-01

Client Sample ID: TH1 @ 2'-W.S.-D.U.
Collection Date: 6/6/2005 3:10:00 PM

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/10/2005 4:00:04 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/10/2005 4:00:04 AM
Surr: DNOP	109	60-124		%REC	1	6/10/2005 4:00:04 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	1400	250		mg/Kg	50	6/13/2005 9:39:38 AM
Surr: BFB	116	78.3-120		%REC	50	6/13/2005 9:39:38 AM
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	0.50		mg/Kg	10	6/10/2005
Toluene	6.3	0.50		mg/Kg	10	6/10/2005
Ethylbenzene	5.4	0.50		mg/Kg	10	6/10/2005
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	6/10/2005
1,2,4-Trimethylbenzene	17	0.50		mg/Kg	10	6/10/2005
1,3,5-Trimethylbenzene	11	0.50		mg/Kg	10	6/10/2005
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	6/10/2005
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	6/10/2005
Naphthalene	1.1	1.0		mg/Kg	10	6/10/2005
1-Methylnaphthalene	ND	2.0		mg/Kg	10	6/10/2005
2-Methylnaphthalene	ND	2.0		mg/Kg	10	6/10/2005
Acetone	ND	20		mg/Kg	10	6/10/2005
Bromobenzene	ND	0.50		mg/Kg	10	6/10/2005
Bromochloromethane	ND	0.50		mg/Kg	10	6/10/2005
Bromodichloromethane	ND	0.50		mg/Kg	10	6/10/2005
Bromoform	ND	0.50		mg/Kg	10	6/10/2005
Bromomethane	ND	1.0		mg/Kg	10	6/10/2005
2-Butanone	ND	10		mg/Kg	10	6/10/2005
Carbon disulfide	ND	5.0		mg/Kg	10	6/10/2005
Carbon tetrachloride	ND	1.0		mg/Kg	10	6/10/2005
Chlorobenzene	ND	0.50		mg/Kg	10	6/10/2005
Chloroethane	ND	1.0		mg/Kg	10	6/10/2005
Chloroform	ND	0.50		mg/Kg	10	6/10/2005
Chloromethane	ND	0.50		mg/Kg	10	6/10/2005
2-Chlorotoluene	ND	0.50		mg/Kg	10	6/10/2005
4-Chlorotoluene	ND	0.50		mg/Kg	10	6/10/2005
cis-1,2-DCE	ND	0.50		mg/Kg	10	6/10/2005
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	6/10/2005
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	6/10/2005
Dibromochloromethane	ND	0.50		mg/Kg	10	6/10/2005
Dibromomethane	ND	1.0		mg/Kg	10	6/10/2005
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	6/10/2005
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	6/10/2005

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 14-Jun-05

CLIENT: Blagg Engineering
Lab Order: 0506066
Project: HARE GC B #1
Lab ID: 0506066-01

Client Sample ID: T111 @ 2'-W.S.-D.U.
Collection Date: 6/6/2005 3:10:00 PM

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	6/10/2005
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	6/10/2005
1,1-Dichloroethane	ND	0.50		mg/Kg	10	6/10/2005
1,1-Dichloroethene	ND	0.50		mg/Kg	10	6/10/2005
1,2-Dichloropropane	ND	0.50		mg/Kg	10	6/10/2005
1,3-Dichloropropane	ND	0.50		mg/Kg	10	6/10/2005
2,2-Dichloropropane	ND	0.50		mg/Kg	10	6/10/2005
1,1-Dichloropropene	ND	0.50		mg/Kg	10	6/10/2005
Hexachlorobutadiene	ND	0.50		mg/Kg	10	6/10/2005
2-Hexanone	ND	5.0		mg/Kg	10	6/10/2005
Isopropylbenzene	1.1	0.50		mg/Kg	10	6/10/2005
4-Isopropyltoluene	0.97	0.50		mg/Kg	10	6/10/2005
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	6/10/2005
Methylene chloride	ND	1.5		mg/Kg	10	6/10/2005
n-Butylbenzene	ND	0.50		mg/Kg	10	6/10/2005
n-Propylbenzene	2.3	0.50		mg/Kg	10	6/10/2005
sec-Butylbenzene	0.86	0.50		mg/Kg	10	6/10/2005
Styrene	ND	0.50		mg/Kg	10	6/10/2005
tert-Butylbenzene	ND	0.50		mg/Kg	10	6/10/2005
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	6/10/2005
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	6/10/2005
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	6/10/2005
trans-1,2-DCE	ND	0.50		mg/Kg	10	6/10/2005
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	6/10/2005
1,2,3-Trichlorobenzene	ND	0.50		mg/Kg	10	6/10/2005
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	6/10/2005
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	6/10/2005
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	6/10/2005
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	6/10/2005
Trichlorofluoromethane	ND	0.50		mg/Kg	10	6/10/2005
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	6/10/2005
Vinyl chloride	ND	0.50		mg/Kg	10	6/10/2005
Xylenes, Total	66	0.50		mg/Kg	10	6/10/2005
Sum: 1,2-Dichloroethane-d4	84.9	74.4-113		%REC	10	6/10/2005
Sum: 4-Bromofluorobenzene	77.0	86.2-120	S	%REC	10	6/10/2005
Sum: Dibromofluoromethane	88.1	77.7-120		%REC	10	6/10/2005
Sum: Toluene-d8	83.3	80.1-113		%REC	10	6/10/2005

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 14-Jun-05

CLIENT: Blagg Engineering

Client Sample ID: TH1 @ 5'-W.S.-P.T.

Lab Order: 0506066

Collection Date: 6/6/2005 3:20:00 PM

Project: HARE GC B #1

Lab ID: 0506066-02

Matrix: SOIL.

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/10/2005 6:02:58 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/10/2005 6:02:58 AM
Surr: DNOP	108	60-124		%REC	1	6/10/2005 6:02:58 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	16	5.0		mg/Kg	1	6/13/2005 10:10:08 AM
Surr: BFB	111	78.3-120		%REC	1	6/13/2005 10:10:08 AM

Qualifiers:

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

* - Value exceeds Maximum Contaminant Level

Hall Environmental Analysis Laboratory

Date: 14-Jun-05

CLIENT: Blagg Engineering
Work Order: 0506066
Project: HARE GC B #1

QC SUMMARY REPORT

Method Blank

Sample ID	MB-8125	Batch ID: 8125	Test Code: SW8015	Units: mg/Kg	Analysis Date	6/10/2005 2:27:57 AM	Prop Date	6/9/2005				
Client ID:		Run ID:	FID(17A) 2_050609A	SeqNo:	370296							
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)		ND	10									
Motor Oil Range Organics (MRO)		ND	50									
Surr: DNOP		11.14	0	10	0	111	60	124	0			

Sample ID MB-8120	Batch ID: 8120	Test Code: SW8015	Units: mg/Kg	Analysis Date 6/10/2005 6:19:23 PM	Prep Date 6/8/2005						
Client ID:	Run ID:	PIDFID_050610A	SeqNo: 370539								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5									
Surr: BFB	1048	0	1000	0	105	78.3	120	0			

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 B - Analyte detected in the associated Method Blank

QC SUMMARY REPORT

Method Blank

CLIENT: Blagg Engineering
 Work Order: 0506066
 Project: HARE GC B #1

Sample ID	mb-8120	Batch ID: 8120	Test Code: SWS2008	Units: mg/Kg	Analysis Date 6/10/2005	Prep Date 6/8/2005					
Client ID:			Run ID: NEPTUNE_050609B		SeqNo: 371392						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.05									
Toluene	ND	0.05									
Ethylbenzene	ND	0.05									
Methyl tert-butyl ether (MTBE)	ND	0.05									
1,2,4-Trimethylbenzene	ND	0.05									
1,3,5-Trimethylbenzene	ND	0.05									
1,2-Dichloroethane (EDC)	ND	0.05									
1,2-Dibromoethane (EDB)	ND	0.05									
Naphthalene	ND	0.1									
1-Methylnaphthalene	ND	0.2									
2-Methylnaphthalene	ND	0.2									
Acetone	ND	2									
Bromobenzene	ND	0.05									
Bromochloromethane	ND	0.05									
Bromodichloromethane	ND	0.05									
Bromoform	ND	0.05									
Bromomethane	0.0279	0.1									J
2-Butanone	ND	1									
Carbon disulfide	ND	0.5									
Carbon tetrachloride	ND	0.1									
Chlorobenzene	ND	0.05									
Chloroethane	ND	0.1									
Chloroform	ND	0.05									
Chloromethane	0.0259	0.05									J
2-Chlorotoluene	ND	0.05									
4-Chlorotoluene	ND	0.05									
de-1,2-DCE	ND	0.05									
de-1,3-Dichloropropene	ND	0.05									

Qualifiers: ND - Not Detected as the Reporting Limit
 J - Analyte detected below quantitation limits
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 B - Analyte detected in the associated Method Blank

QC SUMMARY REPORT

Method Blank

CLIENT: Blagg Engineering

Work Order: 0506066

Project: HARE GC B #1

1,2-Dibromo-3-chloropropane	ND	0.1
Dibromochloromethane	ND	0.05
Dibromomethane	ND	0.1
1,2-Dichlorobenzene	ND	0.05
1,3-Dichlorobenzene	ND	0.05
1,4-Dichlorobenzene	ND	0.05
Dichlorodifluoromethane	ND	0.05
1,1-Dichloroethane	ND	0.05
1,1-Dichloroethene	ND	0.05
1,2-Dichloropropane	ND	0.05
1,3-Dichloropropane	ND	0.05
2,2-Dichloropropane	ND	0.05
1,1-Dichloropropene	ND	0.05
Hexachlorobutadiene	ND	0.05
2-Hexanone	ND	0.5
Isopropylbenzene	ND	0.05
4-Isopropyltoluene	ND	0.05
4-Methyl-2-pentanone	ND	0.5
Methylene chloride	ND	0.15
n-Butylbenzene	ND	0.05
n-Propylbenzene	ND	0.05
sec-Butylbenzene	ND	0.05
Styrene	ND	0.05
tert-Butylbenzene	ND	0.05
1,1,1,2-Tetrachloroethane	ND	0.05
1,1,2,2-Tetrachloroethane	ND	0.05
Tetrachloroethene (PCE)	ND	0.05
trans-1,2-DCE	ND	0.05
trans-1,3-Dichloropropene	ND	0.05
1,2,3-Trichlorobenzene	ND	0.05
1,2,4-Trichlorobenzene	ND	0.05
1,1,1-Trichloroethane	ND	0.05
1,1,2-Trichloroethane	ND	0.05

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

Qualifiers: ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

QC SUMMARY REPORT

Method Blank

CLIENT: Blagg Engineering
Work Order: 0506066
Project: HARE GC B #1

Compound	Concentration (ppm)	Retention Time (min)	Peak Area	Peak Height	Peak Width (min)	Peak Shape	Peak Type	Peak Label
Trichloroethane (TCE)	ND	0.05						
Trichlorofluoromethane	ND	0.05						
1,2,3-Trichloropropane	ND	0.1						
Vinyl chloride	ND	0.05						
Xylenes, Total	ND	0.05						
Surr: 1,2-Dichloroethane-d4	0.4559	0	0.5	91.2	74.4	113	0	
Surr: 4-Bromofluorobenzene	0.4816	0	0.5	98.3	86.2	120	0	
Surr: Dibromofluoromethane	0.4582	0	0.5	91.2	77.7	120	0	
Surr: Toluene-d8	0.4926	0	0.5	98.5	80.1	113	0	

Qualifiers:	NID - Not Detected at the Reporting Limit	S - Spike Recovery outside accepted recovery limits	B - Analyte detected in the associated Method Blank
	J - Analyte detected below quantitation limits	R - RPD outside accepted recovery limits	4

Hall Environmental Analysis Laboratory

Date: 14-Jun-05

CLIENT: Blagg Engineering

Work Order: 0506066

Project: HARE GC B #1

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID 0506066-01AMS Batch ID: 8125 Test Code: SW8015 Units: mg/Kg Analysis Date 6/10/2005 4:30:46 AM Prep Date 6/9/2005
 Client ID: TH1 @ 2'-W.S.-D. Run ID: FID(17A) 2_050609A SeqNo: 370311

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	35.91	10	50	0	71.8	67.4	117	0			
Surr: DNOP	5.23	0	5	0	105	74	125	0			

Sample ID 0506066-01AMSD Batch ID: 8125 Test Code: SW8015 Units: mg/Kg Analysis Date 6/10/2005 5:32:16 AM Prep Date 6/9/2005
 Client ID: TH1 @ 2'-W.S.-D. Run ID: FID(17A) 2_050609A SeqNo: 370313

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44.63	10	50	0	89.3	67.4	117	35.91	21.6	17.4	R
Surr: DNOP	5.644	0	5	0	113	74	125	5.23	7.81	0	

Qualifiers:

ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: 14-Jun-05

QC SUMMARY REPORT

Laboratory Control Spike - generic

CLIENT: Blagg Engineering
Work Order: 0506066
Project: HARE GCB #1

Sample ID	LCS-8125	Batch ID: 8125	Test Code: SW8015	Units: mg/Kg	Analysis Date	6/10/2005 2:58:42 AM	Prep Date	6/9/2005				
Client ID:			Run ID: FID(17A) 2_050609A		SeqNo:	370297						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)		46.48	10	50	0	0	67.4	117	0			

Sample ID	LCSD-8125	Batch ID: 8125	Test Code: SW8015	Units: mg/Kg	Analysis Date	6/10/2005 3:29:24 AM	Prep Date	6/9/2005				
Client ID:			Run ID: FID(17A) 2_050609A		SeqNo:	370298						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)		52.19	10	50	0	0	67.4	117	46.49	11.5	17.4	

Sample ID	LCS-8120	Batch ID: 8120	Test Code: SW8015	Units: mg/Kg	Analysis Date	6/10/2005 6:50:04 PM	Prep Date	6/8/2005				
Client ID:			Run ID: PIDFID_050610A		SeqNo:	370540						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		23.93	5	25	0	95.7	84	120	0			

Sample ID	GRO Ics 2.5ug	Batch ID: 8120	Test Code: SW8015	Units: mg/Kg	Analysis Date	6/13/2005 10:40:36 AM	Prep Date					
Client ID:			Run ID: PIDFID_050613A		SeqNo:	371197						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		24.44	5	25	0	97.8	84	120	0			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Blagg Engineering
 Work Order: 0506066
 Project: HARE GC B #1

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID	ics-8120	Batch ID	8120	Test Code	SW8280B	Units	mg/Kg	Analysis Date	6/11/2005	Prep Date	6/8/2005
Client ID:		Run ID:	NEPTUNE_050609B					SeqNo:	371393		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1.045	0.05	1	0	104	79	133	0			
Toluene	1.122	0.05	1	0	112	74.3	124	0			
Chlorobenzene	1.14	0.05	1	0	114	81.3	126	0			
1,1-Dichloroethene	0.8778	0.05	1	0	87.8	71.3	144	0			
Trichloroethene (TCE)	1.014	0.05	1	0	101	70.2	124	0			

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name **BLAGG**

Date and Time Received:

6/7/2005

Work Order Number **0506066**

Received by **AT**

Checklist completed by

Signature

Date

6/7/05

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 ☐

Water - VOA vials have zero headspace?

No VOA vials submitted ☒

Yes ☐

No ☐

Water - pH acceptable upon receipt?

Yes ☐

No ☐

N/A ☒

Container/Temp Blank temperature?

1°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted

Date contacted:

Person contacted

Contacted by:

Regarding

Comments:

Corrective Action

Hall Environmental Analysis Laboratory

Date: 14-Jun-05

CLIENT: Blagg Engineering

Project: HARE GC B #1

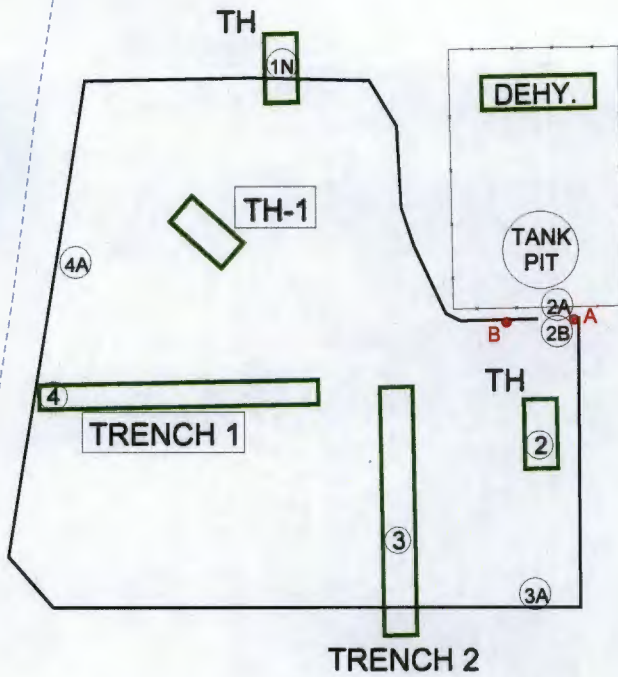
Lab Order: 0506066

CASE NARRATIVE

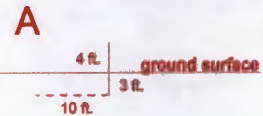
Analytical Comments for METHOD 8260_S, SAMPLE 0506066-01a: Low BFB recovery due to matrix interference.



**POND
AREA**



2 inch PVC casing (vertically) with
slotted screen (horizontally). Wind
turbines on each casing top.



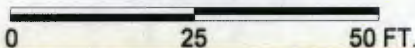
**1,584 CUBIC YARDS
TRANSPORTED TO
JFJ LANDFARM
FACILITY IN CROUCH
MESA, NM.**

SAMP. ID	OVM (ppm)	TIME	DATE
TH-1 @ 2'	749	1510	06/06/05
1N @ 3'	0.0	0909	08/09/05
2 @ 3.5'	2,050	0952	08/09/05
3 @ 3'	79.0	0925	08/09/05
4 @ 1.5'	26.2	0857	08/09/05
4A @ 2.5'	15.8	1154	08/11/05
2A @ 2'	1,734	0905	08/18/05
2B @ 6'	61.0	0901	08/18/05
3A @ 5'	0.0	0920	08/18/05

SAMP. ID	TPH (ppm)	BENZENE (ppm)	TOT. BTEX (ppm)
4A @ 2.5'	28	NA	NA
2A @ 2'	231	ND	5.51
2B @ 6'	ND	ND	ND
3A @ 5'	ND	NA	NA

NOTES: OVM - Organic Vapor Meter or Photo-ionization Detector (PID).
TPH - Total Petroleum Hydrocarbon (USEPA Method 8015B).
BTEX - Benzene, toluene, ethylbenzene, & total xylenes (USEPA Method 8021B).
ppm - Parts per million or milligram per kilogram (mg/kg).

1 INCH = 25 FT.



**WELL
HEAD** ⊕

SAMPLE LOCATIONS ARE ONLY AS ACCURATE AS
THE INSTRUMENTS USED IN OBTAINING THE FOOT-
AGE & BEARING FROM THE WELL HEAD (TAPE
MEASURE, LASER RANGE FINDER, & BRUNTON
COMPASS). ALL OTHER STRUCTURES DISPLAYED ON
THIS MAP ARE SOLELY FOR REFERENCE AND MAY NOT
BE TO SCALE.

XTO ENERGY INC.

HARE GC B #1

SW/4 NE/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: SITE CLEAN-UP

FILENAME: HARE-GC-B1-SM1.SKf

DRAWN BY: NJV

REVISED: 9/13/05

**SITE
MAP**

08/05



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

CERTIFICATE OF WASTE STATUS

1. Generator Name and Address XTO Energy Inc. 2700 Farmington Ave., Bldg. K, Suite 1 Farmington, NM 87401	2. Destination Name: J.F.J. Landfarm c/o Industrial Ecosystems Inc. 420 CR 3100 Aztec, NM 87410
3. Originating Site (name): HARE GC B #1	Location of the Waste (Street address &/or ULSTR): G-23-29N-11W
attach list of originating sites as appropriate	
4. Source and Description of Waste ABANDONED PIT - SURFACE EQUIP. DISCHARGED FLUIDS	

Nelson Velez

representative for :

Print Name

Blagg Engineering, Inc. c/o XTO Energy Inc.

do hereby certify that, according to the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency's July, 1988, regulatory determination, the above described waste is: (Check appropriate classification)

☒ EXEMPT oilfield waste

☐ NON-EXEMPT oilfield waste which is non-hazardous by characteristic analysis or by product identification

and that nothing has been added to the exempt or non-exempt non-hazardous waste defined above.

For NON-EXEMPT waste the following documentation is attached (check appropriate items):

☐ MSDS Information

☐ Other (description)

☐ RCRA Hazardous Waste Analysis

☐ Chain of Custody

This waste is in compliance with Regulated Levels of Naturally Occurring Radioactive Material (NORM) pursuant to 20 NMAC 3.1 subpart 1403.C and D.

Name (Original Signature): Nelson Velez

Title: Staff Geologist / AGENT for XTO Energy

Date: 8/10/05

Hall Environmental Analysis Laboratory

Date: 25-Aug-05

CLIENT: Blagg Engineering

Client Sample ID: 4A@2.5'

Lab Order: 0508218

Collection Date: 8/11/2005 11:54:00 AM

Project: HARE GC B #1

Lab ID: 0508218-01

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/20/2005 4:09:17 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/20/2005 4:09:17 PM
Surr: DNOP	104	60-124		%REC	1	8/20/2005 4:09:17 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	28	10		mg/Kg	2	8/25/2005 3:13:05 AM
Surr: BFB	107	83.1-124		%REC	2	8/25/2005 3:13:05 AM

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 01-Sep-05

CLIENT: Blagg Engineering
Lab Order: 0508244
Project: HARE GC B #1
Lab ID: 0508244-01

Client Sample ID: 2A @ 2'
Collection Date: 8/18/2005 9:05:00 AM

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	21	10		mg/Kg	1	8/24/2005 5:14:56 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/24/2005 5:14:56 PM
Surr: DNOP	106	60-124		%REC	1	8/24/2005 5:14:56 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	210	25		mg/Kg	5	8/30/2005 12:21:53 PM
Surr: BFB	140	83.1-124	S	%REC	5	8/30/2005 12:21:53 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	5	8/30/2005 12:21:53 PM
Benzene	ND	0.13		mg/Kg	5	8/30/2005 12:21:53 PM
Toluene	ND	0.13		mg/Kg	5	8/30/2005 12:21:53 PM
Ethylbenzene	0.61	0.13		mg/Kg	5	8/30/2005 12:21:53 PM
Xylenes, Total	4.9	0.13		mg/Kg	5	8/30/2005 12:21:53 PM
Surr: 4-Bromofluorobenzene	111	87.5-115		%REC	5	8/30/2005 12:21:53 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 01-Sep-05

CLIENT: Blagg Engineering

Client Sample ID: 2B @ 6'

Lab Order: 0508244

Collection Date: 8/18/2005 9:01:00 AM

Project: HARE GC B #1

Lab ID: 0508244-02

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/24/2005 7:27:13 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/24/2005 7:27:13 PM
Surr: DNOP	116	60-124		%REC	1	8/24/2005 7:27:13 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/30/2005 12:53:10 PM
Surr: BFB	102	83.1-124		%REC	1	8/30/2005 12:53:10 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	8/30/2005 12:53:10 PM
Benzene	ND	0.025		mg/Kg	1	8/30/2005 12:53:10 PM
Toluene	ND	0.025		mg/Kg	1	8/30/2005 12:53:10 PM
Ethylbenzene	ND	0.025		mg/Kg	1	8/30/2005 12:53:10 PM
Xylenes, Total	ND	0.025		mg/Kg	1	8/30/2005 12:53:10 PM
Surr: 4-Bromofluorobenzene	100	87.5-115		%REC	1	8/30/2005 12:53:10 PM

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 01-Sep-05

CLIENT: Blagg Engineering

Client Sample ID: 3A @ 5'

Lab Order: 0508244

Collection Date: 8/18/2005 9:20:00 AM

Project: HARE GC B #1

Lab ID: 0508244-03

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/24/2005 7:59:59 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/24/2005 7:59:59 PM
Surr: DNOP	105	60-124		%REC	1	8/24/2005 7:59:59 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/30/2005 1:24:18 PM
Surr: BFB	100	83.1-124		%REC	1	8/30/2005 1:24:18 PM

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Remarks:

Hall Environmental Analysis Laboratory

Date: 25-Aug-05

CLIENT: Blagg Engineering
Work Order: 0508218
Project: HARE GC B #1

QC SUMMARY REPORT

Method Blank

Sample ID MB-8569	Batch ID: 8569	Test Code: SW8015	Units: mg/Kg	Analysis Date 8/20/2005 12:52:22 PM	Prep Date 8/19/2005						
Client ID:		Run ID: FID(17A) 2_050820A		SeqNo: 390339							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10									
Motor Oil Range Organics (MRO)	ND	50									
Surr: DNOP	10.67	0	10	0	107	60	124	0			

Sample ID mb-8571	Batch ID: 8571	Test Code: SW8015	Units: mg/Kg	Analysis Date 8/22/2005 6:42:39 PM	Prep Date 8/19/2005						
Client ID:		Run ID: PIDFID_050822A		SeqNo: 391043							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5									
Surr: BFB	914.7	0	1000	0	91.5	83.1	124	0			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: 25-Aug-05

QC SUMMARY REPORT

Laboratory Control Spike - generic

CLIENT: Blagg Engineering
Work Order: 0508218
Project: HARE GC B #1

Sample ID	LCS-8569	Batch ID:	8569	Test Code:	SW8015	Units:	mg/Kg	Analysis Date	8/20/2005 1:25:07 PM	Prep Date	8/19/2005
Client ID:		Run ID:		FID(17A) 2_050820A				SeqNo:	390340		
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val
Diesel Range Organics (DRO)		46.25		10	50	0		92.5	67.4	117	0
											%RPD
											RPDLimit
											Qual

Sample ID	LCSD-8569	Batch ID:	8569	Test Code:	SW8015	Units:	mg/Kg	Analysis Date	8/20/2005 1:57:51 PM	Prep Date	8/19/2005
Client ID:		Run ID:		FID(17A) 2_050820A				SeqNo:	390341		
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val
Diesel Range Organics (DRO)		47.07		10	50	0		94.1	67.4	117	46.25
											1.74
											1.74
											17.4

Sample ID	lcs-8571	Batch ID:	8571	Test Code:	SW8015	Units:	mg/Kg	Analysis Date	8/22/2005 7:45:44 PM	Prep Date	8/19/2005
Client ID:		Run ID:		PIDFID_050822A				SeqNo:	391059		
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val
Gasoline Range Organics (GRO)		24.66		5	25	0		98.6	84	120	0

Sample ID	GRO lcs 2.5ug	Batch ID:	8571	Test Code:	SW8015	Units:	mg/Kg	Analysis Date	8/23/2005 12:52:35 PM	Prep Date	
Client ID:		Run ID:		PIDFID_050823A				SeqNo:	391457		
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val
Gasoline Range Organics (GRO)		22.13		5	25	0.0156		88.5	84	120	0

Sample ID	GRO lcs 2.5ug	Batch ID:	8571	Test Code:	SW8015	Units:	mg/Kg	Analysis Date	8/24/2005 4:49:06 PM	Prep Date	
Client ID:		Run ID:		PIDFID_050824A				SeqNo:	392009		
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val
Gasoline Range Organics (GRO)		22.35		5	25	0.0214		89.3	84	120	0

Qualifiers: N.D - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name **BLAGG**

Date and Time Received:

8/18/2005

Work Order Number **0508218**

Received by **GLS**

Checklist completed by

[Signature]
Signature

8-18-05
Date

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 ☐	
Water - VOA vials have zero headspace?	No VOA vials submitted ☒	Yes ☐	No ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☒
Container/Temp Blank temperature?	3°	4° C ± 2 Acceptable If given sufficient time to cool.	

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

Hall Environmental Analysis Laboratory

Date: 01-Sep-05

CLIENT: Blagg Engineering
Work Order: 0508244
Project: HARE GC B #1

QC SUMMARY REPORT
Method Blank

Sample ID MB-8588	Batch ID: 8588	Test Code: SW8015	Units: mg/Kg	Analysis Date 8/22/2005 7:15:23 PM	Prep Date 8/22/2005						
Client ID:		Run ID: FID(17A) 2_050822A		SeqNo: 390841							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10									
Motor Oil Range Organics (MRO)	ND	50									
Surr: DNOP	10.01	0	10	0	100	60	124	0			

Sample ID mb-8594	Batch ID: 8594	Test Code: SW8015	Units: mg/Kg	Analysis Date 8/23/2005 6:41:01 PM	Prep Date 8/22/2005						
Client ID:		Run ID: PIDFID_050823A		SeqNo: 391443							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5									
Surr: BFB	943.5	0	1000	0	94.4	83.1	124	0			

Sample ID mb-8594	Batch ID: 8594	Test Code: SW8021	Units: mg/Kg	Analysis Date 8/23/2005 6:41:01 PM	Prep Date 8/22/2005						
Client ID:		Run ID: PIDFID_050823A		SeqNo: 391292							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.1									
Benzene	ND	0.025									
Toluene	ND	0.025									
Ethylbenzene	ND	0.025									
Xylenes, Total	ND	0.025									
Surr: 4-Bromofluorobenzene	1.004	0	1	0	100	87.5	115	0			

Qualifiers:

ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: 01-Sep-05

CLIENT: Blagg Engineering
Work Order: 0508244
Project: HARE GC B #1

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID	LCS-8588	Batch ID:	8588	Test Code:	SW8015	Units:	mg/Kg	Analysis Date	8/22/2005 7:48:08 PM	Prep Date	8/22/2005	
Client ID:		Run ID:	FID(17A) 2_050822A	SeqNo:	390842							
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)		45.13	10	50	0	90.3	67.4	117	0			
Sample ID	LC9D-8588	Batch ID:	8588	Test Code:	SW8015	Units:	mg/Kg	Analysis Date	8/22/2005 8:19:22 PM	Prep Date	8/22/2005	
Client ID:		Run ID:	FID(17A) 2_050822A	SeqNo:	390843							
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)		42.95	10	50	0	85.9	67.4	117	45.13	4.96	17.4	
Sample ID	Ics-8594	Batch ID:	8594	Test Code:	SW8015	Units:	mg/Kg	Analysis Date	8/23/2005 7:12:34 PM	Prep Date	8/22/2005	
Client ID:		Run ID:	PIDFID_050823A	SeqNo:	391444							
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		23.22	5	25	0	92.9	84	120	0			
Sample ID	GRO Ics 2.5ug	Batch ID:	8594	Test Code:	SW8015	Units:	mg/Kg	Analysis Date	8/24/2005 4:49:06 PM	Prep Date		
Client ID:		Run ID:	PIDFID_050824A	SeqNo:	392007							
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		22.35	5	25	0.0214	89.3	84	120	0			
Sample ID	GRO Ics 2.5ug	Batch ID:	8594	Test Code:	SW8015	Units:	mg/Kg	Analysis Date	8/26/2005 4:48:50 PM	Prep Date		
Client ID:		Run ID:	PIDFID_050826A	SeqNo:	392953							
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		22.96	5	25	0.0126	91.8	84	120	0			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Blagg Engineering

Work Order: 0508244

Project: HARE GC B #1

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID	GRO Ics 2.5ug	Batch ID: 8594	Test Code: SW8015	Units: mg/Kg	Analysis Date	8/30/2005 9:48:26 PM	Prep Date					
Client ID:			Run ID: PIDFID_050830A		SeqNo:	393956						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		24.97	5	25	0	99.9	84	120	0			

Sample ID	Ics-8594	Batch ID: 8594	Test Code: SW8021	Units: mg/Kg	Analysis Date	8/23/2005 7:12:34 PM	Prep Date	8/22/2005				
Client ID:			Run ID: PIDFID_050823A		SeqNo:	391296						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)		2.116	0.1	2	0	108	65	132	0			
Benzene		0.4416	0.025	0.42	0	105	85.6	116	0			
Toluene		2.084	0.025	2	0	104	82.4	120	0			
Ethylbenzene		0.4274	0.025	0.41	0	104	86.4	111	0			
Xylenes, Total		2.155	0.025	2	0	108	78.4	125	0			

Sample ID	BTEX Ics 100ng	Batch ID: 8594	Test Code: SW8021	Units: mg/Kg	Analysis Date	8/24/2005 6:24:58 PM	Prep Date					
Client ID:			Run ID: PIDFID_050824A		SeqNo:	391969						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)		1.014	0.1	1	0	101	65	132	0			
Benzene		1.043	0.025	1	0	104	85.6	116	0			
Toluene		1.008	0.025	1	0	101	82.4	120	0			
Ethylbenzene		1.016	0.025	1	0	102	86.4	111	0			
Xylenes, Total		2.056	0.025	2	0	103	78.4	125	0			

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 B - Analyte detected in the associated Method Blank

QC SUMMARY REPORT

Laboratory Control Spike - generic

CLIENT: Blagg Engineering
 Work Order: 0508244
 Project: HARE GC B #1

Sample ID	BTX Ics 100ng	Batch ID: 8594	Test Code: SW8021	Units: mg/Kg	Analysis Date	8/26/2005 3:44:08 PM	Prep Date				
Client ID:			Run ID: PIDFID_050826A		SeqNo: 392876						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	1.067	0.1	1	0	107	65	132	0			
Benzene	1.047	0.025	1	0	105	85.6	116	0			
Toluene	1.013	0.025	1	0	101	82.4	120	0			
Ethylbenzene	1.006	0.025	1	0	100	86.4	111	0			
Xylenes, Total	2.049	0.025	2	0	102	78.4	125	0			

Sample ID	BTEX Ics 100ng	Batch ID: 8594	Test Code: SW8021	Units: mg/Kg	Analysis Date	8/31/2005 12:53:47 AM	Prep Date				
Client ID:			Run ID: PIDFID_050830A		SeqNo: 393856						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.8808	0.1	1	0	88.1	65	132	0			
Benzene	1.045	0.025	1	0	105	85.6	116	0			
Toluene	0.988	0.025	1	0	98.8	82.4	120	0			
Ethylbenzene	0.9957	0.025	1	0	99.6	86.4	111	0			
Xylenes, Total	2.026	0.025	2	0	101	78.4	125	0			

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantization limits
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name **BLAGG**

Date and Time Received:

8/19/2005

Work Order Number 0508244

Received by **AT**

Checklist completed by

[Signature]

Signature

Date

8/19/05

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 ☐	
Water - VOA vials have zero headspace?	No VOA vials submitted ☒	Yes ☐	No ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☒
Container/Temp Blank temperature?	6°	4° C ± 2 Acceptable If given sufficient time to cool.	

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____