States III District III

1000 Rio Brazos Road, Aztec, NM 87410

District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

### State of New Mexico **Energy Minerals and Natural Resources**

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back

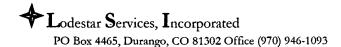
side of form

Form C-141

Revised October 10, 2003

## **Release Notification and Corrective Action**

|                 |              |                 |                    |  | <b>OPERAT</b>                           | OR  |                                      | Initial     | Report      | $\boxtimes$                             | Final Report |              |  |
|-----------------|--------------|-----------------|--------------------|--|---|---|--------------------------------------|-------------|-------------|---|--------------|--------------|--|
| Name of Co      | mpany X      | TO Energy       | Inc.               | -                                      |   | Contact Kim Champlin                                      |                                      |             |             |   |              |              |  |
| Address #3      | 32 County    |                 |                    |  | 7                                       | Telephone N   | lo. <b>(505) 333-3</b>               | 100         |             |   |              |              |  |
|                 |              | n Frame A       | #1 (API            | 30-045-07905)                          | I                                       | acility Typ   | e Gas Well (D                        | akota)      |             |   |              |              |  |
| Surface Own     | ner Fee      |                 |                    | Mineral Ov                             | wner                                    |   |                                      |             | Lease N     | lo.                                     | · · · · ·    |              |  |
|                 |              |                 |                    | LOCA                                   | TION                                    | OF REI  | EASE                                 |             |             |   |              |              |  |
| Unit Letter     | Section      | Township        | Range              | Feet from the                          | North/S                                 | South Line  | Feet from the                        | East/W      | est Line    | 811.4                                   |              |              |  |
| D               | 30           | 29N             | 10W                | 990                                    | North                                   |   | 990                                  | West        |             | San Juan                                |              |              |  |
|                 |              |                 |                    | Latitude36.70                          | 143                                     | Longitude   | 107.93024                            | _           |             |   |              |              |  |
|                 |              |                 |                    | NATI                                   | URE                                     | OF RELI   |                                      |             |             |   |              |              |  |
| Type of Relea   |              |                 |                    |  |   |   | Release Approx                       |             |             | Recovered                               |              |              |  |
| Source of Rel   | ease Prod    | luced Oil Tai   | ık (no oil         | in tank at the tim                     | e)                                      | l   | our of Occurrenc<br>ime unknown      | e           |             | l Hour of D<br>at <b>6:00 p</b> i       |              | У            |  |
| Was Immedia     | te Notice C  |                 | J Vog L            | ] No ⊠ Not Req                         | uirad                                   | If YES, To  | Whom?                                |             |             |   |              | art arms     |  |
|                 |              | <b>_</b>        |                    | 1 140 M 1401 Ked                       | uncu                                    |   |                                      |             |             | CVD AU(                                 |              |              |  |
| By Whom?        |              | 1 10            | •••                |  |   | Date and H  |                                      | 1 117       |             | <u>on com</u>                           | 5. 1)11      | J.           |  |
| Was a Watero    | ourse Read   |                 | Yes 🛚              | No                                     |   | N/A   | lume Impacting t                     | ne water    | course.     | DIST                                    | , Ç          |              |  |
| If a Watercou   | rse was Im   | pacted, Descr   |                    |  | /                                       |   |                                      | *           |             |   |              |              |  |
|                 | se of Proble | em and Reme     | dial Action        | Taken.* An XT                          | O emp                                   | lovee discov  | ered a loss of 18                    | barrels     | of produc   | ed water a                              | ıfter ga     | auging a     |  |
| tank. After i   | nvestigatio  | on it was disc  | overed th          | at the water tank                      | had a s                                 | mall leak on  | the bottom near                      | r the dra   | in line. A  | second ta                               | nk was       | s brought to |  |
|                 |              |                 |                    | l oil remaining in                     |   |   |                                      | vas takei   | n to an in  | ection dis                              | osal. '      | The release  |  |
| Describe Area   |              |                 |                    | ot lined and ther                      | e was n                                 | o standing 1  | uid to recover.                      |             |             | *************************************** |              |              |  |
| The water v     | vas contair  | ed within se    | condary c          | ontainment, no w                       |   |   |                                      |             |             |   |              |              |  |
|                 |              |                 |                    | mples were collec<br>hether or not fur |   |   |                                      | and res     | uits will t | e submitte                              | ea upor      | i receipt.   |  |
| Area was exc    | avated wi    | th a third par  | ty contra          | ctor onsite. PID 1                     | eading                                  | s were cond   | ucted during exc                     | avation     | and samp    | les collect                             | ed. All      | excavated    |  |
| soil was disp   | osed of at a | licensed fac    | ility. Gro         | undwater was encommendation of c       | counter                                 | ed in part o  |                                      |             |             |   |              |              |  |
|                 |              |                 |                    | is true and comple                     |   |   | knowledge and u                      | nderstan    | d that purs | suant to NN                             | 1OCD 1       | rules and    |  |
| regulations al  | loperators   | are required t  | o report ar        | d/or file certain re                   | lease no                                | otifications ar   | d perform correc                     | tive action | ons for rel | eases which                             | n may e      | endanger     |  |
|                 |              |                 |                    | e of a C-141 repor                     |   |   |                                      |             |             |   |              |              |  |
| or the enviror  | perations h  | ave failed to a | adequately         | investigate and retance of a C-141 re  | mediate                                 | contaminati   | on that pose a three the operator of | eat to gro  | ound water  | , surtace w                             | ater, hu     | ıman health  |  |
| federal, state, |              |                 |                    | tance of a C-141 ft                    | eport uc                                | es not renev  | e tile operator or i                 | responsi    | milty for C | ompnance                                | with an      | .y other     |  |
|                 | 1            |                 |                    |  |   |   | OIL CON                              | SERV        | ATION       | DIVISI                                  | ON           |              |  |
| C:4             | Kin          | Cham            | 1/                 | •                                      |   |   |                                      |             |             |   |              |              |  |
| Signature:      | 11000        | Cum             | pa                 | <u> </u>                               |   | Approved by District Supervisor: Brange Fell For: Charlie |                                      |             |             |   |              |              |  |
| Printed Name    | : Kim Ch     | amplin          |                    |  | A                                       | Approved by District Supervisor: Branch I M Perrin        |                                      |             |             |   |              |              |  |
| Title: Sr. En   | vironment    | al Represent    | ative              |  | Approval Date: 8/26/09 Expiration Date: |   |                                      |             |             |   |              |              |  |
| E-mail Addre    | ss: Kim_C    | Champlin@xt     | oenergy.c          | om                                     | (                                       | Conditions of   | Approval:                            |             |             | Attache                                 | 4 []         |              |  |
| Date: 08/0      | 7/09         | Pho             | one: <b>505-</b> 3 | 33-3100                                |   |   |                                      |             |             |   |              |              |  |
| Attach Addit    |              |                 |                    |  |   | Incident # 1 km D 8926036861                              |                                      |             |             |   |              |              |  |



April 29, 2009

Mr. Martin Nee XTO Energy, Inc. San Juan Division 382 CR 3100 Aztec, NM 87410

RE: Soil Excavation at the Sullivan Frame A #1

Dear Mr. Nee,

On April 6<sup>th</sup> through 10<sup>th</sup>, 2009, Lodestar Services, Inc. (Lodestar) conducted excavation oversight at the Sullivan Frame A #1 natural gas production well operated by XTO Energy, Inc. (XTO). During routine maintenance at the site, XTO discovered a release from the produced oil tank on location and began excavating impacted soil. Lodestar was contracted to conduct field screening, document soil removal and collect laboratory closure samples of the affected soils and groundwater.

The Sullivan Frame A #1 is located ¼ mile north of San Juan County Road 4990 (Sullivan Road) and 3.3 miles east of NM highway 44 (US 550), within Unit D of Section 30 within Township 29N and Range 10W. The San Juan River is ¼ mile to the north of the site. Depth to groundwater in the area is 4-6 feet below ground surface (bgs) based on the presence of standing groundwater at that depth in the excavation.

Lodestar first arrived at the site at 0900 on April 6<sup>th</sup>. The 300 bbl tank associated with the release had been relocated, and preliminary excavation of the former containment berm area was complete. Lodestar conducted field screening and recommended additional soil removal. Field screening was conducted by monitoring soil headspace gas with a photo-ionization detector (PID) according to NMOCD headspace techniques. As the excavation progressed, inoperative underground piping was extracted. The excavation concluded at midday on April 10<sup>th</sup> when field screening indicated impacted soil had been removed. The final excavation was roughly 90 feet square and approximately 5 feet deep. A site map is attached showing the general site layout and final excavation perimeter.

A geologist from Lodestar collected closure samples from throughout the excavation. Composite samples were collected by depositing five aliquots of soil into plastic bags, thoroughly mixing the contents and sampling into four-ounce glass jars. The samples were stored on ice and shipped to Hall Environmental Analysis Laboratory following strict chain-of-custody procedures. Hall analyzed the soil samples for benzene, toluene, ethyl-benzene and total xylenes (BTEX), as well as total petroleum hydrocarbons (TPH).

April 29, 2009 Mr. Martin Nee Page 2 of 3

Results from laboratory testing are presented below. Laboratory reports, including chainof-custody documents, are attached.

#### Sullivan Frame A #1 Final Soil Sample Results

| Sample Name     | TPH<br>mg/kg | Benzene<br>mg/kg | Toluene<br>mg/kg | Ethyl-<br>benzene<br>mg/kg | Xylenes<br>mg/kg | Total<br>BTEX<br>mg/kg |
|-----------------|--------------|------------------|------------------|----------------------------|------------------|------------------------|
| North Wall      | ND           | ND               | ND               | ND                         | 0.16             | 0.16                   |
|                 |              |                  |                  |                            |                  |                        |
| South Wall      | ND           | ND               | ND               | ND                         | ND               | NA                     |
| East Wall       | ND           | ND               | ND               | ND                         | ND               | NA                     |
| West Wall       | ND           | ND               | ND               | ND                         | ND               | ND                     |
| Floor Composite | ND           | ND               | 0.43             | 0.085                      | 1.7              | 2.215                  |
| NMOCD Standard  | 100          | 10               | NA               | NA                         | NA               | 50                     |

**TPH: Total Petroleum Hydrocarbons** 

BTEX: benzene, toluene, ethyl benzene, and xylenes

ppm: parts per million

mg/kg: milligrams per kilogram

NA: not applicable ND: not detected

Groundwater from the excavation was also sampled, following two evacuations of the pit groundwater via vacuum truck. A grab sample taken on April 15th and shipped to Hall Environmental Analysis Laboratory (HEAL). HEAL analyzed the groundwater for Results from laboratory testing are presented below and indicate BTEX concentrations are below New Mexico Water Quality Control Commission (MNWQCC) standards.

#### Sullivan Frame A #1 Final Groundwater Sample Results

|                 | Benzene | Toluene | Ethyl-<br>benzene | Xylenes |
|-----------------|---------|---------|-------------------|---------|
| Sample Name     | μg/l    | μg/l    | μg/l              | μg/l    |
| Pit GW          | 9.5     | 60      | 14                | 240     |
| NMWOCC Standard | 10      | 750     | 750               | 620     |

μg/l: micrograms per liter

NA: not applicable

ND: not detected

Based on the soil and groundwater sampling results presented above, Lodestar recommends XTO request closure of the site from NMOCD and ask that no further action be required.

April 29, 2009 Mr. Martin Nee Page 3 of 3

Should you have any questions or require additional information you may contact me at (970) 946-1093.

Respectfully Submitted,

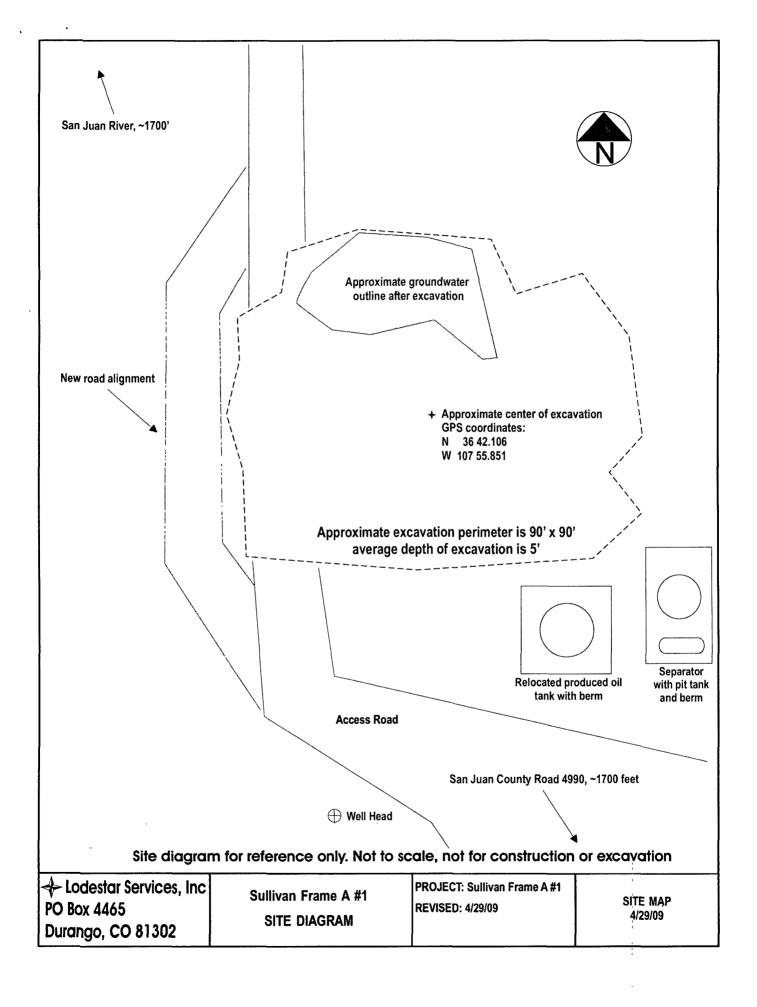
Ashley Ager Lodestar Services, Inc.

Attachments: Site Map

**Laboratory Results** 

CC: Kim Champlin, XTO

File





#### **COVER LETTER**

Wednesday, April 22, 2009

Martin Nee XTO Energy 382 County Road 3100 Aztec, NM 87410

TEL: (505) 333-3100 FAX (505) 333-3280

RE: Sullivan Frame A #1

Dear Martin Nee:

Order No.: 0904180

Hall Environmental Analysis Laboratory, Inc. received 5 sample(s) on 4/13/2009 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager Nancy McDuffie, Laboratory Manager

NM Lab # NM9425 AZ license # AZ0682 ORELAP Lab # NM100001 Texas Lab# T104704424-08-TX



Date: 22-Apr-09

CLIENT:

XTO Energy

Lab Order:

0904180

Project:

Sullivan Frame A #1

Lab ID:

0904180-01

Client Sample ID: North Wall Comp.

Collection Date: 4/7/2009 3:41:00 PM

Date Received: 4/13/2009

Matrix: SOIL

| Analyses                    | Result | PQL (    | Qual Units | DF | Date Analyzed        |
|-----------------------------|--------|----------|------------|----|----------------------|
| EPA METHOD 8021B: VOLATILES |        |          |            |    | Analyst: DAM         |
| Benzene                     | ND     | 0.050    | mg/Kg      | 1  | 4/17/2009 2:09:07 PM |
| Toluene                     | ND     | 0.050    | mg/Kg      | 1  | 4/17/2009 2:09:07 PM |
| Ethylbenzene                | ND     | 0.050    | mg/Kg      | 1  | 4/17/2009 2:09:07 PM |
| Xylenes, Total              | 0.16   | 0.10     | mg/Kg      | 1  | 4/17/2009 2:09:07 PM |
| Surr: 4-Bromofluorobenzene  | 95.4   | 66.8-139 | %REC       | 1  | 4/17/2009 2:09:07 PM |
| EPA METHOD 300.0: ANIONS    |        |          |            |    | Analyst: TAF         |
| Chloride                    | 230    | 3.0      | mg/Kg      | 10 | 4/17/2009 6:09:51 PM |
| EPA METHOD 418.1: TPH       |        |          |            |    | Analyst: LRW         |
| Petroleum Hydrocarbons, TR  | ND     | 20       | mg/Kg      | 1  | 4/14/2009            |

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

Date: 22-Apr-09

CLIENT:

XTO Energy

Client Sample ID: Floor Composite

Lab Order:

0904180

Collection Date: 4/7/2009 4:44:00 PM

Project:

Sullivan Frame A #1

Date Received: 4/13/2009

Lab ID:

0904180-02

Matrix: SOIL

| Analyses                    | Result | PQL Q    | ual Units | DF | Date Analyzed        |
|-----------------------------|--------|----------|-----------|----|----------------------|
| EPA METHOD 8021B: VOLATILES |        |          |           |    | Analyst: DAM         |
| Benzene                     | ND     | 0.050    | mg/Kg     | 1  | 4/17/2009 2:39:39 PM |
| Toluene                     | 0.43   | 0.050    | mg/Kg     | 1  | 4/17/2009 2:39:39 PM |
| Ethylbenzene                | 0.085  | 0.050    | mg/Kg     | 1  | 4/17/2009 2.39:39 PM |
| Xylenes, Total              | 1.7    | 0 10     | mg/Kg     | 1  | 4/17/2009 2:39:39 PM |
| Surr: 4-Bromofluorobenzene  | 120    | 66.8-139 | %REC      | 1  | 4/17/2009 2:39·39 PM |
| EPA METHOD 300.0: ANIONS    |        |          |           |    | Analyst: TAF         |
| Chloride                    | 160    | 3.0      | mg/Kg     | 10 | 4/16/2009 8:43:18 PM |
| EPA METHOD 418.1: TPH       |        |          |           |    | Analyst: LRW         |
| Petroleum Hydrocarbons, TR  | ND     | 20       | mg/Kg     | 1  | 4/14/2009            |

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

Date: 22-Apr-09

CLIENT:

XTO Energy

0904180-03

Lab Order:

0904180

Client Sample ID: East Wall Comp.

Collection Date: 4/8/2009 4:16:00 PM

Project:

Lab ID:

Sullivan Frame A #1

Date Received: 4/13/2009

Matrix: SOIL

| Analyses                    | Result | PQL Qu   | al Units | DF | Date Analyzed        |
|-----------------------------|--------|----------|----------|----|----------------------|
| EPA METHOD 8021B: VOLATILES |        |          |          |    | Analyst: DAM         |
| Benzene                     | ND     | 0.050    | mg/Kg    | 1  | 4/17/2009 3:10:20 PM |
| Toluene                     | ND     | 0.050    | mg/Kg    | 1  | 4/17/2009 3:10:20 PM |
| Ethylbenzene                | ND     | 0.050    | mg/Kg    | 1  | 4/17/2009 3:10:20 PM |
| Xylenes, Total              | ND     | 0.10     | mg/Kg    | 1  | 4/17/2009 3:10:20 PM |
| Surr: 4-Bromofluorobenzene  | 106    | 66.8-139 | %REC     | 1  | 4/17/2009 3:10:20 PM |
| EPA METHOD 300.0: ANIONS    |        |          |          |    | Analyst: TAF         |
| Chloride                    | 28     | 3.0      | mg/Kg    | 10 | 4/16/2009 9:00:43 PM |
| EPA METHOD 418.1: TPH       |        |          |          |    | Analyst: LRW         |
| Petroleum Hydrocarbons, TR  | ДИ     | 20       | mg/Kg    | 1  | 4/14/2009            |

- Value exceeds Maximum Contaminant Level
- E Estimated value
- Analyte detected below quantitation limits
- Not Detected at the Reporting Limit
- Spike recovery outside accepted recovery limits
- В Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

Date: 22-Apr-09

CLIENT:

XTO Energy

Lab Order:

0904180

Project:

Sullivan Frame A #1

Lab ID:

0904180-04

Client Sample ID: South Wall Comp.

Collection Date: 4/9/2009 11:55:00 AM

Date Received: 4/13/2009

Matrix: SOIL

| Analyses                    | Result | PQL      | Qual Units | DF | Date Analyzed        |
|-----------------------------|--------|----------|------------|----|----------------------|
| EPA METHOD 8021B: VOLATILES |        |          |            |    | Analyst: DAM         |
| Benzene                     | ND     | 0.050    | mg/Kg      | 1  | 4/17/2009 3:40:46 PM |
| Toluene                     | ND     | 0.050    | mg/Kg      | 1  | 4/17/2009 3:40:46 PM |
| Ethylbenzene                | ND     | 0.050    | mg/Kg      | 1  | 4/17/2009 3:40:46 PM |
| Xylenes, Total              | ND     | 0.10     | mg/Kg      | 1  | 4/17/2009 3:40:46 PM |
| Surr: 4-Bromofluorobenzene  | 91.2   | 66.8-139 | %REC       | 1  | 4/17/2009 3:40:46 PM |
| PA METHOD 300.0: ANIONS     |        |          |            |    | Analyst: TAF         |
| Chloride                    | 610    | 3.0      | mg/Kg      | 10 | 4/17/2009 6:27:15 PM |
| EPA METHOD 418.1: TPH       |        | ,        |            |    | Analyst: LRW         |
| Petroleum Hydrocarbons, TR  | ND     | 20       | mg/Kg      | 1  | 4/14/2009            |

- Value exceeds Maximum Contaminant Level
- E Estimated value
- 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

Date: 22-Apr-09

**CLIENT:** 

XTO Energy

0904180

Lab Order:

Sullivan Frame A #1

Project: Lab ID:

0904180-05

Client Sample ID: West Wall Comp.

Collection Date: 4/10/2009 11:12:00 AM

Date Received: 4/13/2009

Matrix: SOIL

| Analyses                    | Result                                 | PQL      | Qual Units | DF | Date Analyzed        |
|-----------------------------|--|----------|------------|----|----------------------|
| EPA METHOD 8021B: VOLATILES | ************************************** |          |            |    | Analyst: DAM         |
| Benzene                     | ND                                     | 0.050    | mg/Kg      | 1  | 4/17/2009 4:11:14 PM |
| Toluene                     | ND                                     | 0.050    | mg/Kg      | 1  | 4/17/2009 4:11:14 PM |
| Ethylbenzene                | ND                                     | 0.050    | mg/Kg      | 1  | 4/17/2009 4:11:14 PM |
| Xylenes, Total              | ND                                     | 0.10     | mg/Kg      | 1  | 4/17/2009 4:11:14 PM |
| Surr: 4-Bromofluorobenzene  | 99.8                                   | 66.8-139 | %REC       | 1  | 4/17/2009 4:11:14 PM |
| EPA METHOD 300.0: ANIONS    |  |          |            |    | Analyst: TAF         |
| Chloride                    | 270                                    | 3.0      | mg/Kg      | 10 | 4/17/2009 6:44:40 PM |
| EPA METHOD 418.1: TPH       |  |          |            |    | Analyst: LRW         |
| Petroleum Hydrocarbons, TR  | ND                                     | 20       | mg/Kg      | 1  | 4/14/2009            |

- Value exceeds Maximum Contaminant Level
- Е Estimated value
- Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- 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

Date: 22-Apr-09

# QA/QC SUMMARY REPORT

Client:

XTO Energy

Project:

Sullivan Frame A #1

Work Order:

0904180

| Analyte                     | Result    | Units | PQL   | %Rec | LowLimit | HighLimit       | %RPD RPI       | DLimit Qual          |
|-----------------------------|-----------|-------|-------|------|----------|-----------------|----------------|----------------------|
| Method: EPA Method 300.0: A | Anions    |       |       |      |          |                 |                |                      |
| Sample ID: MB-18837         |           | MBLK  |       |      | Batch I  | D: 18837        | Analysis Date: | 4/15/2009 8:23:40 PM |
| Chloride                    | ND        | mg/Kg | 0.30  | •    |          |                 |                |                      |
| Sample ID: LCS-18837        |           | LCS   |       |      | Batch I  | D: 18837        | Analysis Date: | 4/15/2009 8:41:04 PM |
| Chloride                    | 15.66     | mg/Kg | 0.30  | 104  | 90       | 110             |                |                      |
| Method: EPA Method 418.1: 1 | грн       |       |       |      |          |                 |                |                      |
| Sample ID: MB-18829         |           | MBLK  |       |      | Batch I  | D: <b>18829</b> | Analysis Date: | 4/14/2009            |
| Petroleum Hydrocarbons, TR  | ND        | mg/Kg | 20    |      |          |                 |                |                      |
| Sample ID: LCS-18829        |           | LCS   |       |      | Batch I  | D: 18829        | Analysis Date: | 4/14/2009            |
| Petroleum Hydrocarbons, TR  | 98.06     | mg/Kg | 20    | 98.1 | 82       | 114             |                |                      |
| Sample ID: LCSD-18829       |           | LCSD  |       |      | Batch I  | D: 18829        | Analysis Date: | 4/14/2009            |
| Petroleum Hydrocarbons, TR  | 99.28     | mg/Kg | 20    | 99.3 | 82       | 114             | 1.24 20        | )                    |
| Method: EPA Method 8021B:   | Volatiles |       |       |      |          |                 |                |                      |
| Sample ID: MB-18817         |           | MBLK  |       |      | Batch II | D: 18817        | Analysis Date. | 4/17/2009 7:14:07 PM |
| Benzene                     | ND        | mg/Kg | 0.050 |      |          |                 |                |                      |
| Toluene                     | ND        | mg/Kg | 0.050 |      |          |                 |                |                      |
| Ethylbenzene                | ND        | mg/Kg | 0.050 |      |          |                 |                |                      |
| Xylenes, Total              | ND        | mg/Kg | 0.10  |      |          |                 |                |                      |
| Sample ID: LCS-18817        |           | LCS   |       |      | Batch II | D: 18817        | Analysis Date: | 4/17/2009 6:43:29 PM |
| Benzene                     | 1.083     | mg/Kg | 0.050 | 106  | 78.8     | 132             |                |                      |
| Toluene                     | 1.024     | mg/Kg | 0.050 | 102  | 78.9     | 112             |                |                      |
| Ethylbenzene                | 1.081     | mg/Kg | 0.050 | 108  | 69.3     | 125             | •              |                      |
| Xylenes, Total              | 3.224     | mg/Kg | 0.10  | 107  | 73       | 128             |                |                      |

E Estimated value

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

## Sample Receipt Checklist

| Client Name XTO ENERGY                        |                   |        |              | Date Receive   | ed:               | 4/13/2009   |   |
|---|-------------------|--------|--------------|----------------|-------------------|-------------|---|
| Work Order Number 0904180                     |                   |        |              | Received by    | r: ARS            | 11          |   |
| Checklist completed by:                       |                   |        | 4 13 Date    | Sample ID I    | abels checked by: | Initiale    |   |
| Matrix:                                       | Carrier name:     | Grey   | hound        |                |                   |             |   |
| Shipping container/cooler in good condition?  |                   | Yes    | ¥            | No 🗆           | Not Present       |             |   |
| Custody seals intact on shipping container/co | ooler?            | Yes    | $\checkmark$ | No 🗆           | Not Present       | Not Shipped |   |
| Custody seals intact on sample bottles?       |                   | Yes    | V            | No 🗆           | N/A               |             |   |
| Chain of custody present?                     |                   | Yes    | V            | No 🗌           | •                 |             |   |
| Chain of custody signed when relinquished a   | nd received?      | Yes    | $\mathbf{Z}$ | No 🗆           |                   |             |   |
| Chain of custody agrees with sample labels?   |                   | Yes    | V            | No 🗆           |                   |             |   |
| Samples in proper container/bottle?           |                   | Yes    | $\checkmark$ | No 🗌           | •                 |             |   |
| Sample containers intact?                     |                   | Yes    | V            | No 🗆           |                   |             |   |
| Sufficient sample volume for indicated test?  |                   | Yes    | ¥            | No 🗆           |                   |             |   |
| All samples received within holding time?     |                   | Yes    | V            | No 🗌           |                   |             |   |
| Water - VOA vials have zero headspace?        | No VOA vials subn | nitted | V            | Yes 🗌          | No 🗆              |             |   |
| Water - Preservation labels on bottle and cap | match?            | Yes    |              | No 🗆           | N/A 🗹             |             |   |
| Water - pH acceptable upon receipt?           |                   | Yes    |              | No 🗌           | N/A 🗹             | ,           |   |
| Container/Temp Blank temperature?             |                   |        | 8°           | <6° C Acceptab |                   |             |   |
| COMMENTS:                                     |                   |        |              |                |                   |             |   |
|   |                   |        |              |                |                   |             |   |
| •   |                   |        |              |                |                   |             |   |
| Client contacted                              | Date contacted:   |        |              | Pers           | son contacted     |             |   |
| Contacted by:                                 | Regarding:        | ,      |              |                |                   |             |   |
| Comments:                                     |                   |        |              |                |                   |             |   |
|   |                   |        |              |                |                   |             |   |
|   |                   |        |              |                |                   |             |   |
|   |                   |        |              |                |                   |             |   |
|   |                   |        |              |                |                   |             | • |
| Corrective Action                             |                   |        |              |                |                   |             |   |
|   |                   |        |              |                |                   |             |   |
|   |                   |        |              |                |                   |             |   |
|   |                   |        |              |                |                   |             |   |

| (              | Chain-          | of-Cu      | stody Record                | Turn-Around              | Time:                |   |  |                 |                              |                               |                    |                    |                   |               |                               | T                          |              |                 | # C      | A 1 /     | <b>.</b> =           |                |
|----------------|-----------------|------------|-----------------------------|--------------------------|----------------------|---|--|-----------------|------------------------------|-------------------------------|--------------------|--------------------|-------------------|---------------|-------------------------------|----------------------------|--------------|-----------------|----------|-----------|----------------------|----------------|
| Client:        | Xto             | CNZ        | 194                         | Standard                 | □ Rush               | <u></u>                                 |  | <u> </u><br>  _ |                              |                               |                    |                    |                   |               |                               |                            |              |                 |          | NTA<br>TO |                      |                |
|                | k.              | Cl.        |                             | Standard<br>Project Name | :                    |   |  |                 |                              |                               |                    |                    |                   |               |                               |                            |              |                 |          |           |                      |                |
| Mailing        | Address         | 382        | rgy<br>mplin<br>CR 3(00     | Sulliva                  | n Frame              | A #1                                    |  |                 | 490                          | 01 Ha                         |                    |                    |                   |               |                               | nent<br>eraue              |              |                 | 109      | /         |                      |                |
|                |                 | Andr       | C NM 87410                  | Project #:               |                      | ······································  |  |                 |                              | 1. 50                         |                    |                    |                   |               | •                             | 505-                       |              |                 |          |           |                      |                |
| Phone          | #.              | 11218      | C 7411 81110                |                          |                      |   |  |                 | 16                           | 1. 00                         | U-04               | 0-08               |                   |               | _                             | Requ                       |              |                 |          |           |                      |                |
|                |                 | sim-chu    | alice xtorneyy.com          | Project Mana             | ger:                 | *************************************** |  | <u> </u>        | ly)                          | (e)                           |                    |                    |                   | -             | _                             | rte g                      | 4036         |                 |          |           |                      |                |
|                | Package:        |            |                             | 1                        | •                    |   |  | 021             | o s                          | Sies                          |                    | İ                  |                   |               | SC.                           | B's                        |              | İ               | Ó        |           |                      |                |
| <b>≱</b> \Sta  | ndard           |            | ☐ Level 4 (Full Validation) | Ma<br>Sampler:           | Itu No               | e                                       |  | 8) 8            | (Gas                         | 3as/I                         |                    |                    |                   |               | PO,                           | 2 PC                       |              |                 | 300      |           |                      |                |
| Accred<br>□ NE | titation<br>_AP | □ Othe     | r                           | Sampler: S               | otever A             | Tanon I                                 |  | Proper (8021)   | • ТРН                        | 15B ((                        | 18.1)              | 74.1)              | AH)               |               | NO.                           | / 808                      |              | <b>&amp;</b>    | M        |           | 2                    | · ·            |
| □ ED           | O (Type)_       |            |                             | Samplement               | etalia e se s        |   | 186                                    |                 | 3E .                         | 1 80                          | 4 6                | d 5(               | <u> </u>          | tals          | Š,                            | des                        |              | Ņ               | 5        |           | ح ا                  | ,<br>ت         |
| Date           | Time            | Matrix     | Sample Request ID           | Container<br>Type and #  | Preservative<br>Type |   |  | BTEX + WAR      | BTEX + MTBE + TPH (Gas only) | TPH Method 8015B (Gas/Diesel) | TPH (Method 418.1) | EDB (Method 504.1) | 8310 (PNA or PAH) | RCRA 8 Metals | Anions (F,CI,NO3,NO2,PO4,SO4) | 8081 Pesticides / 8082 PCB | 8260B (VOA)  | 8270 (Semi-VOA) | Chloride |           | Air Bubbles (Y or N) | בַּבְבַבְּבַבְ |
| 11/09          | 1541            | soil       | north wall comp.            | Zea Yoz                  |                      | Ī                                       |  | X               |                              |                               | X                  |                    |                   |               |                               |                            |              |                 | X        |           |                      |                |
| 7/09           | 1644            | soil       | floor composite             | 200 402                  | -                    | 2                                       |  | X               |                              |                               | X                  |                    |                   |               |                               |                            |              |                 | X        |           |                      | -              |
| 19/09          | 1616            | Soil       | east wall camp              | Zen Yoz                  |                      | 3                                       |  | X               |                              |                               | X                  |                    |                   |               |                               |                            |              |                 | X        |           |                      |                |
| 9/09           | 1155            | soil       | sorth wall comp             | 2eg 402                  | ,                    | 4                                       |  | X               |                              |                               | Х                  |                    |                   |               |                               |                            |              |                 | X        |           |                      |                |
| 1009           | 1644            | sbil       | westwall comp               | 29402                    |                      | 5                                       |  | Х               |                              |                               | X                  |                    |                   |               |                               |                            |              |                 | X        |           |                      |                |
| · · ·          |                 |            | •                           |                          |                      |   |  |                 |                              |                               |                    |                    |                   |               |                               |                            |              |                 |          |           |                      |                |
|                |                 |            |                             |                          | ,                    |   |  |                 |                              |                               |                    |                    |                   |               |                               |                            |              |                 |          |           |                      |                |
|                |                 |            |                             |                          |                      |   | ······································ | ļ               |                              |                               |                    |                    |                   |               |                               |                            |              |                 |          |           |                      |                |
|                |                 |            |                             |                          |                      |   |  | <u> </u>        |                              |                               |                    |                    |                   |               | _                             |                            |              |                 |          |           | <u> </u>             |                |
| ****           |                 | ļ          |                             |                          |                      |   |  |                 |                              |                               |                    | _                  |                   |               |                               |                            |              |                 |          |           | <u> </u>             |                |
|                |                 |            |                             |                          |                      |   |  | <u> </u>        |                              |                               |                    |                    |                   |               |                               |                            | -            |                 |          | $\bot$    | $\bot$               |                |
| Dates          | Time:           | Reljnguish | ed by:                      | Received N:              |                      | Date                                    | rime                                   | Por             | nark                         |                               |                    |                    |                   |               |                               |                            |              | Щ               |          |           |                      |                |
| Date:          | 7 0100<br>Time: | Relinquish | 1.gr                        | Received by:             | T 15:02              | 1 1                                     | rime                                   | Ref             | nark                         | ام "                          | \ <del>2</del> 41  | se<br>al           | CO                | PY<br>@       | iod                           | est                        | 1 † S<br>%/5 | t<br>serv       | o<br>CES | S (0)     | n                    |                |



#### **COVER LETTER**

Monday, April 27, 2009

Martin Nee XTO Energy 382 County Road 3100 Aztec, NM 87410

TEL: (505) 333-3100 FAX (505) 333-3280

RE: Sullivan Frame A#1

Dear Martin Nee:

Order No.: 0904301

Hall Environmental Analysis Laboratory, Inc. received 2 sample(s) on 4/21/2009 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager Nancy McDuffie, Laboratory Manager

NM Lab # NM9425 AZ license # AZ0682 ORELAP Lab # NM100001 Texas Lab# T104704424-08-TX



Date: 27-Apr-09

CLIENT: XTO Energy Lab Order: 0904301 Project: Sullivan Frame A#1 Collection Date: 4/15/2009 2:55:00 PM Lab ID: 0904301-01 Client Sample ID: Pit GW Matrix: AQUEOUS PQL Qual Units Result DF Analyses **Date Analyzed EPA METHOD 8260: VOLATILES SHORT LIST** Analyst: HL Benzene 9.5 1.0 4/24/2009 11:38:04 AM µg/L 1 μg/L Toluene 1.0 1 4/24/2009 11:38:04 AM 60 4/24/2009 11:38:04 AM Ethylbenzene 14 1.0 µg/L Xylenes, Total 240 2.0 μg/L 4/24/2009 11:38:04 AM Surr: 4-Bromofluorobenzene 93.3 80.4-119 %REC 4/24/2009 11:38:04 AM Lab ID: 0904301-02 **Collection Date:** Client Sample ID: TRIP BLANK Matrix: TRIP BLANK DF PQL Qual Units Analyses Result **Date Analyzed EPA METHOD 8260: VOLATILES SHORT LIST** Analyst: HL 4/24/2009 12:06:53 PM Benzene 1.0 µg/L 1 Toluene ND µg/L 4/24/2009 12:06:53 PM 1.0 1 ND Ethylbenzene 1.0 µg/L 1 4/24/2009 12:06:53 PM Xylenes, Total ND 2.0 µg/L 1 4/24/2009 12:06:53 PM Surr: 4-Bromofluorobenzene 100 80.4-119 %REC 4/24/2009 12:06:53 PM

- Value exceeds Maximum Contaminant Level
- E Estimated value
- 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

Qualifiers:

**QA/QC SUMMARY REPORT** 

Client:

XTO Energy

Project:

Sullivan Frame A#1

Work Order:

Date: 27-Apr-09

0904301

| Analyte                  | Result          | Units | PQL | %Rec | LowLimit H | lighLimit | %RPD RPI       | DLimit Qual          |
|--------------------------|-----------------|-------|-----|------|------------|-----------|----------------|----------------------|
| Method: EPA Method 8260: | Volatiles Short | List  |     |      |            |           |                |                      |
| Sample ID: 5ml rb        |                 | MBLK  |     |      | Batch ID:  | R33416    | Analysis Date: | 4/24/2009 8:45:27 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 ics     |                 | LCS   |     |      | Batch ID:  | R33416    | Analysis Date: | 4/24/2009 9:42:54 AM |
| Benzene                  | 17.18           | μg/L  | 1.0 | 85.9 | 86.8       | 120       |                | \$                   |
| Toluene                  | 22.89           | µg/L  | 1.0 | 114  | 64.1       | 127       |                |                      |

E Estimated value

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

## Sample Receipt Checklist

| Client Name XTO ENERGY                                   |                |                | Date Receive                      | d:                | 4/21/2009   |             |
|--|----------------|----------------|-----------------------------------|-------------------|-------------|-------------|
| Work Order Number 0904301                                |                |                | Received by                       | r: TLS            | AI          |             |
| Checklist completed by:                                  | <del>-</del> 1 | 4              | Sample ID Is                      | abels checked by. | Initials    |             |
| Matrix: Carrier name:                                    | Gre            | yhound         |                                   | •                 |             |             |
| Shipping container/cooler in good condition?             | Yes            | V              | No 🗌                              | Not Present       |             |             |
| Custody seals intact on shipping container/cooler?       | Yes            | $\checkmark$   | No 🗌                              | Not Present       | Not Shipped |             |
| Custody seals intact on sample bottles?                  | Yes            |                | No 🗌                              | . N/A             |             |             |
| Chain of custody present?                                | Yes            | V              | No 🗌                              |                   | •           |             |
| Chain of custody signed when relinquished and received?  | Yes            | $\checkmark$   | No 🗌                              |                   |             |             |
| Chain of custody agrees with sample labels?              | Yes            | $ \mathbf{V} $ | No 🗌                              |                   |             |             |
| Samples in proper container/bottle?                      | Yes            | V              | No 🗌                              |                   |             |             |
| Sample containers intact?                                | Yes            | V              | No 🗌                              |                   |             |             |
| Sufficient sample volume for indicated test?             | Yes            | $\checkmark$   | No 🗌                              |                   |             |             |
| All samples received within holding time?                | Yes            | $\checkmark$   | No 🗌                              |                   |             |             |
| Water - VOA vials have zero headspace? No VOA vials subm | nitted         |                | Yes 🗹                             | No 🗆              |             |             |
| Water - Preservation labels on bottle and cap match?     | Yes            |                | No 🗌                              | N/A 🗹             |             |             |
| Water - pH acceptable upon receipt?                      | Yes            |                | No 🗌                              | N/A 🗹             |             |             |
| Container/Temp Blank temperature?                        |                | 3°             | <6° C Acceptab                    |                   |             |             |
| COMMENTS:  |                |                | If given sufficient time to cool. |                   |             |             |
|  |                |                |                                   |                   |             |             |
|  |                |                |                                   |                   |             |             |
|  |                |                |                                   |                   |             |             |
| Client contacted Date contacted:                         |                |                | Pers                              | on contacted      |             | <del></del> |
| Contacted by: Regarding:                                 |                |                |                                   |                   |             |             |
| Comments:  |                |                |                                   |                   |             |             |
|  |                |                |                                   |                   |             |             |
|  |                |                |                                   |                   |             | _           |
|  |                |                |                                   |                   |             |             |
|  |                |                |                                   |                   | •           |             |
| Corrective Action  |                |                |                                   |                   |             | _           |
|  |                |                |                                   |                   |             |             |
|  |                |                |                                   |                   |             |             |

| RONMENTAL LABORATORY  |  |  |  |  |  |
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|   |  |  |  |  |  |
| ental com   |  |  |  |  |  |
| www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109 |  |  |  |  |  |
| 05-345-4107   |  |  |  |  |  |
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| 8270 (Semi-VOA) Air Bubbles (Y or N)                              |  |  |  |  |  |
| Ai  |  |  |  |  |  |
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| esults to<br>an services, com                                     |  |  |  |  |  |
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