EPWM - 010

FINAL CLOSURE REPORT

R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Fax: 505.266-0745

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2014 APR -3 P 1:55

December 5, 2013

Mr. Brad Jones
NMOCD
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: C-144 Closure Report for the Poseidon Modular Impoundment.
Operator: XTO Energy. API #: 30-015-29434.
Unit Letter J Section 13 T23S R29E.

Dear Mr. Jones:

R.T. Hicks consultants is pleased to submit this Closure Report for the above referenced location on the behalf of XTO Energy. Closure activities were performed in accordance with the approved C-144 application *"Nash Draw Unit #29 modular impoundment (Atlantis system) for temporary storage of treated produced water"* dated June 13, 2012. The location of the modular impoundment is on Plate 1. Plate 2 is a plat of the location.

On June 20th, 2012, XTO Energy began sending treated water from Halliburton's CleanWave system, located at Nash Unit #53 SWD, to the Poseidon Modular Impoundment (Poseidon tank). On June 25, 2012, the first well, Nash Unit 39H, was hydraulically fractured using treated water from the Poseidon tank. On September 26th, 2012, the last well, Nash Unit 49, was fractured using treated water from the Poseidon tank. The transfer completion date, in lieu of rig release date, was October 5, 2012 as noted on Form C-105 per approved C-144 plan.

CLOSURE NOTIFICATIONS

Closure activities for the Poseidon tank began on October 15, 2012. Notification of closure activities were sent to Mr. Bratcher (NMOCD), Mr. Jones (NMOCD), and Mr. Jim Amos (BLM) via email on October 12, 2012. Closure notification to the surface owner (BLM) was sent via certified mail return receipt. A copy of the receipt is presented in Appendix A.

Figure 1: One of the four roll-offs containing liner material that was transported to R360.

MODULAR IMPOUND CLOSURE

On October 15, 2012 Poseidon Concepts began the disassembly of the Poseidon tank. Due to the oily nature of remaining fluid in the

Poseidon tank, the fluid was removed using a vacuum truck and transported to R360 (formerly CRI) in Lea County, NM. The closure plan originally stated that remaining fluid would be injected into the Nash Unit 53 SWD (API#: 3001539400) well.

Poseidon Concepts transported all reusable pipes, pumps, and tank walls to their field yard. The tank liner was deposited into four 20-cu. yrd. roll-offs (Figure 1) and transported to R360 for proper disposal.

Operation Logs

Operation logs for the Poseidon tank and the CleanWave system are presented in Appendix B. As noted in Tables B-1 and B-2, on August 27th, 2012 the Poseidon tank liner seam split slightly 1-foot from the top of the tank and approximately 3 barrels of fluid escaped. Mr. Randy Green of XTO Energy mobilized water haul trucks to the site and lowered the water level to prevent further leakage. The water was transferred to Nash Draw 49 H and Nash Draw Unit # 57 H for use in well stimulation. Water levels in the tank were kept below the split and the seam was repaired to prevent further leakage. The release was reported on Form 141 and submitted to NMOCD District 2 on March 15, 2013.

C-144 Closure Sampling And C-141 Spill Release Notification & Correction Action

Submissions and Approvals

On October 12, 2012, Hicks Consultants provided a 72-hour closure notice to Mr. Bratcher of District 2 NMOCD. On November 8, 2012, Hicks Consultants provided District 2 NMOCD a 72-hour closure sampling notice. These notices were submitted via email. A copy of the emails and subsequent email correspondence is provided in Attachment E.

On November 13, 2012, Hicks Consultants collected two on-site 5-point composite soil samples (Plate 3) per the approved C-144 for the modular impoundment employed for hydraulic fracturing of five wells in 2012.

On February 11, 2013, in support of an interim reclamation ordered by the BLM-Carlsbad Office, Hicks Consultants performed soil characterization to determine whether chloride and EC concentrations would support vegetation for interim reclamation. The Trench Sample was referenced in the initial Release Notification and Corrective Action plan (discussed below) and assisted with defining the vertical and horizontal extend of chloride impacted soil.

After confirmation of a release from the Tank Composite, BG Composite, and Trench Sample, a spill "Release Notification and Corrective Action" Form C-141 was submitted to NMOCD District 2 on March 15, 2013 (see Appendix C). District 2 NMOCD approved the C-141 Initial Report on May 31, 2013. Hicks Consultants received notice of approval via email on June 5, 2013. The approval included conditions and stipulations as presented in Appendix E. Plate 4 shows the Corrective Action remediation area.

On June 24, 2013 Hicks Consultants sampled an off-site background location (Background Sample) per C-141/Part 29 approval conditions/stipulations for release event 2RP-1674.

After completion of reclamation, Hicks Consultants submitted the Final Report for the C-141 to NMOCD District 2 on December 5, 2013. The Final Report was approved by District 2 NMOCD on January 14, 2014. A copy of the Final Report is located in Appendix C.

Sampling Results

The point samples for the Tank Composite and BG Composite were collected approximately two inches below the caliche pad/soil interface at a depth of approximately 1-foot below ground surface. The Tank Composite sample exhibits a chloride concentration of 7,500 mg/kg (see Table 1); indicating production activities have impacted the western half of the caliche pad. The BG Composite sample exhibited a chloride concentration comparable to the Trench Sample (discussed below) at the 2 foot depth (3,480 mg/kg) interval.

Table 1: Soil chemistry summary results

Sample ID	Date	Depth (ft)	Chloride mg/kg	EC uS/cm	Benzene mg/kg	BTEX mg/kg	TPH mg/kg	GRO/DRO mg/kg
NMAC 19.15.17.13.B(1).b			**500 or background**		**0.2**	**50**	**2,500**	**500**
Tank Composite	11/13/2012	1.0	7,500	NS	<0.49	ND	<20	<10
BG Composite	11/13/2012	1.0	3,000	NS	<0.49	ND	<20	<10
Trench Sample	2/11/2013	2.0	3,480	8,010	NS	NS	NS	NS
Trench Sample	2/11/2013	4.0	2,120	3,020	NS	NS	NS	NS
Trench Sample	2/11/2013	6.0	2,000	7,050	NS	NS	NS	NS
Background Sample	6/24/2013	1.5	2,960	NS	NS	NS	NS	NS
Background Sample	6/24/2013	3.0	2,440	NS	NS	NS	NS	NS
Background Sample	6/24/2013	4.5	2,920	NS	NS	NS	NS	NS
Background Sample	6/24/2013	6.0	1,880	NS	NS	NS	NS	NS
Background Sample	6/24/2013	7.5	1,380	NS	NS	NS	NS	NS
Background Sample	6/24/2013	8.0	1,500	NS	NS	NS	NS	NS

Notes

1. ND = non-detect
2 NS = not sampled

The Trench Sample consisted of discrete samples at 2, 4, and 6 foot depths. Soil chloride concentrations at the Trench Sample (collected within the area of the Tank Composite sample) show chloride concentrations are decreasing with depth, from 3,480 mg/kg at 2 feet to 2,120 mg/kg at 4 feet. At 4 feet, the concentration is less than that encountered in the Background Sample trench at comparable depths (3.0 and 4.5 feet). We conclude that the majority of chloride impairment is contained in the production pad surface. Table 2 summarizes the lithology of the Trench Sample.

Table 2: Lithology of Trench Sample

Depth (ft)	Description
0 - 1	Caliche pad
1 - 4	Top soil (loamy sand), dark brown, moist
4 - 6	Top soil, reddish brown, moist
6	Medim sand w/caliche, hard, brown, moist

Note: native hard caliche was observed below 6 feet.

Comparing the on-site Trench Sample (Table 3) to the off-site Background Sample at depths below 2-feet bgs, the on-site chloride concentrations are either near or lower than off-site background concentrations.

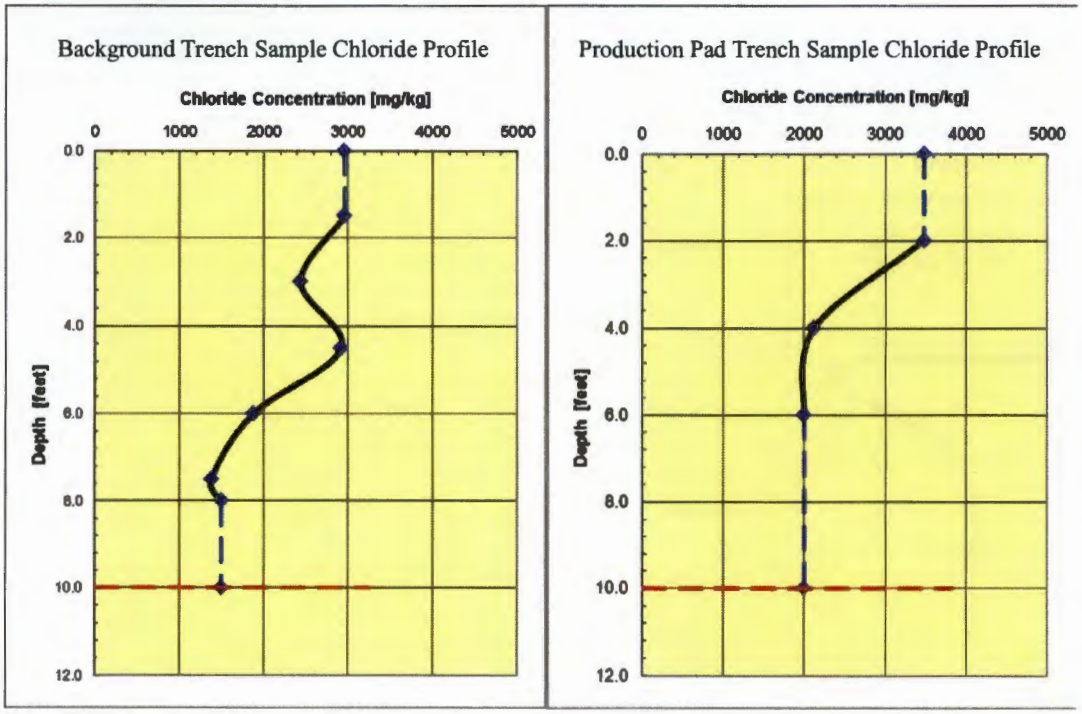
Table 1: Chloride concentration comparison between an on-site and off-site (background)

	Chloride (mg/kg)	
Depth (+/- 0.5 ft)	Trench Sample	Background Sample
1.5 - 2	3,480	2,960
4	2,120	2,920
6	2,000	1,880

The Background Sample (per condition of the C-141) was located in an area not impacted by past or current production activities.

Graphic 1, below, shows the chloride concentration data from Table 1 plotted at the appropriate depth for both the Background Sample trench and the Trench Sample located on the production pad (locations shown on Plate 3). From the ground surface to the depth of 10-feet, the mass of chloride per unit area can be calculated from these chloride concentration profiles.

Graphic 1 : *Concentrations for samples closest to the surface and at greatest depth are assumed as constant to both the ground surface and to a depth of 10 feet*



Multiplying each sample concentration by a moist soil density and a centered depth interval for each sample depth yields a chloride mass per area for that depth interval. The calculation is shown below:

Conc(z) [mg/kg] * rho [kg/m^3] * delta z [m] = Chloride Mass [kg/m^2]

where:

Conc is the chloride concentration from a particular depth (z)
rho is a moist soil density and assumed as constant from the surface to 10 feet
delta z is the depth interval for which a chloride concentration is taken as constant

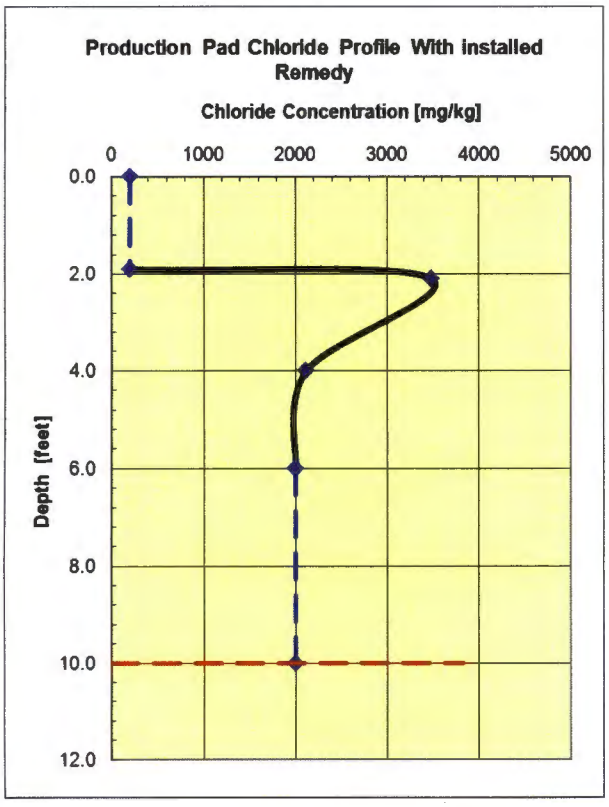
(We used a rho (moist soil density) of 1780 kg/m^3 calculated by using a porosity of 0.4 and a volumetric moisture content of 0.19 to reflect the moist conditions.)

Adding up the Chloride Mass per m^2 calculated for each depth interval yields a total chloride mass per m^2 for each profile. This sum represents the chloride mass between ground surface and a depth of 10 feet per square meter of surface area.

The Background Trench Sample Chloride Profile has a total chloride mass per m^2 of 12.09 kg/m^2. The Production Pad Trench Sample Chloride Profile has a total chloride mass/m^2 of 13.4 kg/m^2, a mass about 11% more than the Background Trench Sample Chloride Profile.

Graphic 2 presents the Production Pad Chloride Profile with the installed remedy.

Graphic 2: *The uppermost 2 feet of soil have been replaced with soil having an assumed chloride concentration of 200 mg/kg*



Performing the same calculations yields a total chloride mass per m^2 of 9.87 kg/m^2, a mass about 18% less than the Background Trench Chloride Profile.
Note that changing the assumed values within the calculation does not change the relative chloride mass/m^2 for the chloride concentration profiles. That is, while it does increase or decrease the calculated chloride mass/m^2 for each profile, their relative magnitudes are not changed.

The chemistry, lithology, and calculated chloride mass of the trench samples suggest that:

- soil at depths from 1 to 5 feet below surface have chloride and EC concentrations that will support vegetation. Re-vegetation of the impacted area is included in the C-141 remediation plan and also satisfies BLM's request for interim reclamation,
- the eastern portion of the location is not measurably impaired by production activities as the BG Composite sample result (3,000 mg/kg) is not different from the Background Sample at 1.5 feet below ground surface.
- The selected remedy lowered the chloride mass per m^2 in the upper 10-feet of the soil profile to less than that of the background trench location.

The removal of the upper 2-feet of soil within the remediation area as shown on Plate 2 remediated the observed higher chlorides and allowed for vegetation.

Current Status

The location is currently an active well site. To return the site to pre-existing conditions, the three "Y" shaped trenches associated with the modular impoundment were backfilled with caliche (Figure 2) and graded even with the existing production pad (Figure 3).

Figure 2: Backfilling a "Y" shaped trench with caliche.

Figure 3: Location reclaimed to pre-existing conditions graded even with the active production pad.

Please contact us at 505-266-5004 if you have any questions or comments.

Sincerely,
R.T. Hicks Consultants

Andrew Parker
Durango Field Office
Ph: 970-570-9535

Copy: David Luna, XTO Energy
Mike Bratcher, District 2 NMOCD

Submit To Appropriate District Office
Two Copies
District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Rd., 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

Form C-105
Revised August 1, 2011

1. WELL API NO. 30-015-29434
2. Type of Lease ☐ STATE ☐ FEE ☒ FED/INDIAN
3. State Oil & Gas Lease No.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

4. Reason for filing:

☐ **COMPLETION REPORT** (Fill in boxes #1 through #31 for State and Fee wells only)

☒ **C-144 CLOSURE ATTACHMENT** (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15.17.13.K NMAC)

5. Lease Name or Unit Agreement Name

6. Well Number: Nash Unit #29

7. Type of Completion:
☐ NEW WELL ☐ WORKOVER ☐ DEEPENING ☐ PLUGBACK ☐ DIFFERENT RESERVOIR ☒ OTHER C-144 Closure Report

8. Name of Operator: XTO Energy, Inc

9. OGRID: 5380

10. Address of Operator: 200 N. Loraine, Suite 800 Midland, TX 79701

11. Pool name or Wildcat

12.Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County
Surface:										
BH:										

13. Date Spudded	14. Date T.D. Reached	15. Date Rig Released	16. Date Completed (Ready to Produce)	17. Elevations (DF and RKB, RT, GR, etc.)
		October 5, 2012		

18. Total Measured Depth of Well	19. Plug Back Measured Depth	20. Was Directional Survey Made?	21. Type Electric and Other Logs Run

22. Producing Interval(s), of this completion - Top, Bottom, Name

23. **CASING RECORD** (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED

24. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN

25. TUBING RECORD

SIZE	DEPTH SET	PACKER SET

26. Perforation record (interval, size, and number)

27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED

28. **PRODUCTION**

Date First Production	Production Method *(Flowing, gas lift, pumping - Size and type pump)*	Well Status *(Prod. or Shut-in)*

Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl	Gas - MCF	Water - Bbl.	Gas - Oil Ratio

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - *(Corr.)*

29. Disposition of Gas *(Sold, used for fuel, vented, etc.)*

30. Test Witnessed By

31. List Attachments

32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit. See Plates 1 and 2.

33. If an on-site burial was used at the well, report the exact location of the on-site burial:

Latitude Longitude NAD 1927 1983

I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature David Luna Printed Name David Luna Title Operations Engineer Date December 05, 2013

E-mail Address David_Luna@xtoenergy.com

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
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
Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144
Revised August 1, 2011

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit, Closed-Loop System, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application

Type of action: ☒ Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method
☐ Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method
☐ Modification to an existing permit
☐ Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.
Operator: XTO Energy,Inc OGRID #: 5380
Address: 200 N. Loraine, Suite 800 Midland, TX 79701
Facility or well name: Nash Unit #29
API Number: 30-015-29434 OCD Permit Number:
U/L or Qtr/Qtr J Section 13 Township 23S Range 29E County: Eddy
Center of Proposed Design: Latitude N 32.30322 Longitude W 103.93719 NAD: ☐1927 ☒ 1983
Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
☒ **Pit:** Subsection F or G of 19.15.17.11 NMAC
Temporary: ☐ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A X Other: Modular impoundment for temporary storage of treated produced water
☒ Lined ☐ Unlined Liner type: Thickness 30 mil ☒ LLDPE ☐ HDPE ☐ PVC ☒ Other Vertical steel foam-insulated panels that support liner
☐ String-Reinforced
Liner Seams: ☒ Welded ☒ Factory ☐ Other Volume: 41,000 bbl Dimensions: L~~--------~~ x W~~--------~~ x D~~--------~~ Diameter: 157 ft. Height: 12 ft

3.
☐ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC
Type of Operation: ☐ P&A ☐ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other
☐ Lined ☐ Unlined Liner type: Thickness mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other
Liner Seams: ☐ Welded ☐ Factory ☐ Other

4.
☐ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC
Volume: bbl Type of fluid:
Tank Construction material:
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other
Liner type: Thickness mil ☐ HDPE ☐ PVC ☐ Other

5.
☐ **Alternative Method:**
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

6.

Fencing: Subsection D of 19.15.17.11 NMAC *(Applies to permanent pits, temporary pits, and below-grade tanks)*

☐ Chain link, six feet in height, two strands of barbed wire at top *(Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)*

☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet

☒ Alternate. Please specify Modular impoundment walls are 12 feet high; no fencing necessary.

7.

Netting: Subsection E of 19.15.17.11 NMAC *(Applies to permanent pits and permanent open top tanks)*

☐ Screen ☐ Netting ☐ Other_____

☐ Monthly inspections (If netting or screening is not physically feasible)

8.

Signs: Subsection C of 19.15.17.11 NMAC

☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

☒ Signed in compliance with 19.15.16.8 NMAC See photos in Appendix SSI-1

9.

Administrative Approvals and Exceptions:

Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

Please check a box if one or more of the following is requested, if not leave blank:

☒ Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval.

☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

10.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. **Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.**

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☒ No SEE FIGURES 1a,1b
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No SEE FIGURE 2
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to temporary, emergency, or cavitation pits and below-grade tanks)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☒ No ☐ NA SEE FIGURE 3
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to permanent pits)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No ☒ NA
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☒ No SEE FIGURE 4
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☒ No SEE FIGURE 5
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No SEE FIGURE 6
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☒ No SEE FIGURE 7
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☒ Yes ☐ No SEE FIGURE 8
Within a 100-year floodplain. - FEMA map	☐ Yes ☒ No SEE FIGURE 9

11.
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- ☒ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
- ☒ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☒ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☒ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☒ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

12.
Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
- ☐ Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____

☐ Previously Approved Operating and Maintenance Plan API Number: _____ *(Applies only to closed-loop system that use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)*

13.
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H_2S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

14.
Proposed Closure: 19.15.17.13 NMAC
Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

Type: ☐ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☐ Permanent Pit ☐ Below-grade Tank ☐ Closed-loop System
☒ Alternative Modular impoundment for temporary storage of treated produced water

Proposed Closure Method: ☒ Waste Excavation and Removal
☐ Waste Removal (Closed-loop systems only)
☐ On-site Closure Method (Only for temporary pits and closed-loop systems)
☐ In-place Burial ☐ On-site Trench Burial
☐ Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

15.
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

- ☒ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☒ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- ☒ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- ☒ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☒ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
- ☒ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

16.

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)

Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please provide the information below) ☐ No

Required for impacted areas which will not be used for future service and operations:

☐ Soil Backfill and Cover Design Specifications - - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC

☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

17.

Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC

Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 50 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ No

18.

On-Site Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC

☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC

☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC

☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)

☐ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC

☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19.
Operator Application Certification:
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): David Luna Title: Operations Engineer

Signature: David Luna Date: 06/13/2012

e-mail address: David_Luna@xtoenergy.com Telephone: 432-620-6742

20.
OCD Approval: ☒ Permit Application (including closure plan) ☐ Closure Plan (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature: Approval Date: 6/14/12

Title: Environmental Engineer OCD Permit Number:

21.
Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC
Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

☐ Closure Completion Date: November 13, 2012

22.
Closure Method:
☒ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)
☐ If different from approved plan, please explain. Modular impoundment closure - hauled off-site

23.
Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:
Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.

Disposal Facility Name: R360 Disposal Facility Permit Number: R-9166

Disposal Facility Name: Disposal Facility Permit Number:

Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?
☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

Required for impacted areas which will not be used for future service and operations:
☐ Site Reclamation (Photo Documentation)
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique

24.
Closure Report Attachment Checklist: *Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.*
☐ Proof of Closure Notice (surface owner and division)
☐ Proof of Deed Notice (required for on-site closure)
☐ Plot Plan (for on-site closures and temporary pits)
☐ Confirmation Sampling Analytical Results (if applicable)
☐ Waste Material Sampling Analytical Results (required for on-site closure)
☐ Disposal Facility Name and Permit Number
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique
☐ Site Reclamation (Photo Documentation)
On-site Closure Location: Latitude Longitude NAD: ☐ 1927 ☐ 1983

25.
Operator Closure Certification:
I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): David Luna Title: Operations Engineer

Signature: David Luna Date: 12/05/2013

e-mail address: David_Luna@xtoenergy.com Telephone: 432-620-6742

PLATES

R.T. Hicks Consultants, Ltd 901 Rio Grande Blvd NW Suite F-142 Albuquerque, NM 87104 Ph: 505.266.5004	Modular Impoundment Location	Plate 1
	XTO Energy: Nash Draw 29 C-144 closure for modular impoundment	December 2012

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised October 18, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-015-29434	47545	NASH DRAW BRUSHY CANYON OIL POOL

[4] Property Code	[5] Property Name	[6] Well Number
010735	NASH UNIT	29

[7] OGRID No.	[8] Operator Name	[9] Elevation
021712	STRATA PRODUCTION	2991.

[10] Surface Location

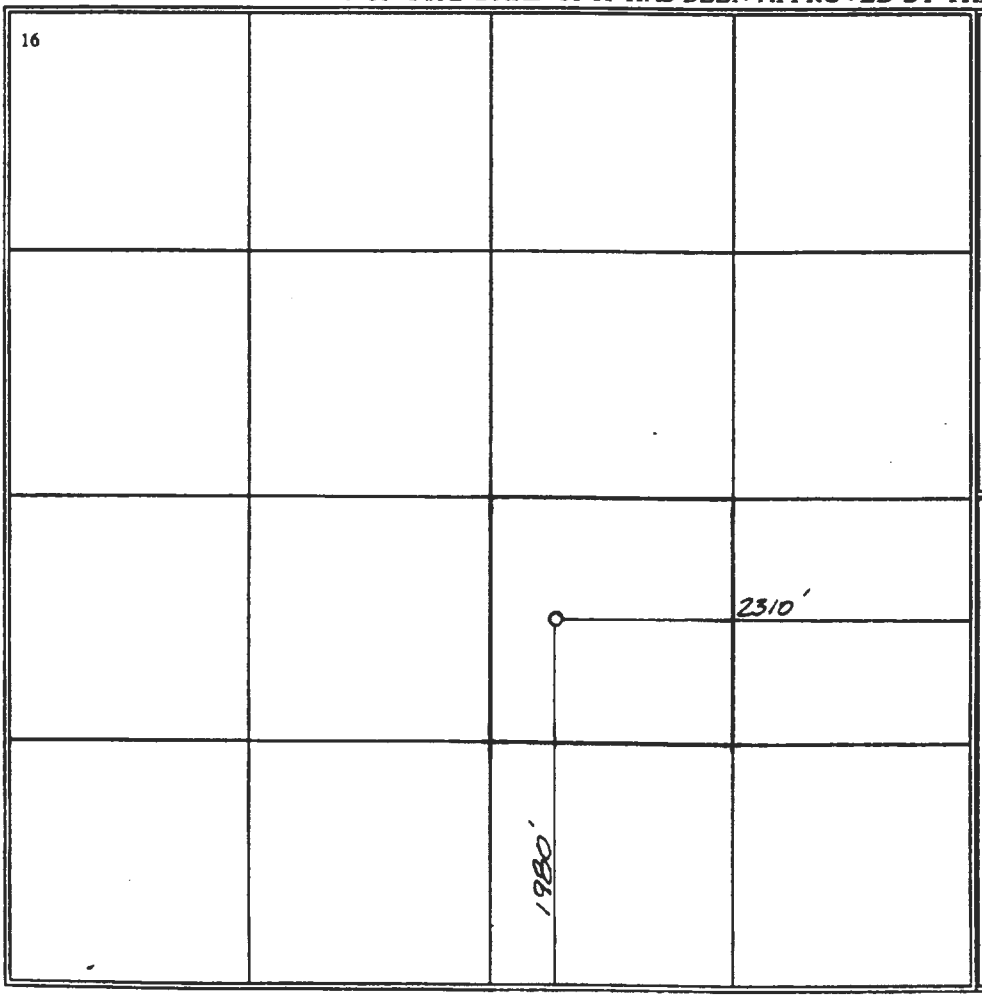
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	13	23-S	29-E		1980	SOUTH	2310	EAST	EDDY

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
40.00	N	U	

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Carol J. Garcia
Signature

CAROL J. GARCIA
Printed Name

PRODUCTION RECORDS MANAGER
Title

JANUARY 15, 1997
Date

[18] SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

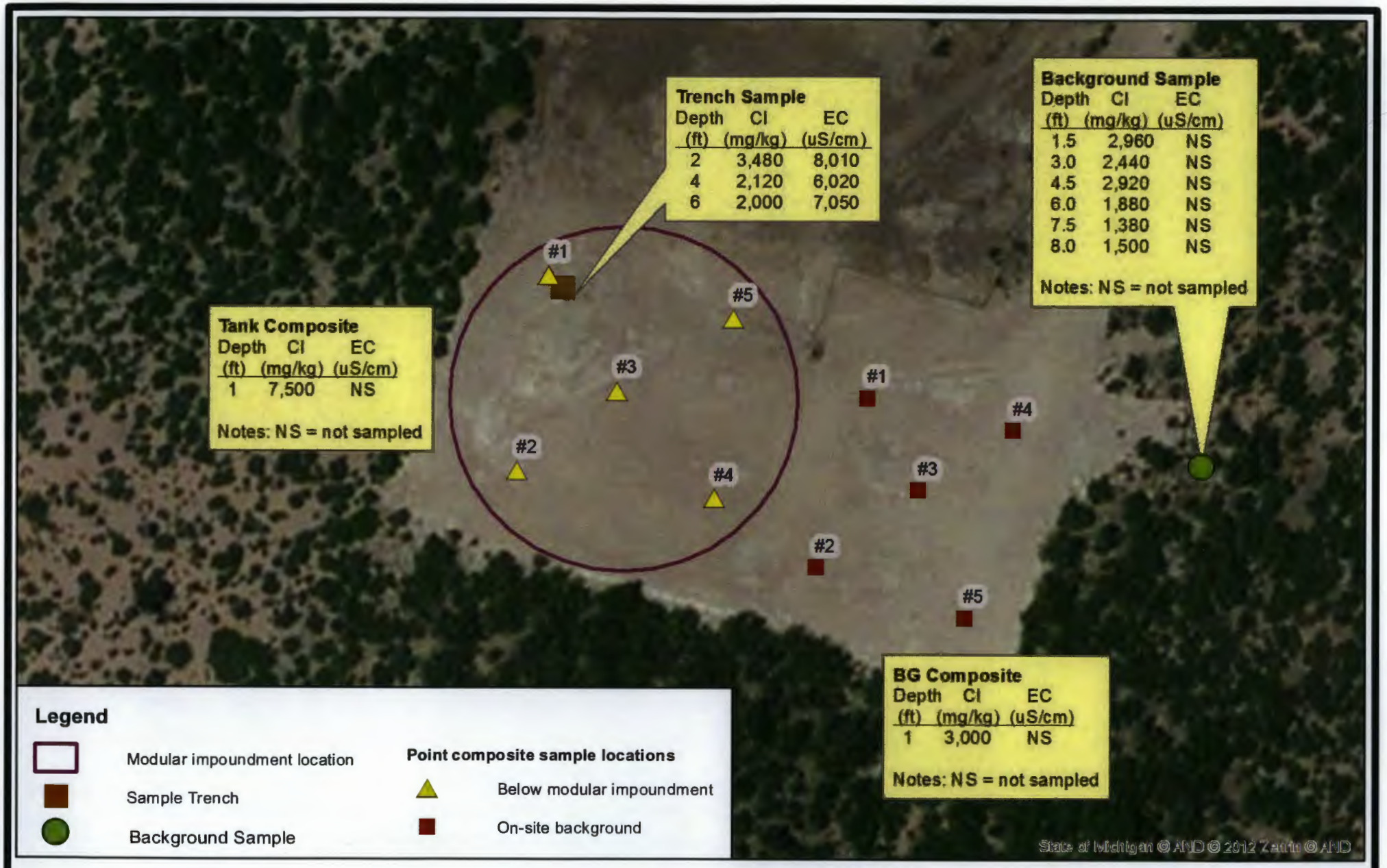
NOVEMBER 26, 1996
Date of Survey

Signature and Seal of Professional Surveyer:

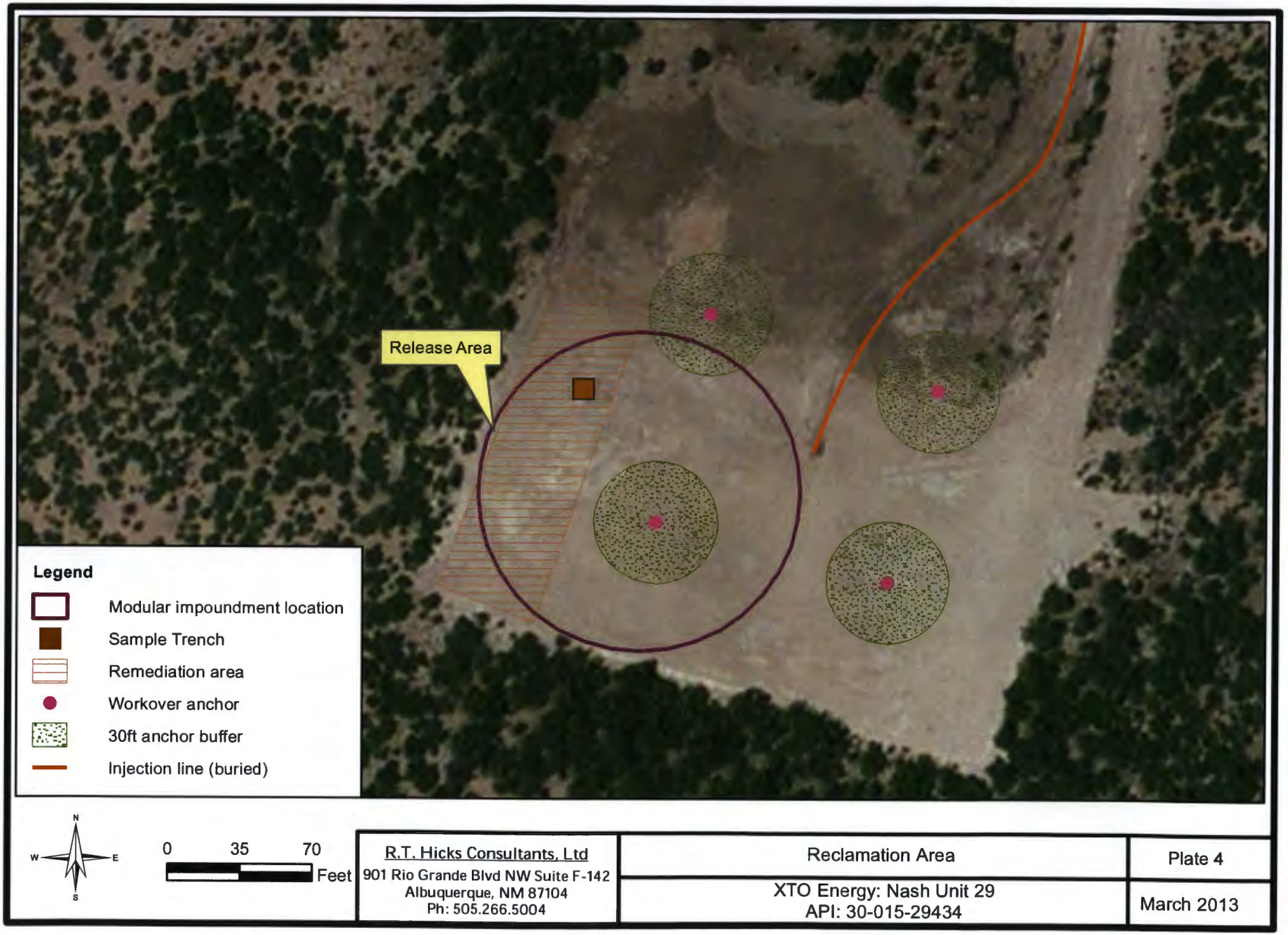
D. R. REDDY
NEW MEXICO
12312
PROFESSIONAL ENGINEER

Certificate Number NM PE&PS NO. 5412

Plate 2



R.T. Hicks Consultants, Ltd 901 Rio Grande Blvd NW Suite F-142 Albuquerque, NM 87104 Ph: 505.266.5004	Chloride Concentrations in Soil	Plate 3
	XTO Energy: Nash Unit 29 API: 30-015-29434	July 2013



R.T. Hicks Consultants, Ltd 901 Rio Grande Blvd NW Suite F-142 Albuquerque, NM 87104 Ph: 505.266.5004	Reclamation Area	Plate 4
	XTO Energy: Nash Unit 29 API: 30-015-29434	March 2013

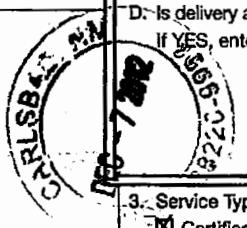
APPENDIX A

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Jim Amos
BLM- Carlsbad
620 E. Green St
Carlsbad, NM 88220



COMPLETE THIS SECTION ON DELIVERY

A. Signature

X ☒ Agent ☐ Addressee

B. Received by (Printed Name) SOORM C. Date of Delivery 12/07/12

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Transfer from service label)* 7004 1350 0001 9663 5615

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1

APPENDIX B

Appendix B

Table B-1

Date	Processing Hrs	Bbls Processed	Comments
4-Jun	0	0	Arrive & check out location
5-Jun			RU Unit & 2 Weir Tanks
6-Jun			Continue RU Unit & Weir Tanks
7-Jun			RU Setteling Tanks, Electricity, Acid
8-Jun			Wait on Caustic
9-Jun	7	2900	Receive Caustic, fill weir & set tanks
10-Jun	6	2500	Clean tanks full
11-Jun			Wait on Poseidon Tank
12-Jun			Wait on Poseidon Tank
13-Jun			Wait on Poseidon Tank
14-Jun			Wait on Poseidon Tank
15-Jun			Wait on Poseidon Tank
16-Jun			Wait on Poseidon Tank
17-Jun			Wait on Poseidon Tank
18-Jun			Wait on Poseidon Tank
19-Jun			Wait on Poseidon Tank
20-Jun			Hook up H-Pump: send water to Poseidon at 7PM
21-Jun	13	4000	1st full day of processing
22-Jun		3600	
23-Jun	23	7500	
24-Jun	8	3800	
25-Jun	11	1400	Frac Nash 39H: used 10,000 bbls
26-Jun	0	0	Wait until closer to frac date to process
27-Jun	0	0	"
28-Jun			"
29-Jun			"
30-Jun			"
1-Jul	6	1650	Pull down "dirty tanks" to make room
2-Jul			Wait until closer to frac date to process
3-Jul			"
4-Jul			"
5-Jul			"
6-Jul			"
7-Jul			"
8-Jul			"
9-Jul	4	1573	Start back up
10-Jul	8	3363	
11-Jul	4	1980	
12-Jul	8	3362	
13-Jul	10	4704	
14-Jul	10	4321	
15-Jul	9	4273	
16-Jul	7	3852	
17-Jul	6	2352	Tank full. Wait on frac
18-Jul			"
19-Jul	3	1141	Pull down "dirty tanks" to work on valve

Appendix B

Table B-1

Date	Processing Hrs	Bbls Processed	Comments
20-Jul	7	2136	Tank full. Wait on frac
21-Jul			"
22-Jul			"
23-Jul			"
24-Jul			"
25-Jul			Frac Nash 40 JITP: 13,000 BBL
26-Jul			Frac nash 41 JITP: 19,000 BBL
27-Jul			
28-Jul			
29-Jul			
30-Jul			
31-Jul			
1-Aug			
2-Aug	3	1392	Start back up
3-Aug	6	3351	
4-Aug	9	4903	
5-Aug	6	3263	
6-Aug	10	5060	
7-Aug	11	5560	
8-Aug	12	4126	
9-Aug	8	3441	
10-Aug	9	3990	Frac Nash 56: 33,000 BBL
11-Aug	10	4279	
12-Aug	16	3359	
13-Aug	12	4735	
14-Aug	14	6008	
15-Aug	16	7282	
16-Aug	11	3056	Screened out 1st Stage of Nash 49
17-Aug	4	1009	
18-Aug	6	2885	
19-Aug	4	1009	
20-Aug	0	0	
21-Aug	8	3208	Poseidon Tank Full. Top off XTO tanks.
22-Aug	3	1419	"
23-Aug	5	2648	"
24-Aug	0	0	All Tanks full. Oil found on top of Poseidon tank.
25-Aug	0	0	All Tanks are full.
26-Aug	0	0	"
27-Aug	0	0	Poseidon Tank started leaking from seams.
28-Aug	0	0	Hauling water from Poseidon to frac tanks.
29-Aug		0	
30-Aug		0	Frac Nash 57
31-Aug		5125	
1-Sep		6101	
2-Sep		4483	
3-Sep		4394	

Appendix B

Table B-1

Date	Processing Hrs	Bbls Processed	Comments
4-Sep		4844	
5-Sep		5113	
6-Sep		2786	Frac Nash 58
7-Sep		6480	Brown Bear went down/hauling water
8-Sep		6480	Tanks full from hauling all night
9-Sep		1230	Filled holding tanks
10-Sep		2277	Frac Nash 51/Pulled sludge & cleaned tanks
11-Sep		935	Replaced Suction riser on Poseidon Tank
12-Sep		2513	
13-Sep		2206	
14-Sep		2206	
15-Sep		0	Maintenance & Repair
16-Sep		0	XTO Transfer pump is down
17-Sep		0	
18-Sep		3005	Transfer pump is working
19-Sep		1366	
20-Sep		4476	
21-Sep		1967	
22-Sep		2982	
23-Sep		1441	
24-Sep		1156	
25-Sep		0	Maintenance & Repair
26-Sep		2970	
27-Sep		1045	Frac Nash 49/Done with Treating water

Appendix B
Table B-2

Date:	6/4/2012

Report Number:	1
Unit Number:	8

Client:	XTO
Location:	NASH
Site Contact:	BO JACKSON
Site Contact:	

Shift Onsite Time:	NA	am/pm
Shift Offsite Time:	NA	am/pm
System Run Time:	1	Total hrs.
Present Onsite Activities:	Treating Produced Water	

RIG UP

Processing Hrs Today:	1 hrs
BBLS Processed Today:	1 bbls
BBLS/Hr Processed:	**1**

Cumulative Processing Hrs:	1 hrs
Cumulative BBLS Processed:	1 bbls
Cumulative BBLS/Hr Processed:	**1.0 bbl/hr**

Lead Operator:	Paul Worley
Crew:	

Readings:	flow back	Volts/Amps	pH	Turbidity
NA		NA	NA	NA
NA		NA	NA	NA
NA		NA	NA	NA
NA		NA	NA	NA
NA		NA	NA	NA
NA		NA	NA	NA

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	0	0	YES
Sodium Hydroxide	0	0	0	YES

Visitors:	
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		OXY

NO

Additional Comments	

MOVED EQUIPMENT TO LOCATION... CUSTOMER SAID IT WOULD TAKE 3 DAYS BEFORE HE COULD HAVE ANY WATER FOR US TO PROCESS.

Appendix B
Table B-2

Date:	6/5/2012

Report Number:	2
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	

Shift Onsite Time:	7:00 AM	am/pm
Shift Offsite Time:	4:00 PM	am/pm
System Run Time:		Total hrs.
Present Onsite Activities:	Rig Up Equipment	

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	#DIV/0!

Cumulative Processing Hrs:	0 hrs
Cumulative BBLS Processed:	0 bbls
Cumulative BBLS/Hr Processed:	#DIV/0!

Lead Supervisor:	Paul Worley
Lead Operator	
Crew	
	Kevin Wilson
	Special Service hands

Readings:	flow back	Volts/Amps	pH	Turbidity
06:00				
08:00				
10:00				
12:00				
14:00				
16:00				

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	4,000	4,000	NO
Sodium Hydroxide	0	3,800	3,800	NO

Visitors:	Bo Wells
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

None

Are there any additional supplies/equipment needed? If so, what items and when?

2 frac tanks will be delivered to location tomorrow.

Have there been any changes to the current schedule, including volumes needed by client?

Poseidon tank will be delivered to location possible end of the week. Could be a days delay with rig up.

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

Rigged up Halliburton equipment along with 2 ea. weir tanks.Will complete rig up when the 2 frac tanks arrives tomorrow. Need to contact the electricians to complete the wiring from transformers to units. Will return to location tomorrow AM to complete rigging up equipment.

Appendix B
Table B-2

Date:	6/6/2012

Report Number:	3
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	

Shift Onsite Time:	7:00 AM	am/pm
Shift Offsite Time:	6:00 PM	am/pm
System Run Time:		Total hrs.
Present Onsite Activities:	Rig Up Equipment	

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	**#DIV/0!**

Cumulative Processing Hrs:	0 hrs
Cumulative BBLS Processed:	0 bbls
Cumulative BBLS/Hr Processed:	**#DIV/0!**

Lead Supervisor:	Paul Worley
Lead Operator	Chad Edwards
Crew	Kevin Wilson
	Reginald White S.S.
	Reginald Neal S.S.
	Christopher Perry S.S.
	John Larson S.S.

Readings:	flow back	Volts/Amps	pH	Turbidity
06:00				
08:00				
10:00				
12:00				
14:00				
16:00				

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	2,000	2,000	NO
Sodium Hydroxide	0	3,800	3,800	NO

Visitors:	Bo Wells
Visitors:	Bo Jackson
Visitors:	

Were there any abnormal operational issues onsite?

None

Are there any additional supplies/equipment needed? If so, what items and when?

settling tanks arrived around 5:30 pm

Have there been any changes to the current schedule, including volumes needed by client?

Poseidon tank will be delivered to location possible end of the week. Could be a days delay with rig up.

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

Arrived on location at 8:00 am, completed and reviewed JSA.....Continued riggiing up Halliburton equipment along with weir tanks, called Basic energy asked about settling tanks they are still looking for some.Called electrician and told him what all to bring to location and he said he was on his way.Called to confirm Acid and Caustic delivery in the morning,they will be here around 6:00 am. Frac tanks for settling tanks

Appendix B
Table B-2

Date:	6/7/2012

Report Number:	4
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	

Shift Onsite Time:	6:00 AM	am/pm
Shift Offsite Time:	6:00 PM	am/pm
System Run Time:		Total hrs.
Present Onsite Activities:	Rig Up Equipment	

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	**#DIV/0!**

Cumulative Processing Hrs:	0 hrs
Cumulative BBLS Processed:	0 bbls
Cumulative BBLS/Hr Processed:	**#DIV/0!**

Lead Supervisor:	Paul Worley
Lead Operator	Chad Edwards
Crew	Reginald White S.S.
	Reginald Neal S.S.
	Christopher Perry S.S.

Readings:	flow back	Volts/Amps	pH	Turbidity
06:00				
08:00				
10:00				
12:00				
14:00				
16:00				

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	2,000	2,000	NO
Sodium Hydroxide	0	3,800	3,800	NO

Visitors:	Bo Wells
Visitors:	Bo Jackson
Visitors:	

Were there any abnormal operational issues onsite?

None

Are there any additional supplies/equipment needed? If so, what items and when?

None

Have there been any changes to the current schedule, including volumes needed by client?

Poseidon tank will be delivered to location possibly on Tuesday after the permits are approved.

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

Arrived on location at 6:00 am, completed and reviewed JSA..... We recieved both settling tanks and rigged them up..... We also had electrician finish electrical and checked rotation on all equipment .. We recieved the acid from reagent around 2:00 PM. We are completly rigged up and waiting on caustic to arrive in the morning and start processing water... Took samples of the dirty water and am very confident

Appendix B
Table B-2

Date:	6/7/2012

Report Number:	4
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	

Shift Onsite Time:	8:00 AM	am/pm
Shift Offsite Time:	12:00 PM	am/pm
System Run Time:		Total hrs.
Present Onsite Activities:	Rig Up Equipment	

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	**#DIV/0!**

Cumulative Processing Hrs:	0 hrs
Cumulative BBLS Processed:	0 bbls
Cumulative BBLS/Hr Processed:	**#DIV/0!**

Lead Supervisor:	Paul Worley
Lead Operator	Chad Edwards
Crew	Reginald White S.S.
	Reginald Neal S.S.
	Christopher Perry S.S.
Visitors:	
Visitors:	
Visitors:	

Readings:	flow back	Volts/Amps	pH	Turbidity
06:00				
08:00				
10:00				
12:00				
14:00				
16:00				

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	2,000	2,000	NO
Sodium Hydroxide	0	3,800	3,800	NO

Were there any abnormal operational issues onsite?

None

Are there any additional supplies/equipment needed? If so, what items and when?

None

Have there been any changes to the current schedule, including volumes needed by client?

Poseidon tank will be delivered to location possibly on Saturday after the permits are approved.

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

Arrived on location at 700 am, completed and reviewed JSA..... We finished cleaning up and getting ready to process water. We also waited for caustic and got a call from caustic driver; he said he had some trouble and would not arrive until late Friday evening, I told him to call me when he got his 10 hour break and I would meet him at store on the way to location..Went ahead and released everyone until Monday morning.

Appendix B
Table B-2

Date:	6/9/2012

Report Number:	5
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	

Shift Onsite Time:	4:00 AM	am/pm
Shift Offsite Time:	2:00 PM	am/pm
System Run Time:	7	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	7 hrs
BBLS Processed Today:	2,908 bbls
BBLS/Hr Processed:	**415.4285714**

Cumulative Processing Hrs:	7 hrs
Cumulative BBLS Processed:	2,908 bbls
Cumulative BBLS/Hr Processed:	**415.4 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	
Crew	

Readings:	flow back	Volts/Amps	pH	Turbidity
06:00		110	6.73	0.134
08:00		110	6.54	0.765
10:00		110	6.85	0.443
12:00		110	6.52	0.691
14:00		110	6.91	0.346
16:00				

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	140	1,900	1,760	NO
Sodium Hydroxide	190	2,500	2,310	NO

Visitors:	BO JACKSON
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

None

Are there any additional supplies/equipment needed? If so, what items and when?

None

Have there been any changes to the current schedule, including volumes needed by client?

Poseidon tank did not show up today but want to get a head start on the frac.... Water was looking very clean.

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

Arrived on location at 3:00 am, completed and reviewed JSA..... Driver with Brentag called me at 1:30 am said he had his 10 hour break. Driver arrived on locstion at 4:45.... Caustic was unloaded and I started filling settling and weir tanks around 7:00 am ,made a couple of adjustments to the Caustic and water was looking great .... So I kept running the water and made a couple of adjustments to the acid and

Appendix B
Table B-2

Date:	6/10/2012

Report Number:	6
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	4:00 AM	am/pm
Shift Offsite Time:	1:00 PM	am/pm
System Run Time:	6	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	6 hrs
BBLS Processed Today:	2,544 bbls
BBLS/Hr Processed:	**424**

Cumulative Processing Hrs:	13 hrs
Cumulative BBLS Processed:	5,452 bbls
Cumulative BBLS/Hr Processed:	**419.4 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	
Crew	

Readings:	flow back	Volts/Amps	pH	Turbidity
06:00		120	7.24	1.3
08:00		120	6.68	0.876
10:00		120	6.93	0.557
12:00		120	6.88	0.942
14:00				
16:00				

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	175	1,900	1,725	NO
Sodium Hydroxide	220	2,500	2,280	NO

Visitors:	BO JACKSON
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

None

Are there any additional supplies/equipment needed? If so, what items and when?

None

Have there been any changes to the current schedule, including volumes needed by client?

Poseidon tank is suppose to be here Wednesday or Thursday of next week.

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

Arrived on location at 3:40 am, Completed and reviewed JSA..... Started processing water at around 4:30 am made several adjustments to caustic ,acid and EC Cells.. The water looked good and clear when sample was taken and after it sat for a few minutes had a slight yellow tint to it.... Tried adjusting chemicals and polarity on cells but yellow tint still came back.. There is a lot of salt in the water and the PH was around

Appendix B
Table B-2

Date:	6/11/2012

Report Number:	7
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	N/A	am/pm
Shift Offsite Time:	N/A	am/pm
System Run Time:	0	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	#DIV/0!

Cumulative Processing Hrs:	13 hrs
Cumulative BBLS Processed:	5,452 bbls
Cumulative BBLS/Hr Processed:	**419.4 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	
Crew	

Readings:	flow back	Volts/Amps	pH	Turbidity
06:00				
08:00				
10:00				
12:00				
14:00				
16:00				

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	1,725	1,725	NO
5odium Hydroxide	0	2,280	2,280	NO

Visitors:	BO JACKSON
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

None

Are there any additional supplies/equipment needed? If so, what items and when?

None

Have there been any changes to the current schedule, including volumes needed by client?

Poseidon tank is suppose to be here Wednesday or Thursday of next week.

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

All tanks are full ,waiting on poseidon tanks.

Appendix B
Table B-2

Date:	6/12/2012

Report Number:	7
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	N/A	am/pm
Shift Offsite Time:	N/A	am/pm
System Run Time:	0	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	**#DIV/0!**

Cumulative Processing Hrs:	13 hrs
Cumulative BBLS Processed:	5,452 bbls
Cumulative BBLS/Hr Processed:	**419.4 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	
Crew	

Readings:	flow back	Volts/Amps	pH	Turbidity
06:00				
08:00				
10:00				
12:00				
14:00				
16:00				

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	1,725	1,725	NO
Sodium Hydroxide	0	2,280	2,280	NO

Visitors:	BO JACKSON
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

None

Are there any additional supplies/equipment needed? If so, what items and when?

None

Have there been any changes to the current schedule, including volumes needed by client?

Poseidon tank is suppose to be here Wednesday or Thursday of next week.

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

All tanks are full ,waiting on Poseidon tanks.. Filled all dirty tanks Bo Jackson showed me where to get more water to fill dirty tanks and I filled them using pumps on different locations.

Appendix B
Table B-2

Date:	6/13/2012

Report Number:	8
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	N/A	am/pm
Shift Offsite Time:	N/A	am/pm
System Run Time:	0	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	**#DIV/0!**

Cumulative Processing Hrs:	13 hrs
Cumulative BBLS Processed:	5,452 bbls
Cumulative BBLS/Hr Processed:	**419.4 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	
Crew	

Readings:	flow back	Volts/Amps	pH	Turbidity
06:00				
08:00				
10:00				
12:00				
14:00				
16:00				

Chemical	Usage	Start Inv.	End Inv.	On Order
Hcl Acid	0	1,725	1,725	NO
Sodium Hydroxide	0	2,280	2,280	NO

Visitors:	BO JACKSON
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

None

Are there any additional supplies/equipment needed? If so, what items and when?

None

Have there been any changes to the current schedule, including volumes needed by client?

Poseidon tank is suppose to be here anytime now.

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

All tanks are full ,waiting on Poseidon tank.....Called customer and let him know I was on location this morning everything wass good and offered my services while I was on location... Bo Jackson said that all is good,

Appendix B
Table B-2

Date:	6/14/2012

Report Number:	9
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	N/A	am/pm
Shift Offsite Time:	N/A	am/pm
System Run Time:	0	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	#DIV/0!

Cumulative Processing Hrs:	13 hrs
Cumulative BBLS Processed:	5,452 bbls
Cumulative BBLS/Hr Processed:	**419.4 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	
Crew	
Visitors:	
Visitors:	
Visitors:	

Readings:	flow back	Volts/Amps	pH	Turbidity
06:00				
08:00				
10:00				
12:00				
14:00				
16:00				

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	1,725	1,725	NO
Sodium Hydroxide	0	2,280	2,280	NO

Were there any abnormal operational issues onsite?

None

Are there any additional supplies/equipment needed? If so, what items and when?

None

Have there been any changes to the current schedule, including volumes needed by client?

Poseidon tank is suppose to be here maybe on Monday.

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

All tanks are full ,waiting on Poseidon tank..

Date:	6/15/2012

Report Number:	10
Unit Number:	8

STAND BY WAITING ON TANK

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	N/A	am/pm
Shift Offsite Time:	N/A	am/pm
System Run Time:	0	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	#DIV/0!

Cumulative Processing Hrs:	13 hrs
Cumulative BBLS Processed:	5,452 bbls
Cumulative BBLS/Hr Processed:	**419.4 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	
Crew	
Visitors:	
Visitors:	
Visitors:	

Readings:	flow back	Volts/Amps	pH	Turbidity
06:00				
08:00				
10:00				
12:00				
14:00				
16:00				

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	1,725	1,725	NO
Sodium Hydroxide	0	2,280	2,280	NO

Were there any abnormal operational issues onsite?

None

Are there any additional supplies/equipment needed? If so, what items and when?

None

Have there been any changes to the current schedule, including volumes needed by client?

Poseidon tank is suppose to be here maybe on Monday.

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

All tanks are full ,waiting on Poseidon tank..

Appendix B
Table B-2

Date:	6/16/2012

Report Number:	11
Unit Number:	8

STAND BY WAITING ON TANK

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	N/A	am/pm
Shift Offsite Time:	N/A	am/pm
	0	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	#DIV/0!

Cumulative Processing Hrs:	13 hrs
Cumulative BBLS Processed:	5,452 bbls
Cumulative BBLS/Hr Processed:	**419.4 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	
Crew	
Visitors:	
Visitors:	
Visitors:	

Readings:	flow back	Volts/Amps	pH	Turbidity
06:00				
08:00				
10:00				
12:00				
14:00				
16:00				

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	1,725	1,725	NO
Sodium Hydroxide	0	2,280	2,280	NO

Were there any abnormal operational issues onsite?

None

Are there any additional supplies/equipment needed? If so, what items and when?

None

Have there been any changes to the current schedule, including volumes needed by client?

Poseidon tank is suppose to be here on Monday and we are suppose to start filling it on Monday afternoon.

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

All tanks are full ,waiting on Poseidon tank..

Date:	6/17/2012

Report Number:	12
Unit Number:	8

STAND BY WAITING ON TANK

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	N/A	am/pm
Shift Offsite Time:	N/A	am/pm
	0	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	**#DIV/0!**

Cumulative Processing Hrs:	13 hrs
Cumulative BBLS Processed:	5,452 bbls
Cumulative BBLS/Hr Processed:	**419.4 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	
Crew	

Readings:	flow back	Volts/Amps	pH	Turbidity
06:00				
08:00				
10:00				
12:00				
14:00				
16:00				

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	1,725	1,725	NO
Sodium Hydroxide	0	2,280	2,280	NO

Visitors:	
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

None

Are there any additional supplies/equipment needed? If so, what items and when?

None

Have there been any changes to the current schedule, including volumes needed by client?

Poseidon tank should arrive on Monday.

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

All tanks are full ,waiting on Poseidon tank..

Appendix B
Table B-2

Date:	6/18/2012

Report Number:	13
Unit Number:	8

STAND BY WAITING ON TANK

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	N/A	am/pm
Shift Offsite Time:	N/A	am/pm
	0	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	#DIV/0!

Cumulative Processing Hrs:	13 hrs
Cumulative BBLS Processed:	5,452 bbls
Cumulative BBLS/Hr Processed:	**419.4 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	Ken Erler
Crew	Adam Pollard

Readings:	flow back	Volts/Amps	pH	Turbidity
06:00				
08:00				
10:00				
12:00				
14:00				
16:00				

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	1,725	1,725	NO
Sodium Hydroxide	0	2,280	2,280	NO

Visitors:	
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

None

Are there any additional supplies/equipment needed? If so, what items and when?

None

Have there been any changes to the current schedule, including volumes needed by client?

Poseidon tank arrived around 3:00 PM and we waited until 8:00,walls were not up yet.

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

All tanks are full waiting on Poseidon tank to be installed

Date:	6/19/2012

Report Number:	14
Unit Number:	8

STAND BY WAITING ON TANK

Client:	XTO
Location:	Nash 29
e Contact:	Bo Jackson
e Contact:	Paul Worley

Shift Onsite Time:	6:00	am/pm
Shift Offsite Time:	N/A	am/pm
	0	Total hrs.
esent Onsite Activities:	PROCESS WATER	

rocessing Hrs Today	0 hrs
BLS Processed Toda	0 bbls
BBLS/Hr Processed:	**#DIV/0!**

Cumulative Processing Hrs:	13 hrs
Cumulative BBLS Processed:	5,452 bbls
Cumulative BBLS/Hr Processed:	**419.4 bbl/hr**

Supervisor:	Paul Worley
d Operator	Adam Pollard
Crew	

Readings:	flow back	Volts/Amps	pH	Turbidity
06:00				
08:00				
10:00				
12:00				
14:00				
16:00				

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	1,725	1,725	NO
Sodium Hydrox	0	2,280	2,280	NO

Visitors:	
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

None

Are there any additional supplies/equipment needed? If so, what items and when?

None

Have there been any changes to the current schedule, including volumes needed by client?

Waiting on Poseidon tank to be completely

Has client provided any operational feedback (positive or negative)?

Person:		***Company :***		XTO

N/A

Additional Comments

All tanks are full waiting on Poseidon tank to be complete

Appendix B
Table B-2

Date:	6/20/2012

Report Number:	15
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	5:00	am/pm
Shift Offsite Time:	9:00 PM	am/pm
	0	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	**#DIV/0!**

Cumulative Processing Hrs:	13 hrs
Cumulative BBLS Processed:	5,452 bbls
Cumulative BBLS/Hr Processed:	**419.4 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	Adam Pollard
Crew	

Readings:	flow back	Volts/Amps	pH	Turbidity
06:00				
08:00				
10:00				
12:00				
14:00				
16:00				

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	1,725	1,725	YES
Sodium Hydroxide	0	2,280	2,280	YES

Visitors:	BO JACKSON
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

YES.... TRIED PUMPING TO MAIN CLEAN TANK AND PRESSURED UP ON LINES TOO FAR TO PUMP WITH OUR PUMP... CALLED BO JACKSON AND HE HOOKED UP ANOTHER PUMP.

Are there any additional supplies/equipment needed? If so, what items and when?

YES FITTINGS FOR 6500 GAL.ACID AND CAUSTIC TANKS.

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

ARRIVED ON LOCATION AT 5:00 AM REVIEWED JSA WAITED ON POSEIDON TANK.. FINALLY READY FOR WATER BUT OUR PUMP WOULD NOT PUSH WATER THAT FAR... WAITED TO HOOK UP OTHER PUMP.. XTO CALLED OUT ELECTRICIAN AND HOOKED UP BIG PUMP COMING OFF OF CLEAN TANKS.

Appendix B
Table B-2

Date:	6/21/2012		**Report Number:**	16	
			Unit Number:	8	
Client:	XTO		Shift Onsite Time:	5:30	am/pm
Location:	Nash 29		Shift Offsite Time:	5:00 PM	am/pm
Site Contact:	Bo Jackson			9	Total hrs.
Site Contact:	Paul Worley		Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	9 hrs	**Cumulative Processing Hrs:**	13 hrs
BBLS Processed Today:	3,828 bbls	**Cumulative BBLS Processed:**	5,452 bbls
BBLS/Hr Processed:	**425.3333333**	**Cumulative BBLS/Hr Processed:**	**419.4 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	Adam Pollard
Crew	Ken Erler
Visitors:	BO JACKSON
Visitors:	
Visitors:	

Readings:	flow back	Volts/Amps	pH	Turbidity
07:30		100	7.23	1.36
09:30		100	6.98	1.23
11:30		100	6.43	1.05
13:30		100	6.23	0.98
15:30		100	6.76	1.31
16:30		100	6.81	1.03

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	213	1,725	1,512	YES
Sodium Hydroxide	295	2,280	1,985	YES

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments

ARRIVED AT LOCATION AT 5:30 AM. COMPLETED AND REVIEWED JSA. STARTED PROCESSING WATER TO FILL THE CLEAN TANKS. EVERYTHING WENT VERY WELL WITH US ONLY HAVING TO MAKE MINOR ADJUSTMENTS TO THE CAUSTIC AND ACID. ALL THE CLEAN TANKS ARE FULL.

Appendix B
Table B-2

Date:	6/22/2012

Report Number:	17
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	5:30	am/pm
Shift Offsite Time:	12:00 AM	am/pm
	11	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	11 hrs
BBLS Processed Today:	3,555 bbls
BBLS/Hr Processed:	**323.1818182**

Cumulative Processing Hrs:	33 hrs
Cumulative BBLS Processed:	12,835 bbls
Cumulative BBLS/Hr Processed:	**388.9 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	Adam Pollard
Crew	Ken Erler
	Ray Lee
	Eddy McGruder

Readings:	flow back	Volts/Amps	pH	Turbidity
07:30		100	6.57	1.63
09:30		100	6.87	1.87
11:30		100	6.43	1.19
13:30		100	7.02	1.98
15:30		100	7.1	1.32
16:30		100	6.79	1.27

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	197	1,512	1,315	YES
Sodium Hydroxide	262	1,985	1,723	YES

Visitors:	BO JACKSON
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

HAD TO REPLACE ACID PUMP

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

ARRIVED ON LOCATION AT 5:30 AM. COMPLETED AND REVIEWED JSA. STARTED PROCESSING WATER. HAD SMALL PROBLEM WITH ACID PUMP SHUTTING DOWN THROUGH OUT THE DAY, SO WE HAD TO CHANGE IT OUT. OTHER THEN THAT EVERYTHING WENT GOOD. WE HAD TO MAKE SMALL ADJUSTMENTS TO THE CAUSTIC AND ACID THROUGH OUT THE DAY.

Appendix B
Table B-2

Date:	6/23/2012	**Report Number:**	18
		Unit Number:	8

Client:	XTO	Shift Onsite Time:	5:00 am/pm
Location:	Nash 29	Shift Offsite Time:	5:00 AM am/pm
Site Contact:	Bo Jackson		23 Total hrs.
Site Contact:	Paul Worley	Present Onsite Activities:	PROCESS WATER

Processing Hrs Today:	23 hrs	**Cumulative Processing Hrs:**	56 hrs
BBLS Processed Today:	7,541 bbls	**Cumulative BBLS Processed:**	20,376 bbls
BBLS/Hr Processed:	**327.8695652**	**Cumulative BBLS/Hr Processed:**	**363.9 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	Adam Pollard
Crew	Ken Erler
	Ray Lee
	Eddy McGruder
Visitors:	BO JACKSON
Visitors:	
Visitors:	

Readings:	flow back	Volts/Amps	pH	Turbidity
07:00		100	7.23	1.98
13:00		100	6.97	1.76
19:00		100	6.72	1.56
23:00		100	7.15	1.87
2:00		100	6.45	1.45
4:00		100	6.81	1.51

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	416	1,315	899	YES
Sodium Hydroxide	590	1,723	1,133	YES

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

ARRIVED AT LOCATION AT 5:00 AM. COMPLETED AND REVIEWED JSA. STARTED PROCESSING WATER TO FILL THE CLEAN TANKS. EVERYTHING WENT VERY WELL WITH US ONLY HAVING TO MAKE MINOR ADJUSTMENTS TO THE CAUSTIC AND ACID. WE RAN ALL NIGHT TO MAKE SURE WE HAD ENOUGH WATER.

Appendix B
Table B-2

Date:	6/24/2012

Report Number:	19
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	5:00	am/pm
Shift Offsite Time:	1:30 PM	am/pm
	8	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	8 hrs
BBLS Processed Today:	3,806 bbls
BBLS/Hr Processed:	**475.75**

Cumulative Processing Hrs:	64 hrs
Cumulative BBLS Processed:	24,182 bbls
Cumulative BBLS/Hr Processed:	**377.8 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	Adam Pollard
Crew	Ken Erler
	Ray Lee
	Eddy McGruder

Readings:	flow back	Volts/Amps	pH	Turbidity
07:00		100	6.89	1.89
09:00		100	7.03	1.45
11:00		100	7.09	1.76
13:00		100	6.97	1.94
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	213	899	686	YES
Sodium Hydroxide	295	1,133	838	YES

Visitors:	BO JACKSON
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

ARRIVED AT LOCATION AT 5:00 AM. COMPLETED AND REVIEWED JSA. STARTED PROCESSING WATER TO FILL THE CLEAN TANKS. EVERYTHING WENT VERY WELL. WE ONLY MADE MINOR ADJUSTMENTS TO THE CAUSTIC AND ACID.

Appendix B
Table B-2

Date:	6/25/2012

Report Number:	20
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	6:00	am/pm
Shift Offsite Time:	5:00 PM	am/pm
	11	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	4 hrs
BBLS Processed Today:	1,450 bbls
BBLS/Hr Processed:	**362.5**

Cumulative Processing Hrs:	75 hrs
Cumulative BBLS Processed:	25,632 bbls
Cumulative BBLS/Hr Processed:	**341.8 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	Adam Pollard
Crew	Ken Erler
	Ray Lee
	Eddy McGruder

Readings:	flow back	Volts/Amps	pH	Turbidity
07:00		100	6.97	1.67
09:00		100	7.13	1.89
11:00		100	6.89	1.45
12:30		100	6.57	1.72
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	115	5,686	5,571	RECEIVED 5000 GALS
Sodium Hydroxide	150	220	70	YES

Visitors:	BO JACKSON
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

WE ARRIVED AT LOCATION AT 6:00 AM. COMPLETED AND REVIEWED JSA. INSTALLED CLEANED CELLS AND STARTED PROCESSING WATER. MADE SMALL ADJUSTMENTS TO THE CAUSTIC AND ACID. TOMORROW WE HAVE SCHEDULED A SLUDGE PULL. WE ALSO RECEIVED 5,000 GALLONS OF ACID AND ARE EXPECTING A LOAD OF CAUSTIC TOMORROW. EVERYTHING WENT VERY WELL TODAY.

Date:	6/26/2012

Report Number:	21
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	6:00	am/pm
Shift Offsite Time:	5:00 PM	am/pm
	0	Total hrs.
Present Onsite Activities:	PROCESS WATER	

MAINTENANCE

Processing Hrs Today:	0 hrs
BBLS Processed Today:	1,450 bbls
BBLS/Hr Processed:	**#DIV/0!**

Cumulative Processing Hrs:	75 hrs
Cumulative BBLS Processed:	25,632 bbls
Cumulative BBLS/Hr Processed:	**341.8 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	
Crew	

Readings:	flow back	Volts/Amps	pH	Turbidity
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	5,686	5,686	CEIVED 5000 GA
Sodium Hydroxide	0	1,000	1,000	YES

Visitors:	BO JACKSON
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

WE ARRIVED AT LOCATION AT 6:00 AM. COMPLETED AND REVIEWED ,PULLED SLUDGE RECEIVED CAUSTIC AND DRAINED ALL LINES.... THERE WAS ALMOST 12,000 BBLS LEFT IN STORAGE TANK...EVERYTHING WENT VERY WELL TODAY.

Appendix B
Table B-2

Date:	6/27/2012		**Report Number:**	22	
			Unit Number:	8	
Client:	XTO		Shift Onsite Time:	6:00	am/pm
Location:	Nash 29		Shift Offsite Time:	5:00 PM	am/pm
Site Contact:	Bo Jackson			0	Total hrs.
Site Contact:	Paul Worley		Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	0 hrs	**Cumulative Processing Hrs:**	75 hrs
BBLS Processed Today:	1,450 bbls	**Cumulative BBLS Processed:**	25,632 bbls
BBLS/Hr Processed:	**#DIV/0!**	**Cumulative BBLS/Hr Processed:**	**341.8 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	
Crew	

Readings:	flow back	Volts/Amps	pH	Turbidity
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	5,686	5,686	CEIVED 5000 GA
Sodium Hydroxide	0	1,000	1,000	YES

Visitors:	BO JACKSON
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments

ARRIVED ON LOCATION AT 7:00 AM CHECKED ALL VALVES AND TANKS INCLUDING POSIEDON TANK ..EVERYTHING LOOKED GOOD.....BASIC WAS HAULING CLEANED WATER TO FRAC JOB.

Appendix B
Table B-2

Date:	6/28/2012

Report Number:	23
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	N/A	am/pm
Shift Offsite Time:	N/A	am/pm
	0	Total hrs.
Present Onsite Activities:	PROCESS WATER	

STAND BY

Processing Hrs Today:	0 hrs
BBLS Processed Today:	1,450 bbls
BBLS/Hr Processed:	**#DIV/0!**

Cumulative Processing Hrs:	75 hrs
Cumulative BBLS Processed:	25,632 bbls
Cumulative BBLS/Hr Processed:	**341.8 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	
Crew	

Readings:	flow back	Volts/Amps	pH	Turbidity
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	5,686	5,686	CEIVED 5000 GA
Sodium Hydroxide	0	1,000	1,000	YES

Visitors:	BO JACKSON
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

SPOKE WITH BO JACKSON AND WE AGREED ON STARTING BACK UP ON THE 9TH OF JULY FOR THE FRAC ON THE 20TH... DUE TO POSSIBLE BACTERIA GROWTH WE WILL WAIT UNTIL CLOSER TO THE FRAC DATE...

Appendix B
Table B-2

Date:	6/29/2012

Report Number:	24
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	N/A	am/pm
Shift Offsite Time:	N/A	am/pm
	0	Total hrs.
Present Onsite Activities:	PROCESS WATER	

STAND BY

Processing Hrs Today:	0 hrs
BBLS Processed Today:	1,450 bbls
BBLS/Hr Processed:	**#DIV/0!**

Cumulative Processing Hrs:	75 hrs
Cumulative BBLS Processed:	25,632 bbls
Cumulative BBLS/Hr Processed:	**341.8 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	
Crew	

Readings:	flow back	Volts/Amps	pH	Turbidity
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	5,686	5,686	CEIVED 5000 GA
Sodium Hydroxide	0	1,000	1,000	YES

Visitors:	BO JACKSON
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

SPOKE WITH BO JACKSON AND WE AGREED ON STARTING BACK UP ON THE 9TH OF JULY FOR THE FRAC ON THE 20TH... DUE TO POSSIBLE BACTERIA GROWTH WE WILL WAIT UNTIL CLOSER TO THE FRAC DATE...

Appendix B
Table B-2

Date:	6/30/2012

Report Number:	25
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	N/A	am/pm
Shift Offsite Time:	N/A	am/pm
	0	Total hrs.
Present Onsite Activities:	PROCESS WATER	

STAND BY

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	**#DIV/0!**

Cumulative Processing Hrs:	75 hrs
Cumulative BBLS Processed:	25,632 bbls
Cumulative BBLS/Hr Processed:	**341.8 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	
Crew	

Readings:	flow back	Volts/Amps	pH	Turbidity
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	120	5,686	5,566	CEIVED 5000 GA
Sodium Hydroxide	100	1,000	900	YES

Visitors:	BO JACKSON
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

SPOKE WITH BO JACKSON AND WE AGREED ON STARTING BACK UP ON THE 9TH OF JULY FOR THE FRAC ON THE 20TH... DUE TO POSSIBLE BACTERIA GROWTH WE WILL WAIT UNTIL CLOSER TO THE FRAC DATE...

Appendix B
Table B-2

Date:	7/1/2012	**Report Number:**	26
		Unit Number:	8

Client:	XTO	Shift Onsite Time:	3:00 am/pm
Location:	Nash 29	Shift Offsite Time:	9:30 PM am/pm
Site Contact:	Bo Jackson		6 Total hrs.
Site Contact:	Paul Worley	Present Onsite Activities:	PROCESS WATER

Processing Hrs Today:	6 hrs	**Cumulative Processing Hrs:**	81 hrs
BBLS Processed Today:	1,650 bbls	**Cumulative BBLS Processed:**	28,932 bbls
BBLS/Hr Processed:	**275**	**Cumulative BBLS/Hr Processed:**	**357.2 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	RAY LEE
Crew	EDDIE MCGRUBER

Visitors:	
Visitors:	
Visitors:	

Readings:	flow back	Volts/Amps	pH	Turbidity
0500		100	6.67	0.87
0700		100	6.73	0.98
0900		100	6.91	1.03
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	120	5,686	5,566	CEIVED 5000 GA
Sodium Hydroxide	100	1,000	900	YES

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***	XTO

N/A

Additional Comments	

ARRIVED ON LOCATION AT 3:00 PM REVEIWED JSA.. DAVID LUNA CALLED ME AROUND 12:00 AM SAID THAT DIRTY TANKS WERE FULL AND WE NEEDED TO RUN WATER TO GET TANKS DOWN. AFTER INVESTIGATING , FOUND OUT THAT A VALVE WAS LEAKING AND WAS GOING INTO THE DIRTY TANKS... WE GOT THE DIRTY TANKS DOWN TO 9' AND LARRY ONEAL SAID THAT WOULD HOLD THEM OVER UNTIL BO JACKSON GETS BACK TO FIX VALVE. EVERYTHING WENT WELL WITH MINOR ADJUSTMENTS TO CHEMICAL.

Appendix B
Table B-2

Date:	7/2/2012

Report Number:	27
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	N/A	am/pm
Shift Offsite Time:	N/A	am/pm
	0	Total hrs.
Present Onsite Activities:	PROCESS WATER	

STAND BY

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	#DIV/0!

Cumulative Processing Hrs:	75 hrs
Cumulative BBLS Processed:	25,632 bbls
Cumulative BBLS/Hr Processed:	**341.8 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	
Crew	

Readings:	flow back	Volts/Amps	pH	Turbidity
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	5,556	5,556	
Sodium Hydroxide	0	900	900	

Visitors:	BO JACKSON
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

SPOKE WITH BO JACKSON AND WE AGREED ON STARTING BACK UP ON THE 9TH OF JULY FOR THE FRAC ON THE 20TH... DUE TO POSSIBLE BACTERIA GROWTH WE WILL WAIT UNTIL CLOSER TO THE FRAC DATE...

Appendix B
Table B-2

Date:	7/3/2012

Report Number:	28
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	N/A	am/pm
Shift Offsite Time:	N/A	am/pm
	0	Total hrs.
Present Onsite Activities:	PROCESS WATER	

STAND BY

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	**#DIV/0!**

Cumulative Processing Hrs:	75 hrs
Cumulative BBLS Processed:	25,632 bbls
Cumulative BBLS/Hr Processed:	**341.8 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	
Crew	

Readings:	flow back	Volts/Amps	pH	Turbidity
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	5,566	5,566	
Sodium Hydroxide	0	900	900	

Visitors:	BO JACKSON
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

CHECKED ON LINES VALVES AND TANKS..TOOK SAMPLES TO HOBBS LAB TO CHECK FOR BACTERIA GROWTH.

Appendix B
Table B-2

Date:	7/4/2012

Report Number:	29
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	N/A	am/pm
Shift Offsite Time:	N/A	am/pm
	0	Total hrs.
Present Onsite Activities:	PROCESS WATER	

STAND BY

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	**#DIV/0!**

Cumulative Processing Hrs:	75 hrs
Cumulative BBLS Processed:	25,632 bbls
Cumulative BBLS/Hr Processed:	**341.8 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	
Crew	

Readings:	flow back	Volts/Amps	pH	Turbidity
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
Hcl Acid	0	5,566	5,566	
Sodium Hydroxide	0	900	900	

Visitors:	BO JACKSON
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

STARTING BACK UP ON THE 9TH OF JULY FOR THE FRAC ON THE 20TH... DUE TO POSSIBLE BACTERIA GROWTH WE WILL WAIT UNTIL CLOSER TO THE FRAC DATE...

Date:	7/5/2012

Report Number:	30
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	N/A	am/pm
Shift Offsite Time:	N/A	am/pm
	0	Total hrs.
Present Onsite Activities:	PROCESS WATER	

STAND BY

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	**#DIV/0!**

Cumulative Processing Hrs:	75 hrs
Cumulative BBLS Processed:	25,632 bbls
Cumulative BBLS/Hr Processed:	**341.8 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	
Crew	

Readings:	flow back	Volts/Amps	pH	Turbidity
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	5,566	5,566	
Sodium Hydroxide	0	900	900	

Visitors:	BO JACKSON
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

STARTING BACK UP ON THE 9TH OF JULY FOR THE FRAC ON THE 20TH... DUE TO POSSIBLE BACTERIA GROWTH WE WILL WAIT UNTIL CLOSER TO THE FRAC DATE...

Appendix B
Table B-2

Date:	7/6/2012

Report Number:	31
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	N/A	am/pm
Shift Offsite Time:	N/A	am/pm
	0	Total hrs.
Present Onsite Activities:	PROCESS WATER	

STAND BY

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	#DIV/0!

Cumulative Processing Hrs:	75 hrs
Cumulative BBLS Processed:	25,632 bbls
Cumulative BBLS/Hr Processed:	**341.8 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	
Crew	

Readings:	flow back	Volts/Amps	pH	Turbidity
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	5,566	5,566	
Sodium Hydroxide	0	900	900	

Visitors:	BO JACKSON
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

STARTING BACK UP ON THE 9TH OF JULY FOR THE FRAC ON THE 20TH... DUE TO POSSIBLE BACTERIA GROWTH WE WILL WAIT UNTIL CLOSER TO THE FRAC DATE...

Appendix B
Table B-2

Date:	7/7/2012

Report Number:	32
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	N/A	am/pm
Shift Offsite Time:	N/A	am/pm
	0	Total hrs.
Present Onsite Activities:	PROCESS WATER	

STAND BY

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	#DIV/0!

Cumulative Processing Hrs:	75 hrs
Cumulative BBLS Processed:	25,632 bbls
Cumulative BBLS/Hr Processed:	**341.8 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	
Crew	

Readings:	flow back	Volts/Amps	pH	Turbidity
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	5,566	5,566	
Sodium Hydroxide	0	900	900	

Visitors:	BO JACKSON
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

STARTING BACK UP ON THE 9TH OF JULY FOR THE FRAC ON THE 20TH... DUE TO POSSIBLE BACTERIA GROWTH WE WILL WAIT UNTIL CLOSER TO THE FRAC DATE...

Appendix B
Table B-2

Date:	7/8/2012

Report Number:	33
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	N/A	am/pm
Shift Offsite Time:	N/A	am/pm
	0	Total hrs.
Present Onsite Activities:	PROCESS WATER	

STAND BY

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	#DIV/0!

Cumulative Processing Hrs:	75 hrs
Cumulative BBLS Processed:	25,632 bbls
Cumulative BBLS/Hr Processed:	**341.8 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	
Crew	

Readings:	flow back	Volts/Amps	pH	Turbidity
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	5,566	5,566	
Sodium Hydroxide	0	900	900	

Visitors:	BO JACKSON
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments
STARTING BACK UP ON THE 9TH OF JULY FOR THE FRAC ON THE 20TH... DUE TO POSSIBLE BACTERIA GROWTH WE WILL WAIT UNTIL CLOSER TO THE FRAC DATE..

Appendix B
Table B-2

Date:	7/9/2012	**Report Number:**	34
		Unit Number:	8

Client:	XTO	Shift Onsite Time:	6:00	am/pm
Location:	Nash 29	Shift Offsite Time:	6:00 PM	am/pm
Site Contact:	Bo Jackson		4	Total hrs.
Site Contact:	Paul Worley	Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	4 hrs	**Cumulative Processing Hrs:**	85 hrs
BBLS Processed Today:	1,650 bbls	**Cumulative BBLS Processed:**	30,505 bbls
BBLS/Hr Processed:	**412.5**	**Cumulative BBLS/Hr Processed:**	**358.9 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	ADAM POLLARD
Crew	REGGIE WHITE
	CHRIS ONEAL

Readings:	flow back	Volts/Amps	pH	Turbidity
0200		100	6.35	1.16
0400		100	6.65	0.57
0500		100	6.9	0.78
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	150	5,566	5,416	
Sodium Hydroxide	130	900	770	YES

Visitors:	BO JACKSON
Visitors:	BO WELLS
Visitors:	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments

ARRIVED ON LOCATION AT 6:00 AM REVEIWED JSA.. EMPLOYEES HAD SOME TROUBLE WITH SOME VALVES AND WE WERE ON OUR WAY UP FROM KILGORE TRIED TO FIX OVER THE PHONE AND COULD NOT... EMPLOYEES WERE INSTRUCTED TO WAIT UNTIL WE ARRIVED. WE GOT VALVE PROBLEMS FIXED AND STARTED PROCESSING AROUND 1:30 PM AFTER PROBLEM WITH VALVES EVERYTHING WENT WELL AND WE MADE MINOR ADJUSTMENTS TO CHEMICALS.. THERE IS A LITTLE OVER 11,000 BBLS IN POISIDEN TANK AND WATER LOOKS GOOD IN TANK... WE WILL TREAT WITH BE-6 IN THE MORNING JUST AS A PRECAUTION.

Appendix B
Table B-2

Date:	7/10/2012

Report Number:	35
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	6:00	am/pm
Shift Offsite Time:	6:00 PM	am/pm
	8	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	8 hrs
BBLS Processed Today:	3,363 bbls
BBLS/Hr Processed:	**420.375**

Cumulative Processing Hrs:	93 hrs
Cumulative BBLS Processed:	33,868 bbls
Cumulative BBLS/Hr Processed:	**364.2 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	ADAM POLLARD
Crew	REGGIE WHITE
	CHRIS ONEAL

Readings:	flow back	Volts/Amps	pH	Turbidity
800		100	7.1	1.34
1000		100	6.89	1.22
1200		100	6.65	0.98
1400		100	6.65	1.35
0:00		N/A	N/A	N/A
0:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	200	5,416	5,216	
Sodium Hydroxide	185	770	585	YES

Visitors:	
Visitors:	BO WELLS
Visitors:	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

ARRIVED ON LOCATION AT 6:00 AM REVEIWED JSA..STARTED PROCESSING WATER AT 7:00 AM FILLED CLEAN TANKS UP AND WAITED FOR SOME IMPROVEMENTS TO THE PUMP THAT GOES TO POISIDEN TANK. WE LET SMALL PUMP RUN WATER TO IT.. EVERYTHING WENT WELL AND WE MADE SMALL ADJUSTMENTS TO CHEMICALS. WE ALSO GATHERED AND DROPPED OFF SAMPLES FOR HOUSTON AND HOBBS LAB.

Appendix B
Table B-2

Date:	7/11/2012

Report Number:	36
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	6:00	am/pm
Shift Offsite Time:	6:00 PM	am/pm
	4	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	4 hrs
BBLS Processed Today:	1,980 bbls
BBLS/Hr Processed:	**495**

Cumulative Processing Hrs:	97 hrs
Cumulative BBLS Processed:	35,848 bbls
Cumulative BBLS/Hr Processed:	**369.6 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	ADAM POLLARD
Crew	CHRIS ONEAL

Readings:	flow back	Volts/Amps	pH	Turbidity
800		100	6.85	1.67
1000		100	6.76	1.55
1200		100	6.9	1.89
1400		100	6.85	1.66
0:00		N/A	N/A	N/A
0:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	235	5,416	5,181	
Sodium Hydroxide	205	3,800	3,595	

Visitors:	
Visitors:	BO WELLS
Visitors:	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

ARRIVED ON LOCATION AT 6:00 AM REVEIWED JSA..STARTED PROCESSING WATER AT 7:00 AM .RAN OUT OF CAUSTIC AND WAITED A COUPLE OF HOURS....CAUSTIC ARRIVED AND EVERYTHING WENT WELL WITH MINOR ADJUSTMENTS TO CHEMICALS.

Appendix B
Table B-2

Date:	7/12/2012

Report Number:	37
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	6:00	am/pm
Shift Offsite Time:	8:00 PM	am/pm
	8	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	8 hrs
BBLS Processed Today:	3,362 bbls
BBLS/Hr Processed:	**420.25**

Cumulative Processing Hrs:	105 hrs
Cumulative BBLS Processed:	39,210 bbls
Cumulative BBLS/Hr Processed:	**373.4 bbl/hr**

Lead Supervisor:	PAUL WORLEY
Lead Operator	ADAM POLLARD
Crew	CHRIS ONEAL
	REGGIE WHITE

Readings:	flow back	Volts/Amps	pH	Turbidity
800		110	7.1	2.56
1000		110	7.43	1.89
1200		110	6.67	0.98
1400		110	6.63	1.45
0:00		N/A	N/A	N/A
0:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	355	5,181	4,826	
Sodium Hydroxide	420	3,595	3,175	

Visitors:	
Visitors:	BO WELLS
Visitors:	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments

ARRIVED ON LOCATION AT 6:00 AM REVEIWED JSA..STARTED PROCESSING WATER AT 7:00 AM WE FILLED CLEAN TANKS AND HAD SOME BACK PRESSURE ON SAND FILTERS BECAUSE THE SMALL PUMPE WENT DOWN ONXTO TRANFER PUMP WENT DOWN WE HAD TO WAIT FOR CLEAN TANKS TO GO DOWN TO KEEP FILLING. THERE WAS TO MUCH BACK PRESSURE ON SAND FILTERS AND BLEW SOME OF THE GASKETS.. WE HAD TO REPAIR THEM...XTO COMPANY MAN WAS CALLED AND THEY ARE GOING TO GET A BIGGER PUMP TO TRANSFER WATER. THE SINGLE PUMP ON XTO SIDE IS TOO SMALL TO KEEP UP WITH US.OTHER THAN THE WAITING AND REPAIRS EVERYTHING ELSE WENT WELL AND WE MADE MINOR ADJUSTMENTS TO CHEMICALS.

Appendix B
Table B-2

Date:	7/13/2012	**Report Number:**	38
		Unit Number:	8

Client:	XTO	Shift Onsite Time:	2:00	am/pm
Location:	Nash 29	Shift Offsite Time:	7:00 PM	am/pm
Site Contact:	Bo Jackson		10	Total hrs.
Site Contact:	Paul Worley	Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	10 hrs	**Cumulative Processing Hrs:**	107 hrs
BBLS Processed Today:	4,704 bbls	**Cumulative BBLS Processed:**	40,552 bbls
BBLS/Hr Processed:	**470.4**	**Cumulative BBLS/Hr Processed:**	**379.0 bbl/hr**

Lead Supervisor:	PAUL WORLEY
Lead Operator	ADAM POLLARD
Crew	CHRIS ONEAL
	REGGIE WHITE
Visitors:	
Visitors:	
Visitors:	

Readings:	flow back	Volts/Amps	pH	Turbidity
800		110	7.21	0.76
1000		110	6.87	0.87
1200		110	6.95	1.24
1400		110	6.34	2.34
0:00		N/A	N/A	N/A
0:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	345	5,181	4,836	
Sodium Hydroxide	380	3,595	3,215	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments

ARRIVED ON LOCATION AT 2:00 AM REVEIWED JSA..STARTED PROCESSING WATER AT 3:00 AM... WE HAD TO WAIT SEVERAL HOURS FOR PUMP TO TRANFER WATER FROM CLEAN TANKS TO PIT TANK... EVERYTHING ELSE WENT WELL WITH MINOR ADJUSTMENTS TO CHEMICALS .... WE ALSO TREATED TANKS WITH BE6 FOR ANY POSSIBLE BACTERIA GROWTH.

Appendix B
Table B-2

Date:	7/14/2012

Report Number:	39
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	5:00	am/pm
Shift Offsite Time:	7:00 PM	am/pm
	10	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	10 hrs
BBLS Processed Today:	4,321 bbls
BBLS/Hr Processed:	**432.1**

Cumulative Processing Hrs:	117 hrs
Cumulative BBLS Processed:	44,843 bbls
Cumulative BBLS/Hr Processed:	**383.3 bbl/hr**

Lead Supervisor:	PAUL WORLEY
Lead Operator	ADAM POLLARD
Crew	CHRIS ONEAL
	REGGIE WHITE

Visitors:	LARRY ONEAL
Visitors:	
Visitors:	

Readings:	flow back	Volts/Amps	pH	Turbidity
800		100	7.24	0.89
1000		100	6.98	1.31
1200		100	6.54	1.87
1400		100	6.88	1.63
0:00		N/A	N/A	N/A
0:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	380	5,181	4,801	
Sodium Hydroxide	410	3,595	3,185	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

ARRIVED ON LOCATION AT 5:00 AM REVEIWED JSA..STARTED PROCESSING WATER AT 5:15 AM... WE HAD TO WAIT SEVERAL HOURS FOR PUMP TO TRANFER WATER FROM CLEAN TANKS TO PIT TANK... EVERYTHING ELSE WENT WELL WITH MINOR ADJUSTMENTS TO CHEMICALS ....

Appendix B
Table B-2

Date:	7/15/2012	**Report Number:**	40
		Unit Number:	8

Client:	XTO	Shift Onsite Time:	6:00 am/pm
Location:	Nash 29	Shift Offsite Time:	6:00 PM am/pm
Site Contact:	Bo Jackson		9 Total hrs.
Site Contact:	Paul Worley	Present Onsite Activities:	PROCESS WATER

Processing Hrs Today:	9 hrs	**Cumulative Processing Hrs:**	126 hrs
BBLS Processed Today:	4,273 bbls	**Cumulative BBLS Processed:**	49,116 bbls
BBLS/Hr Processed:	**474.7777778**	**Cumulative BBLS/Hr Processed:**	**389.8 bbl/hr**

Lead Supervisor:	PAUL WORLEY
Lead Operator	ADAM POLLARD
Crew	CHRIS ONEAL
	REGGIE WHITE
Visitors:	LARRY ONEAL
Visitors:	
Visitors:	

Readings:	flow back	Volts/Amps	pH	Turbidity
800		100	6.75	1.65
1000		100	6.56	1.97
1200		100	6.87	1.88
1400		100	6.93	1.53
0:00		N/A	N/A	N/A
0:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	320	4,801	4,481	
Sodium Hydroxide	385	3,185	2,800	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments

ARRIVED ON LOCATION AT 6:00 AM REVEIWED JSA..STARTED PROCESSING WATER AT 6:15 AM... WE HAD TO WAIT SEVERAL HOURS FOR PUMP TO TRANFER WATER FROM CLEAN TANKS TO PIT TANK... FILLED CLEAN TANKS AND SHUT DOWN FOR PUMP TO CATCH UP....EVERYTHING ELSE WENT WELL WITH MINOR ADJUSTMENTS TO CHEMICALS .... POISIDEN TANK HAS APPROX.35,000 BBLS. IN IT AS OF TODAY.

Appendix B
Table B-2

Date:	7/16/2012

Report Number:	41
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	6:00	am/pm
Shift Offsite Time:	4:00 PM	am/pm
	7	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	7 hrs
BBLS Processed Today:	3,852 bbls
BBLS/Hr Processed:	**550.2857143**

Cumulative Processing Hrs:	133 hrs
Cumulative BBLS Processed:	52,968 bbls
Cumulative BBLS/Hr Processed:	**398.3 bbl/hr**

Lead Supervisor:	PAUL WORLEY
Lead Operator	CHRIS ONEAL
Crew	REGGIE WHITE
	REGGIE WHITE

Readings:	flow back	Volts/Amps	pH	Turbidity
800		100	6.35	0.87
1000		100	6.43	1.23
1200		100	7.12	2.1
1400		100	6.97	1.87
0:00		N/A	N/A	N/A
0:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	260	4,481	4,221	
Sodium Hydroxide	285	2,800	2,515	

Visitors:	LARRY ONEAL
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

ARRIVED ON LOCATION AT 6:00 AM REVEIWED JSA..STARTED PROCESSING WATER AT 6:30 AM... ... FILLED CLEAN TANKS AND SHUT DOWN FOR PUMP TO CATCH UP....EVERYTHING ELSE WENT WELL WITH MINOR ADJUSTMENTS TO CHEMICALS .... POISIDEN TANK HAS APPROX.35,000 BBLS. IN IT AS OF TODAY.

Appendix B
Table B-2

Date:	7/17/2012	**Report Number:**	42
		Unit Number:	8

Client:	XTO	Shift Onsite Time:	6:00	am/pm
Location:	Nash 29	Shift Offsite Time:	2:00 PM	am/pm
Site Contact:	Bo Jackson		6	Total hrs.
Site Contact:	Paul Worley	Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	6 hrs	**Cumulative Processing Hrs:**	139 hrs
BBLS Processed Today:	2,352 bbls	**Cumulative BBLS Processed:**	55,320 bbls
BBLS/Hr Processed:	**392**	**Cumulative BBLS/Hr Processed:**	**398.0 bbl/hr**

Lead Supervisor:	PAUL WORLEY
Lead Operator	CHRIS ONEAL
Crew	REGGIE WHITE

Visitors:	LARRY ONEAL
Visitors:	JAMIE HARRIS
Visitors:	STEVEN TIPDEN

Readings:	flow back	Volts/Amps	pH	Turbidity
800		100	6.75	1.32
1000		100	7.12	1.45
1200		100	6.88	0.98
N/A		N/A	N/A	N/A
0:00		N/A	N/A	N/A
0:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	205	4,221	4,016	
Sodium Hydroxide	180	2,515	2,335	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

ARRIVED ON LOCATION AT 6:00 AM REVEIWED JSA..STARTED PROCESSING WATER AT 6:30 AM... ... FILLED CLEAN TANKS AND SHUT DOWN FOR PUMP TO CATCH UP.... POSIEDEN TANK IS 14" FROM THE TOP AND SHOULD HAVE AROUND 37,280 BBLS... CALLED THE MANUFACTURER FOR TANK HE RECOMMENDED WE STAY AROUND 12" FROM THE TOP... EVERYTHING ELSE WENT WELL WITH MINOR ADJUSTMENTS TO CHEMICAL

Appendix B
Table B-2

Date:	7/18/2012

Report Number:	43
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	6:00	am/pm
Shift Offsite Time:	6:00 PM	am/pm
	0	Total hrs.
Present Onsite Activities:	PROCESS WATER	

STAND BY WAITING ON FRAC

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	#DIV/0!

Cumulative Processing Hrs:	139 hrs
Cumulative BBLS Processed:	55,320 bbls
Cumulative BBLS/Hr Processed:	**398.0 bbl/hr**

Lead Supervisor:	PAUL WORLEY
Lead Operator	
Crew	

Readings:	flow back	Volts/Amps	pH	Turbidity
800		N/A	N/A	N/A
1000		N/A	N/A	N/A
1200		N/A	N/A	N/A
N/A		N/A	N/A	N/A
0:00		N/A	N/A	N/A
0:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	4,016	4,016	
Sodium Hydroxide	0	2,335	2,335	

Visitors:	
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

WAITING ON FRAC TO START.....POSIEDEN TANK IS 14" FROM THE TOP AND SHOULD HAVE AROUND 37,280 BBLS...THE MANUFACTURER FOR TANK HE RECOMMENDED WE STAY AROUND 12" FROM THE TOP...

Appendix B
Table B-2

Date:	7/19/2012	**Report Number:**	44
		Unit Number:	8

Client:	XTO	Shift Onsite Time:	16:00 am/pm
Location:	Nash 29	Shift Offsite Time:	9:00 PM am/pm
Site Contact:	Bo Jackson		3 Total hrs.
Site Contact:	Paul Worley	Present Onsite Activities:	PROCESS WATER

Processing Hrs Today:	3 hrs	**Cumulative Processing Hrs:**	142 hrs
BBLS Processed Today:	1,141 bbls	**Cumulative BBLS Processed:**	56,461 bbls
BBLS/Hr Processed:	**380.3333333**	**Cumulative BBLS/Hr Processed:**	**397.6 bbl/hr**

Lead Supervisor:	PAUL WORLEY
Lead Operator	CHRIS PERRY
Crew	
Visitors:	
Visitors:	
Visitors:	

Readings:	flow back	Volts/Amps	pH	Turbidity
800		100	7.2	2.34
1000		N/A	N/A	N/A
1200		N/A	N/A	N/A
N/A		N/A	N/A	N/A
0:00		N/A	N/A	N/A
0:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	145	4,016	3,871	
Sodium Hydroxide	120	2,335	2,215	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

GOT A CALL FROM BO JACKSON THAT THE DIRTY TANKS WERE FULL AND I TOLD HIM WE WOULD BE OUT TO GET THEM EMPTY...WE ARRIVED ON LOCATION AROUND 4 PM AND GOT TANKS DOWN SO THEY WOULD NOT OVER FLOW ANYMORE. EVERYTHING WENT WELL.

Appendix B
Table B-2

Date:	7/20/2012

Report Number:	45
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	9:00	am/pm
Shift Offsite Time:	5:00 PM	am/pm
	7	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	7 hrs
BBLS Processed Today:	2,136 bbls
BBLS/Hr Processed:	**305.1428571**

Cumulative Processing Hrs:	149 hrs
Cumulative BBLS Processed:	58,597 bbls
Cumulative BBLS/Hr Processed:	**393.3 bbl/hr**

Lead Supervisor:	PAUL WORLEY
Lead Operator	CHRIS PERRY
Crew	

Readings:	flow back	Volts/Amps	pH	Turbidity
1200		100	6.82	1.43
1400		100	6.66	1.65
1600		100	6.54	N/A
N/A		N/A	N/A	N/A
0:00		N/A	N/A	N/A
0:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	220	3,871	3,651	
Sodium Hydroxide	180	2,215	2,035	

Visitors:	
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

CONTINUE PROCESSING DIRTY WATER TO GET TANKS LOW ENOUGH TO SWAP OUT SOME VALVES THAT LEAK...WE ARRIVED ON LOCATION AROUND 6 AM AND GOT TANKS DOWN SO THEY WOULD NOT OVER FLOW ANYMORE. EVERYTHING WENT WELL..... GOT TANKS DOWN TO 5 FOOT AND CALLED BO JACKSON TO LET HIM KNOW THAT WE WERE GETTING TO THE OIL.HE SAID FOR US TO STOP THERE.

Date:	7/21/2012

Report Number:	46
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	9:00	am/pm
Shift Offsite Time:	5:00 PM	am/pm
	0	Total hrs.
Present Onsite Activities:	PROCESS WATER	

STAND BY

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	**#DIV/0!**

Cumulative Processing Hrs:	149 hrs
Cumulative BBLS Processed:	58,597 bbls
Cumulative BBLS/Hr Processed:	**393.3 bbl/hr**

Lead Supervisor:	PAUL WORLEY
Lead Operator	
Crew	
Visitors:	
Visitors:	
Visitors:	

Readings:	flow back	Volts/Amps	pH	Turbidity
1200		N/A	N/A	N/A
1400		N/A	N/A	N/A
1600		N/A	N/A	N/A
N/A		N/A	N/A	N/A
0:00		N/A	N/A	N/A
0:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	3,651	3,651	
Sodium Hydroxide	0	2,035	2,035	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

STAND BY WAITING ON FRAC.

Appendix B
Table B-2

Date:	7/22/2012

Report Number:	47
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	9:00	am/pm
Shift Offsite Time:	5:00 PM	am/pm
	0	Total hrs.
Present Onsite Activities:	PROCESS WATER	

STAND BY

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	#DIV/0!

Cumulative Processing Hrs:	149 hrs
Cumulative BBLS Processed:	58,597 bbls
Cumulative BBLS/Hr Processed:	**393.3 bbl/hr**

Lead Supervisor:	PAUL WORLEY
Lead Operator	
Crew	
Visitors:	
Visitors:	
Visitors:	

Readings:	flow back	Volts/Amps	pH	Turbidity
1200		N/A	N/A	N/A
1400		N/A	N/A	N/A
1600		N/A	N/A	N/A
N/A		N/A	N/A	N/A
0:00		N/A	N/A	N/A
0:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	3,651	3,651	
Sodium Hydroxide	0	2,035	2,035	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

STAND BY WAITING ON FRAC.

Appendix B
Table B-2

Date:	7/23/2012

Report Number:	48
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	9:00	am/pm
Shift Offsite Time:	5:00 PM	am/pm
	0	Total hrs.
Present Onsite Activities:	PROCESS WATER	

STAND BY

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	**#DIV/0!**

Cumulative Processing Hrs:	149 hrs
Cumulative BBLS Processed:	58,597 bbls
Cumulative BBLS/Hr Processed:	**393.3 bbl/hr**

Lead Supervisor:	PAUL WORLEY
Lead Operator	
Crew	

Readings:	flow back	Volts/Amps	pH	Turbidity
1200		N/A	N/A	N/A
1400		N/A	N/A	N/A
1600		N/A	N/A	N/A
N/A		N/A	N/A	N/A
0:00		N/A	N/A	N/A
0:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	3,651	3,651	
Sodium Hydroxide	0	2,035	2,035	

Visitors:	
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

STAND BY WAITING ON FRAC.

Appendix B
Table B-2

Date:	7/24/2012

Report Number:	49
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	9:00	am/pm
Shift Offsite Time:	5:00 PM	am/pm
	0	Total hrs.
Present Onsite Activities:	PROCESS WATER	

STAND BY

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	#DIV/0!

Cumulative Processing Hrs:	149 hrs
Cumulative BBLS Processed:	58,597 bbls
Cumulative BBLS/Hr Processed:	**393.3 bbl/hr**

Lead Supervisor:	PAUL WORLEY
Lead Operator	
Crew	
Visitors:	
Visitors:	
Visitors:	

Readings:	flow back	Volts/Amps	pH	Turbidity
1200		N/A	N/A	N/A
1400		N/A	N/A	N/A
1600		N/A	N/A	N/A
N/A		N/A	N/A	N/A
0:00		N/A	N/A	N/A
0:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	3,651	3,651	
Sodium Hydroxide	0	2,035	2,035	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

STAND BY WAITING ON FRAC.

Date:	7/25/2012

Report Number:	50
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	9:00	am/pm
Shift Offsite Time:	5:00 PM	am/pm
	0	Total hrs.
Present Onsite Activities:	PROCESS WATER	

STAND BY

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	**#DIV/0!**

Cumulative Processing Hrs:	149 hrs
Cumulative BBLS Processed:	58,597 bbls
Cumulative BBLS/Hr Processed:	**393.3 bbl/hr**

Lead Supervisor:	PAUL WORLEY
Lead Operator	
Crew	
Visitors:	
Visitors:	
Visitors:	

Readings:	flow back	Volts/Amps	pH	Turbidity
1200		N/A	N/A	N/A
1400		N/A	N/A	N/A
1600		N/A	N/A	N/A
N/A		N/A	N/A	N/A
0:00		N/A	N/A	N/A
0:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	3,651	3,651	
Sodium Hydroxide	0	2,035	2,035	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***	XTO

N/A

Additional Comments	

STAND BY WAITING ON FRAC.

Appendix B
Table B-2

Date:	7/26/2012

Report Number:	51
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	9:00	am/pm
Shift Offsite Time:	5:00 PM	am/pm
	0	Total hrs.
Present Onsite Activities:	PROCESS WATER	

STAND BY

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	**#DIV/0!**

Cumulative Processing Hrs:	149 hrs
Cumulative BBLS Processed:	58,597 bbls
Cumulative BBLS/Hr Processed:	**393.3 bbl/hr**

Lead Supervisor:	PAUL WORLEY
Lead Operator	
Crew	

Readings:	flow back	Volts/Amps	pH	Turbidity
1200		N/A	N/A	N/A
1400		N/A	N/A	N/A
1600		N/A	N/A	N/A
N/A		N/A	N/A	N/A
0:00		N/A	N/A	N/A
0:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	3,651	3,651	
Sodium Hydroxide	0	2,035	2,035	

Visitors:	
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

N/A

Additional Comments	

STAND BY WAITING ON FRAC.

Appendix B
Table B-2

Date:	8/1/2012

Report Number:	52
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Jason Distall

Shift Onsite Time:	11:00	am/pm
Shift Offsite Time:	4:00 PM	am/pm
	0	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	**#DIV/0!**

Cumulative Processing Hrs:	149 hrs
Cumulative BBLS Processed:	58,597 bbls
Cumulative BBLS/Hr Processed:	**393.3 bbl/hr**

Lead Supervisor:	Jason Distall
Lead Operator	
Crew	Eddie McGruder
	Sammy Dean
	Ray Lee

Readings:	flow back	Volts/Amps	pH	Turbidity
1200		N/A	N/A	N/A
1400		N/A	N/A	N/A
1600		N/A	N/A	N/A
N/A		N/A	N/A	N/A
0:00		N/A	N/A	N/A
0:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	3,651	3,651	
Sodium Hydroxide	67	2,035	1,968	

Visitors:	
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

NO

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***	XTO

N/A

Additional Comments	

Filled weir and settling tanks to resume recycle operations 8-02-2012

Appendix B
Table B-2

Date:	8/2/2012

Report Number:	53
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Jason Distall

Shift Onsite Time:	5:30	am/pm
Shift Offsite Time:	4:00 PM	am/pm
	10.5	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	3 hrs
BBLS Processed Today:	1,392 bbls
BBLS/Hr Processed:	**464**

Cumulative Processing Hrs:	152 hrs
Cumulative BBLS Processed:	59,989 bbls
Cumulative BBLS/Hr Processed:	**394.7 bbl/hr**

Lead Supervisor:	Jason Distall
Lead Operator	
Crew	Eddie McGruder
	Sammy Dean
	Ray Lee

Readings:	flow back	Volts/Amps	pH	Turbidity
1200		20v 100a	7.05	3.32
1400		N/A	N/A	N/A
1600		20v 100a	7.03	3.27
N/A		N/A	N/A	N/A
0:00		N/A	N/A	N/A
0:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	143	3,651	3,508	
Sodium Hydroxide	117	1,968	1,851	

Visitors:	
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

Yes, the power source was fluctuating, the lost power.

Are there any additional supplies/equipment needed? If so, what items and when?

NO

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

No

Additional Comments	

Starting recycling water, had several power surges from supply side. Finally lost power. Contacted Bo Jackson with XTO. He said he would send out electrician 08:00 on 8-03-2012. Operation was shut down for the day.

Appendix B
Table B-2

Date:	8/3/2012

Report Number:	54
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Chad Edwards

Shift Onsite Time:	5:30	am/pm
Shift Offsite Time:	4:00 PM	am/pm
	10.5	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	6 hrs
BBLS Processed Today:	3,351 bbls
BBLS/Hr Processed:	**558.5**

Cumulative Processing Hrs:	158 hrs
Cumulative BBLS Processed:	63,340 bbls
Cumulative BBLS/Hr Processed:	**400.9 bbl/hr**

Lead Supervisor:	Chad Edwards
Lead Operator	Jason Distall
Crew	Eddie McGruder
	Sammy Dean
	Ray Lee

Readings:	flow back	Volts/Amps	pH	Turbidity
1200		20v 100a	6.99	3.29
1400		N/A	N/A	N/A
1500		20v 100a	7.03	3.18
N/A		N/A	N/A	N/A
0:00		N/A	N/A	N/A
0:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	345	3,508	3,163	
Sodium Hydroxide	361	1,851	1,490	

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

Yes, supply list will be complete tomorrow.

Have there been any changes to the current schedule, including volumes needed by client?

We are limited to approximately 2,000 bbls/day incoming produced water do to power outages.

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

No

Additional Comments	

Water is treating very consistent, an occasional minor adjustment is needed. Increased rate to 410 gpm without effecting the water quality. Due to power outages in the area, Bo Jackson reported that XTO is currently only producing about 2,000 bbls/day. We had to shut down operation at 15:45. Tanks will be filling overnight. Not sure how much we will be able to treat tomorrow with limited produced water coming in.

Appendix B
Table B-2

Date:	8/4/2012

Report Number:	55
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Chad Edwards

Shift Onsite Time:	2:30	am/pm
Shift Offsite Time:	2:00 PM	am/pm
	11.5	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	8.75 hrs
BBLS Processed Today:	4,903 bbls
BBLS/Hr Processed:	**560.3428571**

Cumulative Processing Hrs:	166.75 hrs
Cumulative BBLS Processed:	68,243 bbls
Cumulative BBLS/Hr Processed:	**409.3 bbl/hr**

Lead Supervisor:	Chad Edwards
Lead Operator	Jason Distall
Crew	Eddie McGruder
	Sammy Dean
	Ray Lee
	Ken Ehler
	Adam Pollard
	Eli Tangura

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Readings:	flow back	Volts/Amps	pH	Turbidity
06:00		20v 100a	7.1	4.25
10:00		20v 100a	7.08	4.03
12:30		20v 100a	7.03	3.25
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	505	3,163	2,658	
Sodium Hydroxide	508	1,490	982	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

No, supplies on order

Have there been any changes to the current schedule, including volumes needed by client?

We are limited to approximately 2,000 bbls/day incoming produced water do to power outages, however, Bo Jackson expects that to change and hopes to have tanks full by 2:30 am.

Has client provided any operational feedback (positive or negative)?

Person:	Bo Jackson	***Company:***		XTO

Bo is pleased with our operation and understands that we are currently limited by our incoming supply of produced water. He has been working on returning rate up to a possible 6,000 bbls/day.

Additional Comments

There were no chemical adjustments needed today.Both pH and turbidity are stable. We had to shut down treating at 12:45. Bo indicated that we will continue to receive reduced rates of produced water depending on electric company. Crew remained on location to perform housekeeping. Crew will arive on location at 02:00 anticipating full tanks. We are currently at 19,000 bbls in the poseidon tank with an additional 2,000 at recycle location. We will complete recycling for the upcoming frac ahead of schedule as long as the incoming produced water rate returns.

Appendix B
Table B-2

Date:	8/5/2012

Report Number:	56
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Chad Edwards

Shift Onsite Time:	6:00	am/pm
Shift Offsite Time:	4:00 PM	am/pm
	11.5	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	6 hrs
BBLS Processed Today:	3,263 bbls
BBLS/Hr Processed:	**543.8333333**

Cumulative Processing Hrs:	172.75 hrs
Cumulative BBLS Processed:	71,506 bbls
Cumulative BBLS/Hr Processed:	**413.9 bbl/hr**

Lead Supervisor:	Chad Edwards
Lead Operator	
Crew	Eddie McGruder
	Sammy Dean
	Ray Lee
	Ken Ehler
	Adam Pollard

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Readings:	flow back	Volts/Amps	pH	Turbidity
08:00		20v 100a	7.1	5.12
10:00		20v 100a	7.09	4.03
12:30		20v 100a	7.11	4.05
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	326	2,658	2,332	
Sodium Hydroxide	331	982	651	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

No, supplies on order

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments
Water is processing well. Incoming rate tomorrow should be about 4500 bbls.

Appendix B
Table B-2

Date:	8/6/2012

Report Number:	57
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Chad Edwards

Shift Onsite Time:	5:30	am/pm
Shift Offsite Time:	7:30 PM	am/pm
	11.5	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	10.5 hrs
BBLS Processed Today:	5,060 bbls
BBLS/Hr Processed:	**481.9047619**

Cumulative Processing Hrs:	183.25 hrs
Cumulative BBLS Processed:	76,566 bbls
Cumulative BBLS/Hr Processed:	**417.8 bbl/hr**

Lead Supervisor:	Chad Edwards
Lead Operator	Sammy Dean
Crew	Eddie McGruder
	Ray Lee
	Chris Ray
	Reginald White

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Readings:	flow back	Volts/Amps	pH	Turbidity
08:00		20v 100a	7.1	2.58
10:00		20v 100a	7.01	2.25
14:00		20v 100a	7.05	2.06
16:00		20v 100a	7.09	1.89
N/A		20v 100a	7	1.92
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	512	2,332	1,820	
Sodium Hydroxide	379	651	272	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

Supplies have been ordered and will begin receiving tomorrow

Have there been any changes to the current schedule, including volumes needed by client?

We will be running a split shift on a trial basis tomorrow. Bo Jackson will be out Friday-Monday; so in order to capture as much water as possible, we will run morning and evening shifts at his suggestion.

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

We have a total of 28,100 bbls treated to date for the upcoming frac on the 9th. Should have no trouble completing the needed volume. Also, we will continue to run after reaching the 35,000 bbls needed until all tanks are full. This should help get a jumpstart on the following frac which will be tight given limited incoming produced water.

Appendix B
Table B-2

Date:	8/7/2012

Report Number:	58
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	6:00	am/pm
Shift Offsite Time:	12:00 PM	am/pm
	18	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	11 hrs
BBLS Processed Today:	5,560 bbls
BBLS/Hr Processed:	**505.4545455**

Cumulative Processing Hrs:	194 hrs
Cumulative BBLS Processed:	82,126 bbls
Cumulative BBLS/Hr Processed:	**423.3 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	Sammy Dean
Crew	Eddie McGruder
	Ray Lee
	Chris Ray
	Reginald White

Readings:	flow back	Volts/Amps	pH	Turbidity
08:00		100	6.89	1.43
10:00		100	6.93	0.89
14:00		100	7.12	0.93
16:00		100	7.24	1.23
18:00		100	7.1	1.56
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	375	3,750	3,375	eceived 4000 gal
Sodium Hydroxide	420	1,200	780	Yes

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

Have there been any changes to the current schedule, including volumes needed by client?

SPLIT SHIFTS TO LET DIRTY TANKS FILL IN BETWEEN SHIFTS.

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments

ARRIVED ON LOCATION AT 6 AM REVIEWED JSA ....RAN AS MUCH WATER AS WE COULD FROM DIRTY TANKS AND THEN SHUT DOWN .....NIGHT SHIFT ARRIVED AND CONTINUED CLEANING UNTIL THEY RAN OUT OF DIRTY WATER.EVERYTHING WENT WELL WITH MINOR ADJUSTMENTS TO THE CHEMICALS...WE WILL HAVE PLENTY OF WATER FOR FRAC ON THE 9th.

Appendix B
Table B-2

Date:	8/8/2012

Report Number:	59
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	6:00	am/pm
Shift Offsite Time:	1:00 AM	am/pm
	19	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	12 hrs
BBLS Processed Today:	4,126 bbls
BBLS/Hr Processed:	**343.8333333**

Cumulative Processing Hrs:	206 hrs
Cumulative BBLS Processed:	86,252 bbls
Cumulative BBLS/Hr Processed:	**418.7 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	Ken Erler
Crew	Eddie McGruder
	Ray Lee
	Chris Perry
	Reginald White

Readings:	flow back	Volts/Amps	pH	Turbidity
08:00		100	7.21	1.87
10:00		100	7.45	0.78
14:00		100	6.89	0.69
16:00		100	7.33	0.56
18:00		100	7.1	1.34
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	300	3,750	3,450	eceived 4000 gal
Sodium Hydroxide	335	3,280	2,945	eceived 2500 gal

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

Have there been any changes to the current schedule, including volumes needed by client?

SPLIT SHIFTS TO LET DIRTY TANKS FILL IN BETWEEN SHIFTS.

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

ARRIVED ON LOCATION AT 6 AM REVIEWED JSA ....RAN AS MUCH WATER AS WE COULD FROM DIRTY TANKS AND THEN SHUT DOWN .....NIGHT SHIFT ARRIVED AND CONTINUED CLEANING UNTIL THEY RAN OUT OF DIRTY WATER.EVERYTHING WENT WELL WITH MINOR ADJUSTMENTS TO THE CHEMICALS.

Appendix B
Table B-2

Date:	8/9/2012

Report Number:	60
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	6:00	am/pm
Shift Offsite Time:	1:00 AM	am/pm
	12	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	8 hrs
BBLS Processed Today:	3,441 bbls
BBLS/Hr Processed:	**430.125**

Cumulative Processing Hrs:	214 hrs
Cumulative BBLS Processed:	89,693 bbls
Cumulative BBLS/Hr Processed:	**419.1 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	Eddie McGruder
Crew	Ray Lee
	Chris Perry
	Reginald White

Readings:	flow back	Volts/Amps	pH	Turbidity
08:00		100	6.97	1.87
10:00		100	6.78	0.78
19:00		100	7.23	0.69
21:00		100	6.89	0.56
22:00		100	6.76	1.23
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	351	3,450	3,099	no
Sodium Hydroxide	374	2,945	2,571	no

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

Have there been any changes to the current schedule, including volumes needed by client?

SPLIT SHIFTS TO LET DIRTY TANKS FILL IN BETWEEN SHIFTS.

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments

ARRIVED ON LOCATION AT 6 AM REVIEWED JSA ....RAN AS MUCH WATER AS WE COULD FROM DIRTY TANKS AND THEN SHUT DOWN .....NIGHT SHIFT ARRIVED AND CONTINUED CLEANING UNTIL THEY RAN OUT OF DIRTY WATER.EVERYTHING WENT WELL WITH MINOR ADJUSTMENTS TO THE CHEMICALS.

Appendix B
Table B-2

Date:	8/10/2012

Report Number:	61
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	6:00	am/pm
Shift Offsite Time:	4:00 PM	am/pm
	9	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	9 hrs
BBLS Processed Today:	3,990 bbls
BBLS/Hr Processed:	**443.3333333**

Cumulative Processing Hrs:	223 hrs
Cumulative BBLS Processed:	93,683 bbls
Cumulative BBLS/Hr Processed:	**420.1 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	Eddie McGruder
Crew	Ray Lee
	Chris Perry
	Reginald White

Readings:	flow back	Volts/Amps	pH	Turbidity
08:00		100	6.76	1.35
10:00		100	6.23	1.67
12:00		100	7.12	1.98
14:00		100	6.52	1.32
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	359	2,748	2,389	no
Sodium Hydroxide	403	2,197	1,794	no

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

Have there been any changes to the current schedule, including volumes needed by client?

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

ARRIVED ON LOCATION AT 6 AM REVIEWED JSA ....RAN AS MUCH WATER AS WE COULD FROM DIRTY TANKS AND THEN SHUT DOWN .....EVERYTHING WENT WELL WITH MINOR ADJUSTMENTS TO THE CHEMICALS.

Appendix B
Table B-2

Date:	8/11/2012

Report Number:	62
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	6:00	am/pm
Shift Offsite Time:	6:00 PM	am/pm
	10	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	10 hrs
BBLS Processed Today:	4,279 bbls
BBLS/Hr Processed:	**427.9**

Cumulative Processing Hrs:	233 hrs
Cumulative BBLS Processed:	97,962 bbls
Cumulative BBLS/Hr Processed:	**420.4 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	Eddie McGruder
Crew	Ray Lee
	Chris Perry
	Reginald White

Readings:	flow back	Volts/Amps	pH	Turbidity
08:00		100	6.87	1.97
10:00		100	6.43	1.89
12:00		100	6.97	1.78
14:00		100	6.89	1.43
16:00		100	6.76	1.56
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	385	2,389	2,004	no
Sodium Hydroxide	411	1,794	1,383	no

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

Have there been any changes to the current schedule, including volumes needed by client?

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

ARRIVED ON LOCATION AT 6 AM REVIEWED JSA ....PROCESSED AS MUCH WATER AS WE COULD FROM DIRTY TANKS .....EVERYTHING WENT WELL WITH MINOR ADJUSTMENTS TO THE CHEMICALS.

Appendix B
Table B-2

Date:	8/12/2012

Report Number:	63
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	6:00	am/pm
Shift Offsite Time:	6:00 PM	am/pm
	16 hrs	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	16 hrs
BBLS Processed Today:	3,359 bbls
BBLS/Hr Processed:	**209.9375**

Cumulative Processing Hrs:	239 hrs
Cumulative BBLS Processed:	101,321 bbls
Cumulative BBLS/Hr Processed:	**423.9 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	Eddie McGruder
Crew	Ray Lee
	Chris Perry
	Reginald White

Readings:	flow back	Volts/Amps	pH	Turbidity
08:00		100	6.87	1.97
10:00		100	6.43	1.89
12:00		100	6.97	1.78
14:00		100	6.89	1.43
16:00		100	6.76	1.56
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	350	2,004	1,654	no
Sodium Hydroxide	411	1,794	1,383	no

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

Have there been any changes to the current schedule, including volumes needed by client?

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

Performed our morning JSA, consist of trips, falls, 3 point contact when climbing up and down steps and ladders. Make sure we use proper PPE when handling chemicals. It is hot make sure we drink plenty of fluids if feel weak go find a place to sit down. Worked on unit did housekeeping.

Appendix B
Table B-2

Date:	8/13/2012

Report Number:	64
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Paul Worley

Shift Onsite Time:	6:00	am/pm
Shift Offsite Time:	6:00 PM	am/pm
	12 hrs	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	12 hrs
BBLS Processed Today:	4,735 bbls
BBLS/Hr Processed:	**394.5833333**

Cumulative Processing Hrs:	235 hrs
Cumulative BBLS Processed:	106,056 bbls
Cumulative BBLS/Hr Processed:	**451.3 bbl/hr**

Lead Supervisor:	Paul Worley
Lead Operator	Eddie McGruder
Crew	Ray Lee
	Chris Perry
	Reginald White

Readings:	flow back	Volts/Amps	pH	Turbidity
08:00		100	6.87	1.97
10:00		100	6.43	1.89
12:00		100	6.97	1.78
14:00		100	6.89	1.43
16:00		100	6.76	1.56
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	405	2,004	1,599	no
Sodium Hydroxide	411	1,794	1,383	no

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

Have there been any changes to the current schedule, including volumes needed by client?

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

Performed our morning JSA, Weather conditions some rain , slippery and muddy. Proper PPE when handling chemicals. Watch out for your co-workers. When lifting use the buddy system. XTO wells keep going down, have a crew working on them.

Appendix B
Table B-2

Date:	8/14/2012

Report Number:	65
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Sammy Deam

Shift Onsite Time:	6:00	am/pm
Shift Offsite Time:	6:00 PM	am/pm
	14 hrs	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	14 hrs
BBLS Processed Today:	6,008 bbls
BBLS/Hr Processed:	**429.1428571**

Cumulative Processing Hrs:	251 hrs
Cumulative BBLS Processed:	112,064 bbls
Cumulative BBLS/Hr Processed:	**446.5 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Eddie McGruder
Crew	Ray Lee
	Chris Perry
	Reginald White

Readings:	flow back	Volts/Amps	pH	Turbidity
08:00		100	6.87	1.97
10:00		100	6.43	1.89
12:00		100	6.97	1.78
14:00		100	6.89	1.43
16:00		100	6.76	1.56
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	525	2,004	1,479	no
Sodium Hydroxide	598	1,794	1,196	no

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

Have there been any changes to the current schedule, including volumes needed by client?

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

Performed our morning JSA, Proper PPE when handling chemicals. Team work help each other out know where our musting area is. XTO Still trying to get wells back up and online. Placed an order for Caustic will not be here till Friday morning.

Appendix B
Table B-2

Date:	8/15/2012

Report Number:	66
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Sammy Deam

Shift Onsite Time:	6:00	am/pm
Shift Offsite Time:	6:00 PM	am/pm
	16 hrs	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	16 hrs
BBLS Processed Today:	7,282 bbls
BBLS/Hr Processed:	**455.125**

Cumulative Processing Hrs:	267 hrs
Cumulative BBLS Processed:	119,346 bbls
Cumulative BBLS/Hr Processed:	**447.0 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Eddie McGruder
Crew	Ray Lee
	Chris Perry
	Reginald White

Readings:	flow back	Volts/Amps	pH	Turbidity
08:00		100	6.87	1.97
10:00		100	6.43	1.89
12:00		100	6.97	1.78
14:00		100	6.89	1.43
16:00		100	6.76	1.56
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	525	2,004	1,479	no
Sodium Hydroxide	598	1,794	1,196	no

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

Have there been any changes to the current schedule, including volumes needed by client?

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

Performed our morning JSA, Proper PPE when handling chemicals. Watch out for each other. Keep a clean path to shower trailer. XTO has some pumps up and going. Received 2 totes of Caustic from Hobbs Yard.

Appendix B
Table B-2

Date:	8/16/2012

Report Number:	67
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Sammy Deam

Shift Onsite Time:	6:00	am/pm
Shift Offsite Time:	6:00 PM	am/pm
	11 hrs	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	11 hrs
BBLS Processed Today:	3,056 bbls
BBLS/Hr Processed:	**277.8181818**

Cumulative Processing Hrs:	278 hrs
Cumulative BBLS Processed:	121,402 bbls
Cumulative BBLS/Hr Processed:	**436.7 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Eddie McGruder
Crew	Ray Lee
	Chris Perry
	Reginald White

Readings:	flow back	Volts/Amps	pH	Turbidity
08:00		100	6.87	1.97
10:00		100	6.43	1.89
12:00		100	6.97	1.78
14:00		100	6.89	1.43
16:00		100	6.76	1.56
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	355	1,479	1,124	no
Sodium Hydroxide	266	1,196	930	Yes

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

Have there been any changes to the current schedule, including volumes needed by client?

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

Performed our morning JSA, Proper PPE when chemicals. Pick up all extra hose laying around. Receive 1 tote of Caustic from Third Party Vendor G&K. Had to repair 4 " valve screws broke off. Bought to C Clamps to fix valve. Acid arrive to location. Third party truck broke down on location.

Appendix B
Table B-2

Date:	8/17/2012

Report Number:	68
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Sammy Deam

Shift Onsite Time:	6:00	am/pm
Shift Offsite Time:	6:00 PM	am/pm
	4 hrs	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	4 hrs
BBLS Processed Today:	1,009 bbls
BBLS/Hr Processed:	**252.25**

Cumulative Processing Hrs:	282 hrs
Cumulative BBLS Processed:	122,411 bbls
Cumulative BBLS/Hr Processed:	**434.1 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Eddie McGruder
Crew	Ray Lee
	Chris Perry
	Reginald White

Readings:	flow back	Volts/Amps	pH	Turbidity
08:00		100	6.87	1.97
10:00		100	6.43	1.89
12:00		100	6.97	1.78
14:00		100	6.89	1.43
16:00		100	6.76	1.56
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	150	1,124	974	no
Sodium Hydroxide	130	3,930	3,800	Yes

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

Have there been any changes to the current schedule, including volumes needed by client?

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

Performed our morning JSA, Proper PPE when handling chemicals. Caustic will not show up until Monday 08-20-2012. Replace the Yardney Media Filter box on the Brown Bear. Raining watch walking area muddy and slippery

Appendix B
Table B-2

Date:	8/18/2012

Report Number:	69
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Sammy Deam

Shift Onsite Time:	6:00	am/pm
Shift Offsite Time:	6:00 PM	am/pm
	6 hrs	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	6 hrs
BBLS Processed Today:	2,885 bbls
BBLS/Hr Processed:	**480.8333333**

Cumulative Processing Hrs:	288 hrs
Cumulative BBLS Processed:	125,296 bbls
Cumulative BBLS/Hr Processed:	**435.1 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Eddie McGruder
Crew	Ray Lee
	Chris Perry
	Reginald White

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Readings:	flow back	Volts/Amps	pH	Turbidity
08:00		100	6.87	1.97
10:00		100	6.43	1.89
12:00		100	6.97	1.78
14:00		100	6.89	1.43
16:00		100	6.76	1.56
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	305	974	669	yes
Sodium Hydroxide	250	3,800	3,550	No

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

Have there been any changes to the current schedule, including volumes needed by client?

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

Performed our morning JSA Proper PPE drink plenty of fluid. Watch out for each other.

Appendix B
Table B-2

Date:	8/19/2012

Report Number:	70
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Sammy Deam

Shift Onsite Time:	6:00	am/pm
Shift Offsite Time:	6:00 PM	am/pm
	4 hrs	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	4 hrs
BBLS Processed Today:	1,009 bbls
BBLS/Hr Processed:	**252.25**

Cumulative Processing Hrs:	292 hrs
Cumulative BBLS Processed:	126,305 bbls
Cumulative BBLS/Hr Processed:	**432.6 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Eddie McGruder
Crew	Ray Lee
	Chris Perry
	Reginald White

Readings:	flow back	Volts/Amps	pH	Turbidity
08:00		100	6.87	1.97
10:00		100	6.43	1.89
12:00		100	6.97	1.78
14:00		100	6.89	1.43
16:00		100	6.76	1.56
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	125	3,669	3,544	yes
Sodium Hydroxide	150	3,550	3,400	No

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

Have there been any changes to the current schedule, including volumes needed by client?

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

Shut down due to cracked 4" Tee .Shut down system to fix leak. Returned to processing water

Appendix B
Table B-2

Date:	8/20/2012

Report Number:	71
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Sammy Deam

Shift Onsite Time:	6:00	am/pm
Shift Offsite Time:	6:00 PM	am/pm
	12 hrs	Total hrs.
Present Onsite Activities:	Maintenance	

Maint on Unit

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	**#DIV/0!**

Cumulative Processing Hrs:	292 hrs
Cumulative BBLS Processed:	126,305 bbls
Cumulative BBLS/Hr Processed:	**432.6 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Eddie McGruder
Crew	Ray Lee
	Chris Perry
	Reginald White

Readings:	flow back	Volts/Amps	pH	Turbidity
08:00		100	6.87	1.97
10:00		100	6.43	1.89
12:00		100	6.97	1.78
14:00		100	6.89	1.43
16:00		100	6.76	1.56
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	3,544	3,544	yes
Sodium Hydroxide	0	3,400	3,400	No

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

Have there been any changes to the current schedule, including volumes needed by client?

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

Replace 4 " line on Brown bear waiting for glue to cure. Continue operations 8/21

Appendix B
Table B-2

Date:	8/21/2012

Report Number:	72
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	5:00	am/pm
Shift Offsite Time:	11:00 PM	am/pm
	18 hrs	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	8 hrs
BBLS Processed Today:	3,208 bbls
BBLS/Hr Processed:	**401**

Cumulative Processing Hrs:	300 hrs
Cumulative BBLS Processed:	129,513 bbls
Cumulative BBLS/Hr Processed:	**431.7 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Chris Perry
Crew	Reginald White

Readings:	flow back	Volts/Amps	pH	Turbidity
16:30		110	7.54	0.64
18:30		110	7	1.67
20:30		110	7.02	1.67
22:30		110	7.34	1.25
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	400	5,300	4,900	No
Sodium Hydroxide	350	2,980	2,630	No

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

No

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

No

Additional Comments	

Presiding tank is full, will not send nomore water to this tank till date of frac job. Started filling holding tanks.

Appendix B
Table B-2

Date:	8/22/2012

Report Number:	73
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	9:00	am/pm
Shift Offsite Time:	4:00 PM	am/pm
	7 hrs	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	3 hrs
BBLS Processed Today:	1,419 bbls
BBLS/Hr Processed:	**473**

Cumulative Processing Hrs:	303 hrs
Cumulative BBLS Processed:	130,932 bbls
Cumulative BBLS/Hr Processed:	**432.1 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Chris Perry
Crew	Reginald White

Readings:	flow back	Volts/Amps	pH	Turbidity
11:30		110	7.69	1.94
13:30		110	6.98	0.44
15:30		110	7	1.67
15:44		110	6.89	0.24
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	200	4,900	4,700	No
Sodium Hydroxide	175	2,630	2,455	No

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

No

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

No

Additional Comments	

Poseidon tank is full, will not send more water to this tank till date of frac job. Started filling holding tanks.

Appendix B
Table B-2

Date:	8/23/2012

Report Number:	74
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	10:00	am/pm
Shift Offsite Time:	7:00 PM	am/pm
	9 hrs	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	5 hrs
BBLS Processed Today:	2,648 bbls
BBLS/Hr Processed:	**529.6**

Cumulative Processing Hrs:	308 hrs
Cumulative BBLS Processed:	133,580 bbls
Cumulative BBLS/Hr Processed:	**433.7 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Chris Perry
Crew	Reginald White

Readings:	flow back	Volts/Amps	pH	Turbidity
13:00		110	6.44	1.05
15:00		110	7.03	0.381
17:00		110	7.14	0.668
18:00		110	7	0.553
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	150	4,700	4,550	No
Sodium Hydroxide	375	2,455	2,080	No

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

Rain and wind

Are there any additional supplies/equipment needed? If so, what items and when?

No

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***	XTO

No

Additional Comments	

Filled holding tanks to 13 feet as per Bo Jackson's instructions. All tanks are full waiting for Frac date.

Appendix B
Table B-2

Date:	8/24/2012

Report Number:	75
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	10:00	am/pm
Shift Offsite Time:	7:00 PM	am/pm
	9 hrs	Total hrs.
Present Onsite Activities:	PROCESS WATER	

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	**0**

Cumulative Processing Hrs:	308 hrs
Cumulative BBLS Processed:	133,580 bbls
Cumulative BBLS/Hr Processed:	**433.7 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Chris Perry
Crew	Reginald White

Readings:	flow back	Volts/Amps	pH	Turbidity
13:00		N/A	N/A	N/A
15:00		N/A	N/A	N/A
17:00		N/A	N/A	N/A
18:00		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	4,700	4,550	No
Sodium Hydroxide	0	2,455	2,080	No

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

No

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

No

Additional Comments	

Fixed 4" line for system one on Brown Bear. Spoke with Mr. Bo Jackson, about how Oil got into Poseidon tank. He is not for sure, but do know that there was 3 rd party trucks taking water from XTO Nash Draw Unit # 47 H and unloading it in Poseidon tank. Do not know if those trucks was clean before doing this. Took samples of influent and enfluent, took to Hobbs Yard to be sent to Houston. Poseidon tank is at 136.5" at this time. Recommend to not suck Poseidon tank no lower than 10 inches for frac job.

Appendix B
Table B-2

Date:	8/25/2012

Report Number:	76
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	8:00	am/pm
Shift Offsite Time:	5:00 AM	am/pm
	9 hrs	Total hrs.
Present Onsite Activities:	Maintenance	

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	**0**

Cumulative Processing Hrs:	308 hrs
Cumulative BBLS Processed:	133,580 bbls
Cumulative BBLS/Hr Processed:	**433.7 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Chris Perry
Crew	Reginald White

Readings:	flow back	Volts/Amps	pH	Turbidity
13:00		N/A	N/A	N/A
15:00		N/A	N/A	N/A
17:00		N/A	N/A	N/A
18:00		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	4,700	4,550	No
Sodium Hydroxide	0	2,455	2,080	No

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

No

Have there been any changes to the current schedule, including volumes needed by client?

NO

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

No

Additional Comments	

Did not run today all equipment is filled. Water in weir tanks is clear. Trying to get a pressure washer to clean out Brown Bear.

Appendix B
Table B-2

Date:	8/26/2012

Report Number:	77
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	10:00	am/pm
Shift Offsite Time:	7:00 PM	am/pm
	9 hrs	Total hrs.
Present Onsite Activities:	Maintenance	

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	**0**

Cumulative Processing Hrs:	308 hrs
Cumulative BBLS Processed:	133,580 bbls
Cumulative BBLS/Hr Processed:	**433.7 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Chris Perry
Crew	Reginald White

Readings:	flow back	Volts/Amps	pH	Turbidity
13:00		N/A	N/A	N/A
15:00		N/A	N/A	N/A
17:00		N/A	N/A	N/A
18:00		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	4,700	4,550	No
Sodium Hydroxide	0	2,455	2,080	No

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

No

Have there been any changes to the current schedule, including volumes needed by client?

Standy- by as per customer request

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

No

Additional Comments	

Did not run today all equipment is filled. Water in weir tanks is clear. Trying to get a pressure washer to clean out Brown Bear.

Appendix B
Table B-2

Date:	8/27/2012

Report Number:	78
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	8:00	am/pm
Shift Offsite Time:	5:00 AM	am/pm
	9 hrs	Total hrs.
Present Onsite Activities:	Maintenance	

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	**0**

Cumulative Processing Hrs:	308 hrs
Cumulative BBLS Processed:	133,580 bbls
Cumulative BBLS/Hr Processed:	**433.7 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Chris Perry
Crew	Reginald White

Readings:	flow back	Volts/Amps	pH	Turbidity
13:00		N/A	N/A	N/A
15:00		N/A	N/A	N/A
17:00		N/A	N/A	N/A
18:00		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	4,700	4,550	No
Sodium Hydroxide	0	2,455	2,080	No

Visitors:	Bo Jackson
Visitors:	Todd Cage
Visitors:	Arron Karcher

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

No

Have there been any changes to the current schedule, including volumes needed by client?

Standy- by as per customer request

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

No

Additional Comments	

Did not run today all equipment is filled. Water in weir tanks is clear. Still to get a pressure washer to clean out Brown Bear. Poseidon tank has started leaking from seams. Mr. Randy Green, is going to have some of the water transferred to XTO Nash Draw 49 H and some to XTO Nash Draw Unit # 57 H.

Appendix B
Table B-2

Date:	8/28/2012

Report Number:	79
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	8:00	am/pm
Shift Offsite Time:	5:00	am/pm
	9 hrs	Total hrs.
Present Onsite Activities:	Maintenance	

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	**0**

Cumulative Processing Hrs:	308 hrs
Cumulative BBLS Processed:	133,580 bbls
Cumulative BBLS/Hr Processed:	**433.7 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Chris Perry
Crew	Reginald White

Readings:	flow back	Volts/Amps	pH	Turbidity
13:00		N/A	N/A	N/A
15:00		N/A	N/A	N/A
17:00		N/A	N/A	N/A
18:00		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	4,700	4,550	No
Sodium Hydroxide	0	2,455	2,080	No

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

Poseidon tank off location developed 2 leaks. Operation has been on standby until leaks can be repaired

Are there any additional supplies/equipment needed? If so, what items and when?

No

Have there been any changes to the current schedule, including volumes needed by client?

Standby as per customer request

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

No

Additional Comments	

Did not process water today. All tanks are full. Poseidon tank under repair with 2 leaks So complete repairs 8/30/12.

Appendix B
Table B-2

Date:	8/29/2012

Report Number:	80
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	8:00	am/pm
Shift Offsite Time:	5:00	am/pm
	9 hrs	Total hrs.
Present Onsite Activities:	Maintenance	

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	**0**

Cumulative Processing Hrs:	308 hrs
Cumulative BBLS Processed:	133,580 bbls
Cumulative BBLS/Hr Processed:	**433.7 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Chris Perry
Crew	Reginald White

Readings:	flow back	Volts/Amps	pH	Turbidity
13:00		N/A	N/A	N/A
15:00		N/A	N/A	N/A
17:00		N/A	N/A	N/A
18:00		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	4,700	4,550	**No**
Sodium Hydroxide	0	2,455	2,080	No

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

Poseidon tank off location developed 2 leaks. Operation has been on standby until leaks can be repaired

Are there any additional supplies/equipment needed? If so, what items and when?

No

Have there been any changes to the current schedule, including volumes needed by client?

Standby as per customer request

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

No

Additional Comments	

Did not process water today. All tanks are full. Poseidon tank under repair with 2 leaks So complete repairs 8/31/12. Mr. Jackson advised we should be able to start cleaning water on Friday 31st Day Of August 2012, sometime that evening.

Appendix B
Table B-2

Date:	8/30/2012

Report Number:	81
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	8:00	am/pm
Shift Offsite Time:	5:00	am/pm
	9 hrs	Total hrs.
Present Onsite Activities:	Maintenance	

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	**0**

Cumulative Processing Hrs:	308 hrs
Cumulative BBLS Processed:	133,580 bbls
Cumulative BBLS/Hr Processed:	**433.7 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Chris Perry
Crew	Reginald White

Readings:	flow back	Volts/Amps	pH	Turbidity
13:00		N/A	N/A	N/A
15:00		N/A	N/A	N/A
17:00		N/A	N/A	N/A
18:00		N/A	N/A	N/A
N/A		N/A	N/A	N/A
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	4,700	4,550	No
Sodium Hydroxide	0	2,455	2,080	No

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

Poseidon tank off location developed 2 leaks. Operation has been on standby until leaks can be repaired

Are there any additional supplies/equipment needed? If so, what items and when?

No

Have there been any changes to the current schedule, including volumes needed by client?

Standby as per customer request

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

No

Additional Comments	

Did not process water today. All tanks are full. Poseidon tank under repair with 2 leaks So complete repairs 8/31/12. Mr. Jackson advised we should be able to start cleaning water on Friday 31st Day Of August 2012, sometime that evening.

Appendix B
Table B-2

Date:	8/31/2012

Report Number:	82
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	12:00:00PM	am/pm
Shift Offsite Time:	0:00	am/pm
	12 hrs	Total hrs.
Present Onsite Activities:	Processing Water	

Processing Hrs Today:	10 hrs
BBLS Processed Today:	5,125 bbls
BBLS/Hr Processed:	**512.5**

Cumulative Processing Hrs:	318 hrs
Cumulative BBLS Processed:	138,705 bbls
Cumulative BBLS/Hr Processed:	**436.2 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Chris Perry
Crew	Reginald White

Readings:	flow back	Volts/Amps	pH	Turbidity
14:00		110	5.31	0.116
16:00		110	6.54	0.864
18:00		110	7.01	0.747
20:00		110	6.57	1.8
22:00		110	7.2	2.12
N/A		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	4,550	4,200	No
Sodium Hydroxide	0	2,080	1,800	No

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

No

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

No

Additional Comments	

Poseidon tank has been repaired. We started running water today, there are no issues at this time. We will run through out the night or till dirty tanks level is down to 4 inches.

Appendix B
Table B-2

Date:	9/1/2012

Report Number:	83
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	12:00:00AM	am/pm
Shift Offsite Time:	21:00	am/pm
	11 hrs	Total hrs.
Present Onsite Activities:	Processing Water	

Processing Hrs Today:	9 hrs
BBLS Processed Today:	6,101 bbls
BBLS/Hr Processed:	**512.5**

Cumulative Processing Hrs:	327 hrs
Cumulative BBLS Processed:	139,681 bbls
Cumulative BBLS/Hr Processed:	**427.2 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Chris Perry
Crew	Reginald White

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Readings:	flow back	Volts/Amps	pH	Turbidity
00:00		110	6.8	0.886
02:00		110	7	0.968
13:00		110	7.65	1.11
15:00		110	7.26	1.26
17:00		110	6.8	1.57
19:00		110	6.654	2.47
21:00		110	6.75	2.23

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	4,200	3,800	No
Sodium Hydroxide	0	1,800	1,500	Yes

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

No

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

No

Additional Comments	

Received about 600 gallons of Caustic from Oxy Location. Order a load of caustic to be here on 09/06/2012.

Appendix B
Table B-2

Date:	9/2/2012

Report Number:	84
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	6:00:00AM	am/pm
Shift Offsite Time:	18:00	am/pm
	12 hrs	Total hrs.
Present Onsite Activities:	Processing Water	

Processing Hrs Today:	8 hrs
BBLS Processed Today:	4,483 bbls
BBLS/Hr Processed:	**512.5**

Cumulative Processing Hrs:	335 hrs
Cumulative BBLS Processed:	138,063 bbls
Cumulative BBLS/Hr Processed:	**412.1 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Kenneth Erler
Crew	Fermin Valdez

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Readings:	flow back	Volts/Amps	pH	Turbidity
08:00		108	7.56	1.15
10:00		108	7.35	1.12
12:00		108	7.89	1.37
14:00		108	7.46	1.24
16:00:00 PM		108	6.8	1.57
18:00:00 PM		108	6.654	2.47

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	3,800	3,500	No
Sodium Hydroxide	0	1,500	1,200	Yes

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

No

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

No

Additional Comments	

Keep losing power. Going to try and run till we are down to 4".

Appendix B
Table B-2

Date:	9/3/2012

Report Number:	85
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	6:00:00AM	am/pm
Shift Offsite Time:	19:00	am/pm
	11 hrs	Total hrs.
Present Onsite Activities:	Processing Water	

Processing Hrs Today:	6 hrs
BBLS Processed Today:	4,394 bbls
BBLS/Hr Processed:	**512.5**

Cumulative Processing Hrs:	341 hrs
Cumulative BBLS Processed:	137,974 bbls
Cumulative BBLS/Hr Processed:	**404.6 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Kenneth Erler
Crew	Fermin Valdez
	Eddie MrGruder
	Ray Lee

Readings:	flow back	Volts/Amps	pH	Turbidity
08:00		108	6.86	0.886
10:00		108	6.9	0.965
12:00		108	7.54	1.116
14:00		108	7.68	1.24
16:00:00 PM		108	7.43	1.032

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	3,500	3,200	No
Sodium Hydroxide	0	1,200	900	Yes

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

No

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

No

Additional Comments	

Appendix B
Table B-2

Date:	9/4/2012

Report Number:	86
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	6:00:00AM	am/pm
Shift Offsite Time:	18:00	am/pm
	12 hrs	Total hrs.
Present Onsite Activities:	Processing Water	

Processing Hrs Today:	9 hrs
BBLS Processed Today:	4,844 bbls
BBLS/Hr Processed:	**512.5**

Cumulative Processing Hrs:	350 hrs
Cumulative BBLS Processed:	138,424 bbls
Cumulative BBLS/Hr Processed:	**395.5 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Kenneth Erler
Crew	Fermin Valdez
	Ray Lee

Readings:	flow back	Volts/Amps	pH	Turbidity
08:00		108	7.89	2.12
10:00		108	6.9	0.892
12:00		108	7.35	0.992
14:00		108	7.55	1.69
16:00:00 PM		108	7.12	1.21

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	3,200	2,900	No
Sodium Hydroxide	0	900	600	Yes

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

No

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***	XTO

No

Additional Comments	

Appendix B
Table B-2

Date:	9/5/2012

Report Number:	87
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	6:00:00AM	am/pm
Shift Offsite Time:	0:00	am/pm
	18 hrs	Total hrs.
Present Onsite Activities:	Processing Water	

Processing Hrs Today:	12 hrs
BBLS Processed Today:	5,113 bbls
BBLS/Hr Processed:	**512.5**

Cumulative Processing Hrs:	362 hrs
Cumulative BBLS Processed:	163,640 bbls
Cumulative BBLS/Hr Processed:	**452.0 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Kenneth Erler
Crew	Fermin Valdez
	Ray Lee
	Adam Pollard
	Eddie McGruder

Readings:	flow back	Volts/Amps	pH	Turbidity
08:00		108	6.54	0.158
10:00		108	6.84	0.872
12:00		108	7.25	1.01
14:00		108	7.35	1.15
20:00		108	7.21	1.21
22:00		108	7.85	1.52

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	2,900	2,500	No
Sodium Hydroxide	0	600	1,425	Yes

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

No

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

No

Additional Comments	

Performed JAS everyone aware of their task for today. Worked on house keeping. Took 4 totes of Caustic from yard. Load of Caustic will arrive tomorrow evening around 1800 hours NMT.

Appendix B
Table B-2

Date:	9/6/2012

Report Number:	88
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	6:00:00AM	am/pm
Shift Offsite Time:	0:00	am/pm
	18 hrs	Total hrs.
Present Onsite Activities:	Processing Water	

Processing Hrs Today:	6 hrs
BBLS Processed Today:	2,786 bbls
BBLS/Hr Processed:	**512.5**

Cumulative Processing Hrs:	368 hrs
Cumulative BBLS Processed:	166,426 bbls
Cumulative BBLS/Hr Processed:	**452.2 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Kenneth Erler
Crew	Fermin Valdez
	Ray Lee
	Adam Pollard
	Eddie McGruder

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Readings:	flow back	Volts/Amps	pH	Turbidity
08:00		108	7.21	0.897
10:00		108	6.54	0.123
12:00		108	7.54	0.998
14:00				
20:00				
22:00				

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	2,500	2,350	Yes
Sodium Hydroxide	0	1,425	6,200	No

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

No

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

No

Additional Comments	

Caustic arrived to location around 5:00 pm. Brown bear System 1 and system 2 blinded off. Ordered load of acid to be on location on 09-07-2012.

Appendix B
Table B-2

Date:	9/7/2012

Report Number:	89
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	6:00:00AM	am/pm
Shift Offsite Time:	0:00	am/pm
	18 hrs	Total hrs.
Present Onsite Activities:	Processing Water	

Processing Hrs Today:	12 hrs
BBLS Processed Today:	6,480 bbls
BBLS/Hr Processed:	**512.5**

Cumulative Processing Hrs:	380 hrs
Cumulative BBLS Processed:	172,906 bbls
Cumulative BBLS/Hr Processed:	**455.0 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Kenneth Erler
Crew	Fermin Valdez
	Ray Lee
	Adam Pollard
	Eddie McGruder

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Readings:	flow back	Volts/Amps	pH	Turbidity
10:00		108	6.75	0.456
12:00		108	6.89	0.573
14:00		108	6.69	0.654
16:00		108	7.32	0.768
18:00		108	7.78	1.189
20:00		108	7.5	0.975
22:00		108	7.25	0.9

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	2,350	1,900	Yes
Sodium Hydroxide	0	6,200	5,800	No

Were there any abnormal operational issues onsite?

Brown bear went down, went to Odessa picked up another unit.

Are there any additional supplies/equipment needed? If so, what items and when?

No

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

No

Additional Comments	

Went to Odessa and picked up another Brown Bear Unit. Acid did not show up PO was never create. Acid will be on location at 0800 hours on 09-07-2012. XTO is hauling in fresh water for this Frac Job.

Appendix B
Table B-2

Date:	9/8/2012

Report Number:	90
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	6:00:00AM	am/pm
Shift Offsite Time:	0:00	am/pm
	18 hrs	Total hrs.
Present Onsite Activities:	Processing Water	

Processing Hrs Today:	16 hrs
BBLS Processed Today:	6,480 bbls
BBLS/Hr Processed:	**512.5**

Cumulative Processing Hrs:	396 hrs
Cumulative BBLS Processed:	179,386 bbls
Cumulative BBLS/Hr Processed:	**453.0 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Kenneth Erler
Crew	Fermin Valdez
	Ray Lee
	Adam Pollard
	Eddie McGruder

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Readings:	flow back	Volts/Amps	pH	Turbidity
10:00		108	7.12	0.789
12:00		108	7.34	0.889
14:00		108	7.54	0.987
16:00		108	7.32	0.785
18:00		108	7.43	0.975
20:00		108	7.5	1.189
22:00		108	7.25	1.115

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	6,400	6,000	NO
Sodium Hydroxide	0	5,800	5,550	No

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

No

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

No

Additional Comments	

Peformed JSA, started raining throughout the night. Posidon Tank is filled for next Frac.

Appendix B
Table B-2

Date:	9/9/2012

Report Number:	91
Unit Number:	8

Client:	XTO
Location:	Nash 29
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	6:00:00AM	am/pm
Shift Offsite Time:	18:00	am/pm
	12 hrs	Total hrs.
Present Onsite Activities:	Processing Water	

Processing Hrs Today:	3 hrs
BBLS Processed Today:	1,230 bbls
BBLS/Hr Processed:	**512.5**

Cumulative Processing Hrs:	399 hrs
Cumulative BBLS Processed:	180,616 bbls
Cumulative BBLS/Hr Processed:	**452.7 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Kenneth Erler
Crew	Eddie McGruder
	Ray Lee
	Adam Pollard

Readings:	flow back	Volts/Amps	pH	Turbidity
10:00		108	7.56	0.895
12:00		108	6.89	0.437
13:00		108	7.32	0.875
16:00		N/A	N/A	N/A
18:00		N/A	N/A	N/A
20:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	6,000	5,950	NO
Sodium Hydroxide	0	5,550	5,400	No

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

No

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

No

Additional Comments	

Peformed JSA, filled holding tanks. Did maintenance and house keeping on units.

Appendix B
Table B-2

Date:	9/10/2012

Report Number:	92
Unit Number:	8

Client:	XTO
Location:	Nash 49
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	6:00:00AM	am/pm
Shift Offsite Time:	18:00	am/pm
	12 hrs	Total hrs.
Present Onsite Activities:	Processing Water	

Processing Hrs Today:	4 hrs
BBLS Processed Today:	2,277 bbls
BBLS/Hr Processed:	**512.5**

Cumulative Processing Hrs:	403 hrs
Cumulative BBLS Processed:	182,893 bbls
Cumulative BBLS/Hr Processed:	**453.8 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Kenneth Erler
Crew	Eddie McGruder
	Ray Lee
	Adam Pollard

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Readings:	flow back	Volts/Amps	pH	Turbidity
10:00		110	7	0.198
12:00		110	7.43	0.089
13:00		N/A	N/A	N/A
16:00		N/A	N/A	N/A
18:00		N/A	N/A	N/A
20:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	5,950	5,800	NO
Sodium Hydroxide	0	5,400	5,250	No

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

PVC SCH 80

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

We have 2 weeks to catch next job, we will need approximately 34,000 lbs.

Appendix B
Table B-2

Date:	9/11/2012

Report Number:	93
Unit Number:	8

Client:	XTO
Location:	Nash 49
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	6:00:00AM	am/pm
Shift Offsite Time:	1:00 PM	am/pm
	5 hrs	Total hrs.
Present Onsite Activities:	Processing Water	

Processing Hrs Today:	1 hrs
BBLS Processed Today:	935 bbls
BBLS/Hr Processed:	**512.5**

Cumulative Processing Hrs:	404 hrs
Cumulative BBLS Processed:	183,828 bbls
Cumulative BBLS/Hr Processed:	**455.0 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Ray Lee
Crew	Eddie McGruder

Readings:	flow back	Volts/Amps	pH	Turbidity
10:00		110	7	0.198
12:00		N/A	N/A	N/A
13:00		N/A	N/A	N/A
16:00		N/A	N/A	N/A
18:00		N/A	N/A	N/A
20:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	5,800	5,750	NO
Sodium Hydroxide	0	5,250	5,200	No

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

PVC SCH 80

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

Pulled Sludge and cleaned tanks.

Appendix B
Table B-2

Date:	9/12/2012

Report Number:	94
Unit Number:	8

Client:	XTO
Location:	Nash 49
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	6:00:00AM	am/pm
Shift Offsite Time:	18:00:00 PM	am/pm
	12 hrs	Total hrs.
Present Onsite Activities:	Processing Water	

Processing Hrs Today:	6 hrs
BBLS Processed Today:	2,513 bbls
BBLS/Hr Processed:	**512.5**

Cumulative Processing Hrs:	410 hrs
Cumulative BBLS Processed:	186,341 bbls
Cumulative BBLS/Hr Processed:	**454.5 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Ray Lee
Crew	Eddie McGruder

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Readings:	flow back	Volts/Amps	pH	Turbidity
10:00		110	7	0.198
12:00		110	7.65	0.285
14:00		110	7.24	1.893
16:00		N/A	N/A	N/A
18:00		N/A	N/A	N/A
20:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	5,750	5,500	NO
Sodium Hydroxide	0	5,200	5,000	No

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

PVC SCH 80

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

Performed JSA dkrink plenty of fluid and watch out for each other.

Appendix B
Table B-2

Date:	9/13/2012

Report Number:	95
Unit Number:	8

Client:	XTO
Location:	Nash 49
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	6:00:00AM	am/pm
Shift Offsite Time:	18:00:00 PM	am/pm
	12 hrs	Total hrs.
Present Onsite Activities:	Processing Water	

Processing Hrs Today:	6 hrs
BBLS Processed Today:	2,206 bbls
BBLS/Hr Processed:	**512.5**

Cumulative Processing Hrs:	416 hrs
Cumulative BBLS Processed:	188,547 bbls
Cumulative BBLS/Hr Processed:	**453.2 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Ray Lee
Crew	Eddie McGruder

Readings:	flow back	Volts/Amps	pH	Turbidity
10:00		110	6.89	1.785
12:00		110	7.24	0.896
14:00		110	7.13	0.987
16:00		N/A	N/A	N/A
18:00		N/A	N/A	N/A
20:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	5,750	5,500	NO
Sodium Hydroxide	0	5,200	5,000	No

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

PVC SCH 80

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

Performed JSA drink plenty of fluid and watch out for each other.

Appendix B
Table B-2

Date:	9/14/2012

Report Number:	96
Unit Number:	8

Client:	XTO
Location:	Nash 49
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	6:00:00AM	am/pm
Shift Offsite Time:	18:00:00 PM	am/pm
	12 hrs	Total hrs.
Present Onsite Activities:	Processing Water	

Processing Hrs Today:	6 hrs
BBLS Processed Today:	2,206 bbls
BBLS/Hr Processed:	**512.5**

Cumulative Processing Hrs:	416 hrs
Cumulative BBLS Processed:	188,547 bbls
Cumulative BBLS/Hr Processed:	**453.2 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Adam Pollard
Crew	Ray Lee

Readings:	flow back	Volts/Amps	pH	Turbidity
10:00		110	6.89	1.785
12:00		110	7.24	0.896
14:00		110	7.13	0.987
16:00		N/A	N/A	N/A
18:00		N/A	N/A	N/A
20:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	5,750	5,500	NO
Sodium Hydroxide	0	5,200	5,000	No

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

PVC SCH 80

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

Performed JSA drink plenty of fluid and watch out for each other.

Appendix B
Table B-2

Date:	9/15/2012	**Report Number:**	97
		Unit Number:	8

Client:	XTO	Shift Onsite Time:	6:00:00AM am/pm
Location:	Nash 49	Shift Offsite Time:	18:00:00 PM am/pm
Site Contact:	Bo Jackson		12 hrs Total hrs.
Site Contact:	Sammy Dean	Present Onsite Activities:	Maintenance

Processing Hrs Today:	0 hrs	**Cumulative Processing Hrs:**	416 hrs
BBLS Processed Today:	0 bbls	**Cumulative BBLS Processed:**	188,547 bbls
BBLS/Hr Processed:	**512.5**	**Cumulative BBLS/Hr Processed:**	**453.2 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Adam Pollard
Crew	Ray Lee
Visitors:	Bo Jackson
Visitors:	
Visitors:	

Readings:	flow back	Volts/Amps	pH	Turbidity
10:00		N/A	N/A	N/A
12:00		N/A	N/A	N/A
14:00		N/A	N/A	N/A
16:00		N/A	N/A	N/A
18:00		N/A	N/A	N/A
20:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	5,500	5,500	NO
Sodium Hydroxide	0	5,000	5,000	No

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

PVC SCH 80

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

Maintenance and Repair

Appendix B
Table B-2

Date:	9/16/2012

Report Number:	98
Unit Number:	8

Client:	XTO
Location:	Nash 49
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	6:00:00AM	am/pm
Shift Offsite Time:	18:00:00 PM	am/pm
	12 hrs	Total hrs.
Present Onsite Activities:	Maintenance	

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	**512.5**

Cumulative Processing Hrs:	416 hrs
Cumulative BBLS Processed:	188,547 bbls
Cumulative BBLS/Hr Processed:	**453.2 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Adam Pollard
Crew	Ray Lee

Readings:	flow back	Volts/Amps	pH	Turbidity
10:00		N/A	N/A	N/A
12:00		N/A	N/A	N/A
14:00		N/A	N/A	N/A
16:00		N/A	N/A	N/A
18:00		N/A	N/A	N/A
20:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	5,500	5,500	NO
Sodium Hydroxide	0	5,000	5,000	No

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

PVC SCH 80

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

XTO pump is down, trying to gravity feed clean water from holding tanks to Poseidon Tank.

Additional Comments	

Maintenance and Repair Waiting on XTO to tell us to start running again.

Appendix B
Table B-2

Date:	9/17/2012

Report Number:	99
Unit Number:	8

Client:	XTO
Location:	Nash 49
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	6:00:00AM	am/pm
Shift Offsite Time:	18:00:00 PM	am/pm
	12 hrs	Total hrs.
Present Onsite Activities:	Maintenance	

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	**512.5**

Cumulative Processing Hrs:	416 hrs
Cumulative BBLS Processed:	188,547 bbls
Cumulative BBLS/Hr Processed:	**453.2 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Eddie McGruder
Crew	Ray Lee

Readings:	flow back	Volts/Amps	pH	Turbidity
10:00		N/A	N/A	N/A
12:00		N/A	N/A	N/A
14:00		N/A	N/A	N/A
16:00		N/A	N/A	N/A
18:00		N/A	N/A	N/A
20:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	5,500	5,500	NO
Sodium Hydroxide	0	5,000	5,000	No

Visitors:	Bo Jackson
Visitors:	
Visitors:	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

PVC SCH 80

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

XTO pump is down, trying to gravity feed clean water from holding tanks to Poseidon Tank.

Additional Comments	

Maintenance and Repair Waiting on XTO to tell us to start running again.

Appendix B
Table B-2

Date:	9/18/2012

Report Number:	100
Unit Number:	8

Client:	XTO
Location:	Nash 49
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	6:00:00AM	am/pm
Shift Offsite Time:	18:00:00 PM	am/pm
	12 hrs	Total hrs.
Present Onsite Activities:	Maintenance	

Processing Hrs Today:	8 hrs
BBLS Processed Today:	3,005 bbls
BBLS/Hr Processed:	**512.5**

Cumulative Processing Hrs:	424 hrs
Cumulative BBLS Processed:	191,552 bbls
Cumulative BBLS/Hr Processed:	**451.8 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Eddie McGruder
Crew	Ray Lee

Readings:	flow back	Volts/Amps	pH	Turbidity
10:00		110	6.89	0.785
12:00		110	7.54	0.983
14:00		110	7.85	1.891
16:00		110	7.36	0.985
18:00		N/A	N/A	N/A
20:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	5,500	5,200	NO
Sodium Hydroxide	0	5,000	4,750	No

Visitors:	Bo Jackson
Visitors:	Select Services
Visitors:	

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

PVC SCH 80

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

Select Services will use teir pump to pump water from holding tanks to Poseidon Tank.

Appendix B
Table B-2

Date:	9/19/2012

Report Number:	101
Unit Number:	8

Client:	XTO
Location:	Nash 49
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	6:00:00AM	am/pm
Shift Offsite Time:	14:00:00 PM	am/pm
	8 hrs	Total hrs.
Present Onsite Activities:	Maintenance	

Processing Hrs Today:	3 hrs
BBLS Processed Today:	1,366 bbls
BBLS/Hr Processed:	**512.5**

Cumulative Processing Hrs:	427 hrs
Cumulative BBLS Processed:	192,918 bbls
Cumulative BBLS/Hr Processed:	**451.8 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Eddie McGruder
Crew	Ray Lee

Readings:	flow back	Volts/Amps	pH	Turbidity
10:00		110	6.89	0.785
12:00		110	7.54	0.983
14:00		110	7.85	1.891
16:00		N/A	N/A	N/A
18:00		N/A	N/A	N/A
20:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	5,200	5,100	NO
Sodium Hydroxide	0	4,750	4,700	No

Visitors:	Bo Jackson
Visitors:	Select Services
Visitors:	Bo Wells

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

PVC SCH 80

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

Select Services will use teir pump to pump water from holding tanks to Poseidon Tank.

Appendix B
Table B-2

Date:	9/20/2012

Report Number:	102
Unit Number:	8

Client:	XTO
Location:	Nash 49
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	6:00:00AM	am/pm
Shift Offsite Time:	20:00:00 PM	am/pm
	14 hrs	Total hrs.
Present Onsite Activities:	Maintenance	

Processing Hrs Today:	8 hrs
BBLS Processed Today:	4,476 bbls
BBLS/Hr Processed:	**512.5**

Cumulative Processing Hrs:	435 hrs
Cumulative BBLS Processed:	197,394 bbls
Cumulative BBLS/Hr Processed:	**453.8 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Eddie McGruder
Crew	Ray Lee

Visitors:	Bo Jackson
Visitors:	Select Services
Visitors:	Bo Wells

Readings:	flow back	Volts/Amps	pH	Turbidity
10:00		110	7.78	1.90
12:00		110	7.13	.483
14:00		110	7.09	.319
16:00		110	7	0.209
18:00		N/A	N/A	N/A
20:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	5,100	4,800	NO
Sodium Hydroxide	0	4,700	4,400	No

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

PVC SCH 80

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

JSA performed, did maintenance on units and housekeeping.

Appendix B
Table B-2

Date:	9/21/2012

Report Number:	103
Unit Number:	8

Client:	XTO
Location:	Nash 49
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	6:00:00AM	am/pm
Shift Offsite Time:	20:00:00 PM	am/pm
	14 hrs	Total hrs.
Present Onsite Activities:	Maintenance	

Processing Hrs Today:	2 hrs
BBLS Processed Today:	1,967 bbls
BBLS/Hr Processed:	**512.5**

Cumulative Processing Hrs:	437 hrs
Cumulative BBLS Processed:	199,361 bbls
Cumulative BBLS/Hr Processed:	**456.2 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Eddie McGruder
Crew	Ray Lee
	Christopher Perry

Readings:	flow back	Volts/Amps	pH	Turbidity
10:00		110	7.2	1.15
12:00		N/A	N/A	N/A
14:00		N/A	N/A	N/A
16:00		N/A	N/A	N/A
18:00		N/A	N/A	N/A
20:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	4,800	4,750	NO
Sodium Hydroxide	0	4,400	4,350	No

Visitors:	Bo Jackson
Visitors:	Select Services
Visitors:	Bo Wells

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

PVC SCH 80

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

JSA performed, did maintenance on units and housekeeping.

Appendix B
Table B-2

Date:	9/22/2012

Report Number:	104
Unit Number:	8

Client:	XTO
Location:	Nash 49
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	6:00:00AM	am/pm
Shift Offsite Time:	12:00 PM	am/pm
	14 hrs	Total hrs.
Present Onsite Activities:	Maintenance	

Processing Hrs Today:	4 hrs
BBLS Processed Today:	2,982 bbls
BBLS/Hr Processed:	**512.5**

Cumulative Processing Hrs:	441 hrs
Cumulative BBLS Processed:	202,343 bbls
Cumulative BBLS/Hr Processed:	**458.8 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Eddie McGruder
Crew	Ray Lee
	Christopher Perry

Readings:	flow back	Volts/Amps	pH	Turbidity
10:00		110	6.84	1.67
12:00		110	7.35	1.02
14:00		N/A	N/A	N/A
16:00		N/A	N/A	N/A
18:00		N/A	N/A	N/A
20:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	4,750	4,600	NO
Sodium Hydroxide	0	4,350	4,200	No

Visitors:	Bo Jackson
Visitors:	Select Services
Visitors:	Bo Wells

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

PVC SCH 80

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

JSA performed, did maintenance on units and housekeeping. Filled holding tanks to 13' waiting on select well service to come out and transfer water to poseidon tank.

Appendix B
Table B-2

Date:	9/23/2012

Report Number:	105
Unit Number:	8

Client:	XTO
Location:	Nash 49
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	6:00:00AM	am/pm
Shift Offsite Time:	12:00 PM	am/pm
	14 hrs	Total hrs.
Present Onsite Activities:	Maintenance	

Processing Hrs Today:	2 hrs
BBLS Processed Today:	1,441 bbls
BBLS/Hr Processed:	**512.5**

Cumulative Processing Hrs:	443 hrs
Cumulative BBLS Processed:	203,784 bbls
Cumulative BBLS/Hr Processed:	**460.0 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Eddie McGruder
Crew	Ray Lee
	Christopher Perry

Readings:	flow back	Volts/Amps	pH	Turbidity
10:00		110	6.79	1.91
12:00		N/A	N/A	N/A
14:00		N/A	N/A	N/A
16:00		N/A	N/A	N/A
18:00		N/A	N/A	N/A
20:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	4,600	4,500	NO
Sodium Hydroxide	0	4,200	4,100	No

Visitors:	Bo Jackson
Visitors:	Select Services
Visitors:	Bo Wells

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

PVC SCH 80

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

JSA performed, did maintenance on units and housekeeping. Filled holding tanks to 13' waiting on select well service to come out and transfer water to poseidon tank.

Appendix B
Table B-2

Date:	9/24/2012

Report Number:	106
Unit Number:	8

Client:	XTO
Location:	Nash 49
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	6:00:00AM	am/pm
Shift Offsite Time:	12:00 PM	am/pm
	14 hrs	Total hrs.
Present Onsite Activities:	Process Water/Maintenance	

Processing Hrs Today:	2 hrs
BBLS Processed Today:	1,156 bbls
BBLS/Hr Processed:	**512.5**

Cumulative Processing Hrs:	445 hrs
Cumulative BBLS Processed:	204,940 bbls
Cumulative BBLS/Hr Processed:	**460.5 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Eddie McGruder
Crew	Ray Lee
	Christopher Perry
	Reginald White

Readings:	flow back	Volts/Amps	pH	Turbidity
10:00		110	7.54	0.897
12:00		N/A	N/A	N/A
14:00		N/A	N/A	N/A
16:00		N/A	N/A	N/A
18:00		N/A	N/A	N/A
20:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	4,500	4,450	NO
Sodium Hydroxide	0	4,100	4,050	No

Visitors:	Bo Jackson
Visitors:	Select Services
Visitors:	Bo Wells

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

PVC SCH 80

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

JSA performed, did maintenance on units and housekeeping. Filled holding tanks to 13' waiting on select well service to come out and transfer water to poseidon tank.

Appendix B
Table B-2

Date:	9/25/2012	**Report Number:**	107
		Unit Number:	8

Client:	XTO	Shift Onsite Time:	6:00:00AM am/pm
Location:	Nash 49	Shift Offsite Time:	12:00 PM am/pm
Site Contact:	Bo Jackson		6 hrs Total hrs.
Site Contact:	Sammy Dean	Present Onsite Activities:	Maintenance

Processing Hrs Today:	0 hrs	**Cumulative Processing Hrs:**	445 hrs
BBLS Processed Today:	0 bbls	**Cumulative BBLS Processed:**	204,940 bbls
BBLS/Hr Processed:	**512.5**	**Cumulative BBLS/Hr Processed:**	**460.5 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Eddie McGruder
Crew	Ray Lee
	Christopher Perry
	Reginald White

Readings:	flow back	Volts/Amps	pH	Turbidity
10:00		N/A	N/A	N/A
12:00		N/A	N/A	N/A
14:00		N/A	N/A	N/A
16:00		N/A	N/A	N/A
18:00		N/A	N/A	N/A
20:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	4,450	4,450	NO
Sodium Hydroxide	0	4,050	4,050	No

Visitors:	Bo Jackson
Visitors:	Select Services
Visitors:	Bo Wells

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

PVC SCH 80

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

JSA performed, did maintenance on units and housekeeping.

Appendix B
Table B-2

Date:	9/26/2012

Report Number:	108
Unit Number:	8

Client:	XTO
Location:	Nash 49
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	6:00:00AM	am/pm
Shift Offsite Time:	12:00 PM	am/pm
	6 hrs	Total hrs.
Present Onsite Activities:	Process Water/Maintenance	

Processing Hrs Today:	4 hrs
BBLS Processed Today:	2,970 bbls
BBLS/Hr Processed:	**512.5**

Cumulative Processing Hrs:	449 hrs
Cumulative BBLS Processed:	207,910 bbls
Cumulative BBLS/Hr Processed:	**463.1 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Eddie McGruder
Crew	Ray Lee
	Christopher Perry
	Reginald White

Readings:	flow back	Volts/Amps	pH	Turbidity
10:00		110	7.10	3.31
12:00		110	7.65	1.96
14:00		N/A	N/A	N/A
16:00		N/A	N/A	N/A
18:00		N/A	N/A	N/A
20:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	4,450	4,200	NO
Sodium Hydroxide	0	4,050	3,800	No

Visitors:	Bo Jackson
Visitors:	Select Services
Visitors:	Bo Wells

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

PVC SCH 80

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

JSA performed, did maintenance on units and housekeeping. Process Water waiting on select to transfer water from holding tanks to Poseidon Tank.

Appendix B
Table B-2

Date:	9/27/2012

Report Number:	109
Unit Number:	8

Client:	XTO
Location:	Nash 49
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	6:00:00AM	am/pm
Shift Offsite Time:	12:00 PM	am/pm
	6 hrs	Total hrs.
Present Onsite Activities:	Process Water/Maintenance	

Processing Hrs Today:	2 hrs
BBLS Processed Today:	1,045 bbls
BBLS/Hr Processed:	**512.5**

Cumulative Processing Hrs:	451 hrs
Cumulative BBLS Processed:	208,955 bbls
Cumulative BBLS/Hr Processed:	**463.3 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Eddie McGruder
Crew	Ray Lee
	Christopher Perry
	Reginald White

Readings:	flow back	Volts/Amps	pH	Turbidity
10:00		110	7.54	1.19
12:00		N/A	N/A	N/A
14:00		N/A	N/A	N/A
16:00		N/A	N/A	N/A
18:00		N/A	N/A	N/A
20:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	4,200	4,100	NO
Sodium Hydroxide	0	3,800	3,700	No

Visitors:	Bo Jackson
Visitors:	Select Services
Visitors:	Bo Wells

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

PVC SCH 80

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

JSA performed, did maintenance on units and housekeeping. Process Water waiting on select to transfer water from holding tanks to Poseidon Tank.Filled up Poseidon Tank Frac Job started today have enough water for job.

Appendix B
Table B-2

Date:	9/28/2012

Report Number:	110
Unit Number:	8

Client:	XTO
Location:	Nash 49
Site Contact:	Bo Jackson
Site Contact:	Sammy Dean

Shift Onsite Time:	6:00:00AM	am/pm
Shift Offsite Time:	12:00 PM	am/pm
	6 hrs	Total hrs.
Present Onsite Activities:	Maintenance	

Processing Hrs Today:	0 hrs
BBLS Processed Today:	0 bbls
BBLS/Hr Processed:	**512.5**

Cumulative Processing Hrs:	451 hrs
Cumulative BBLS Processed:	208,955 bbls
Cumulative BBLS/Hr Processed:	**463.3 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Eddie McGruder
Crew	Ray Lee
	Christopher Perry
	Reginald White

Visitors:	Bo Jackson
Visitors:	Select Services
Visitors:	Bo Wells

Readings:	flow back	Volts/Amps	pH	Turbidity
10:00		N/A	N/A	N/A
12:00		N/A	N/A	N/A
14:00		N/A	N/A	N/A
16:00		N/A	N/A	N/A
18:00		N/A	N/A	N/A
20:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	4,100	4,100	NO
Sodium Hydroxide	0	3,700	3,700	No

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

PVC SCH 80

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

JSA Performed waiting on XTO to schedule the sludge pull. House cleaning working on units.

Appendix B
Table B-2

Date:	9/29/2012	**Report Number:**	111
		Unit Number:	8

Client:	XTO	Shift Onsite Time:	6:00:00AM	am/pm
Location:	Nash 49	Shift Offsite Time:	12:00 PM	am/pm
Site Contact:	Bo Jackson		6 hrs	Total hrs.
Site Contact:	Sammy Dean	Present Onsite Activities:	Maintenance	

Processing Hrs Today:	0 hrs	**Cumulative Processing Hrs:**	451 hrs
BBLS Processed Today:	0 bbls	**Cumulative BBLS Processed:**	208,955 bbls
BBLS/Hr Processed:	**512.5**	**Cumulative BBLS/Hr Processed:**	**463.3 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Eddie McGruder
Crew	Ray Lee
	Christopher Perry
	Reginald White

Readings:	flow back	Volts/Amps	pH	Turbidity
10:00		N/A	N/A	N/A
12:00		N/A	N/A	N/A
14:00		N/A	N/A	N/A
16:00		N/A	N/A	N/A
18:00		N/A	N/A	N/A
20:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	4,100	4,100	NO
Sodium Hydroxide	0	3,700	3,700	No

Visitors:	Bo Jackson
Visitors:	Select Services
Visitors:	Bo Wells

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

PVC SCH 80

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

JSA Performed waiting on XTO to schedule the sludge pull. House cleaning working on units.

Appendix B
Table B-2

Date:	9/30/2012	**Report Number:**	112
		Unit Number:	8

Client:	XTO	Shift Onsite Time:	6:00:00AM am/pm
Location:	Nash 49	Shift Offsite Time:	12:00 PM am/pm
Site Contact:	Bo Jackson		6 hrs Total hrs.
Site Contact:	Sammy Dean	Present Onsite Activities:	Maintenance

Processing Hrs Today:	0 hrs	**Cumulative Processing Hrs:**	451 hrs
BBLS Processed Today:	0 bbls	**Cumulative BBLS Processed:**	208,955 bbls
BBLS/Hr Processed:	**512.5**	**Cumulative BBLS/Hr Processed:**	**463.3 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Eddie McGruder
Crew	Ray Lee
	Christopher Perry
	Reginald White

Visitors:	Bo Jackson
Visitors:	Select Services
Visitors:	Bo Wells

Readings:	flow back	Volts/Amps	pH	Turbidity
10:00		N/A	N/A	N/A
12:00		N/A	N/A	N/A
14:00		N/A	N/A	N/A
16:00		N/A	N/A	N/A
18:00		N/A	N/A	N/A
20:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	4,100	4,100	NO
Sodium Hydroxide	0	3,700	3,700	No

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

PVC SCH 80

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

JSA Performed waiting on XTO to schedule the sludge pull. House cleaning working on units.

Appendix B
Table B-2

Date:	10/1/2012	**Report Number:**	113
		Unit Number:	8

Client:	XTO	Shift Onsite Time:	6:00:00AM am/pm
Location:	Nash 49	Shift Offsite Time:	12:00 PM am/pm
Site Contact:	Bo Jackson		6 hrs Total hrs.
Site Contact:	Sammy Dean	Present Onsite Activities:	Maintenance

Processing Hrs Today:	0 hrs	**Cumulative Processing Hrs:**	451 hrs
BBLS Processed Today:	0 bbls	**Cumulative BBLS Processed:**	208,955 bbls
BBLS/Hr Processed:	**512.5**	**Cumulative BBLS/Hr Processed:**	**463.3 bbl/hr**

Lead Supervisor:	Sammy Dean
Lead Operator	Christopher Perry
Crew	Reginald White

Readings:	flow back	Volts/Amps	pH	Turbidity
10:00		N/A	N/A	N/A
12:00		N/A	N/A	N/A
14:00		N/A	N/A	N/A
16:00		N/A	N/A	N/A
18:00		N/A	N/A	N/A
20:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	4,100	4,100	NO
Sodium Hydroxide	0	3,700	3,700	No

Visitors:	Bo Jackson
Visitors:	Select Services
Visitors:	Bo Wells

Were there any abnormal operational issues onsite?

No

Are there any additional supplies/equipment needed? If so, what items and when?

PVC SCH 80

Have there been any changes to the current schedule, including volumes needed by client?

No

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

JSA performed Started sludge pull today did not finished. Will continue pulling sludge on Tuesday 10/02/2012. Bo Jackson will get an electrician out on location tomorrow to unpluged all the electricity.

Appendix B
Table B-2

Date:	10/5/2012	**Report Number:**	114
		Unit Number:	8

Client:	XTO	Shift Onsite Time:	6:00:00AM am/pm
Location:	Nash 49	Shift Offsite Time:	12:00 PM am/pm
Site Contact:	Bo Jackson		6 hrs Total hrs.
Site Contact:	Sammy Dean	Present Onsite Activities:	Rig Down

Rig down units

Processing Hrs Today:	0 hrs	**Cumulative Processing Hrs:**	0 hrs
BBLS Processed Today:	0 bbls	**Cumulative BBLS Processed:**	208,955 bbls
BBLS/Hr Processed:	**512.5**	**Cumulative BBLS/Hr Processed:**	**#DIV/0!**

Lead Supervisor:	Sammy Dean
Lead Operator	Christopher Perry
Crew	Reginald White

Visitors:	Bo Jackson
Visitors:	Robert Rink
Visitors:	

Readings:	flow back	Volts/Amps	pH	Turbidity
10:00		N/A	N/A	N/A
12:00		N/A	N/A	N/A
14:00		N/A	N/A	N/A
16:00		N/A	N/A	N/A
18:00		N/A	N/A	N/A
20:00		N/A	N/A	N/A

Chemical	Usage	Start Inv.	End Inv.	On Order
HcL Acid	0	4,100	4,100	NO
Sodium Hydroxide	0	3,700	3,700	No

Were there any abnormal operational issues onsite?

Are there any additional supplies/equipment needed? If so, what items and when?

Have there been any changes to the current schedule, including volumes needed by client?

Operation completed

Has client provided any operational feedback (positive or negative)?

Person:		***Company:***		XTO

Additional Comments	

Ooeration Completed. Rig down Equipment

APPENDIX C

C-141 Initial and Final Reports

R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Fax: 505.266-0745

March 15, 2013

Mr. Mike Bratcher
NMOCD District 2
811 South First Street
Artesia, New Mexico 88210

Mr. Brad Jones
NMOCD
1220 S. St. Francis Drive
Santa Fe, NM

RE: Nash Draw Unit #29 modular impoundment spill report. API No: 30-015-29434

Dear Sirs:

R.T. Hicks Consultants is pleased to submit the enclosed Form C-141 Release Notification and Correction Action on the behalf of XTO Energy.

The release from the modular impoundment was brought to our attention during the submittal of the C-144 Closure Report submitted to Mr. Bratcher, via email, on December 17, 2012.

We will revise the C-144 closure report to include results of the remediation plan that is the subject of this spill report. Included in the revision, per request of Mr. Jones, will be the inclusion of the entire C-144 permit application and correction to applicable dates and signatures.

We will submit the report to Mr. Jones with a copy to Mr. Bratcher. Both submittals will be delivered via certified mail/return receipt.

If you have any questions please contact me at 970-570-9535.

Sincerely,
R.T. Hicks Consultants
Durango Field Office

Andrew Parker

Cc: David Luna, XTO Energy, via email
Jennifer Van Curen, BLM - Carlsbad Field Office, via certified mail/return receipt

RECEIVED
MAR 25 2013
NMOCD ARTESIA

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
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

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

nMLB1401430906

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company XTO Energy, Inc 5380	Contact David Luna
Address 200 N. Loraine, Suite 800 Midland, TX 79701	Telephone No. 432-620-6742
Facility Name Nash Unit #29	Facility Type Treated produced water modular impoundment

Surface Owner BLM	Mineral Owner	API No. 30-015-29434

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	13	23S	29E	1980	SOUTH	2310	EAST	EDDY

Latitude N 32.30322 Longitude W 103.93719

NATURE OF RELEASE

Type of Release Treated and non-treated produced water	Volume of Release < 5 bbls	Volume Recovered None
Source of Release Modular Impoundment - western edge	Date and Hour of Occurrence 8/27/12	Date and Hour of Discovery 8/27/12
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom? NA	
By Whom? NA	Date and Hour NA	
Was a Watercourse Reached? X ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. NA	

If a Watercourse was Impacted, Describe Fully.*

NA

Describe Cause of Problem and Remedial Action Taken.*

On August 27th, 2012 the modular impoundment liner detached from the top of the tank along the western edge releasing approximately 3 barrels of treated produced water. Mr. Randy Green of XTO Energy mobilized water haul trucks to the site and lowered the water level to prevent further leakage and reattached the liner to the top of the tank. The water was transferred to Nash Draw 49 H and Nash Draw Unit # 57 H. Soil sampling was conducted per C-144 closure requirements. The attached document presents the sampling results and proposes a remediation plan.

Describe Area Affected and Cleanup Action Taken.*

The release affected the southwest corner of the production pad, adjacent to the modular impoundment. The area of impact was approximately 15 X15 square feet. No cleanup action was taken due to limited access caused by the location of the modular impoundment along the edge of the production pad; beyond the modular impoundment heavy mesquite vegetation exists.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: David Luna

Printed Name: David Luna

Title: Operations Engineer

E-mail Address: David_Luna@xtoenergy.com

Date: 3/15/13 Phone: 432-620-6742

* Attach Additional Sheets If Necessary

OIL CONSERVATION DIVISION

Approved by Environmental Specialist: Signed By Mike Bratcher

Approval Date: MAY 31 2013 Expiration Date:

Conditions of Approval: Attached ☐

Remediation per OCD Rule & Guidelines. SUBMIT REMEDIATION PROPOSAL NO LATER THAN: 7/1/2013

2RP-1674

Soil Chemistry

On November 13, 2012, Hicks Consultants collected two 5-point soil samples on location for closure of the modular impoundment employed for hydraulic fracturing of five wells in 2012. On February 11, 2013 Hicks Consultants performed additional characterization to determine the vertical extent of chloride in soil near the western edge of the former modular impoundment, near the area of the reported release.

The location and chloride chemistry of the samples are presented on Plate 1. The chemistry is summarized in Table 1, below. Table 2 shows the lithology of the "Trench Sample". The laboratory certificate of analysis is attached.

The point samples for the Tank Composite and BG Composite were collected approximately two inches below the caliche pad/soil interface at a depth of approximately 1-foot. The Trench Sample consisted of discrete samples at 2, 4, and 6 foot depths.

Figure 1: Summary of soil chemistry

Sample ID	Date	Depth (ft)	Chloride mg/kg	EC uS/cm	Benzene mg/kg	BTEX mg/kg	TPH mg/kg	GRO/DRO mg/kg
NMAC 19.15.17.13.B(1).b			**500 or background**		**0.2**	**50**	**2,500**	**500**
Tank Composite	11/13/2012	1	7,500	NS	<0.49	ND	<20	<10
BG Composite	11/13/2012	1	3,000	NS	<0.49	ND	<20	<10
Trench Sample	2/11/2013	2	3,480	8,010	NS	NS	NS	NS
Trench Sample	2/11/2013	4	2,120	3,020	NS	NS	NS	NS
Trench Sample	2/11/2013	6	2,000	7,050	NS	NS	NS	NS

Notes

1. ND = non-detect
2 NS = not sampled

Figure 2: Lithology of Trench Sample

Depth (ft)	Description
0 - 1	Caliche pad
1 - 4	Top soil (loamy sand), dark brown, moist
4 - 6	Top soil, reddish brown, moist
6	Medim sand w/caliche, hard, brown, moist

Note: native hard caliche was observed below 6 feet.

The Tank Composite sample with a chloride concentration of 7,500 mg/kg indicates production activities have impacted the western half of the caliche pad. The BG Composite sample has a chloride concentration comparable to the Trench Sample at the 2 foot depth (3,480 mg/kg). Soil chloride concentrations at the Trench Sample that is within the area of the Tank Composite sample show chloride concentrations are decreasing with depth, from 3,480 mg/kg at 2 feet to 2,000 mg/kg at 6 feet and indicate that the majority of chloride impairment is limited to the production pad surface.

The chemistry and lithology of the Trench Sample suggests that:

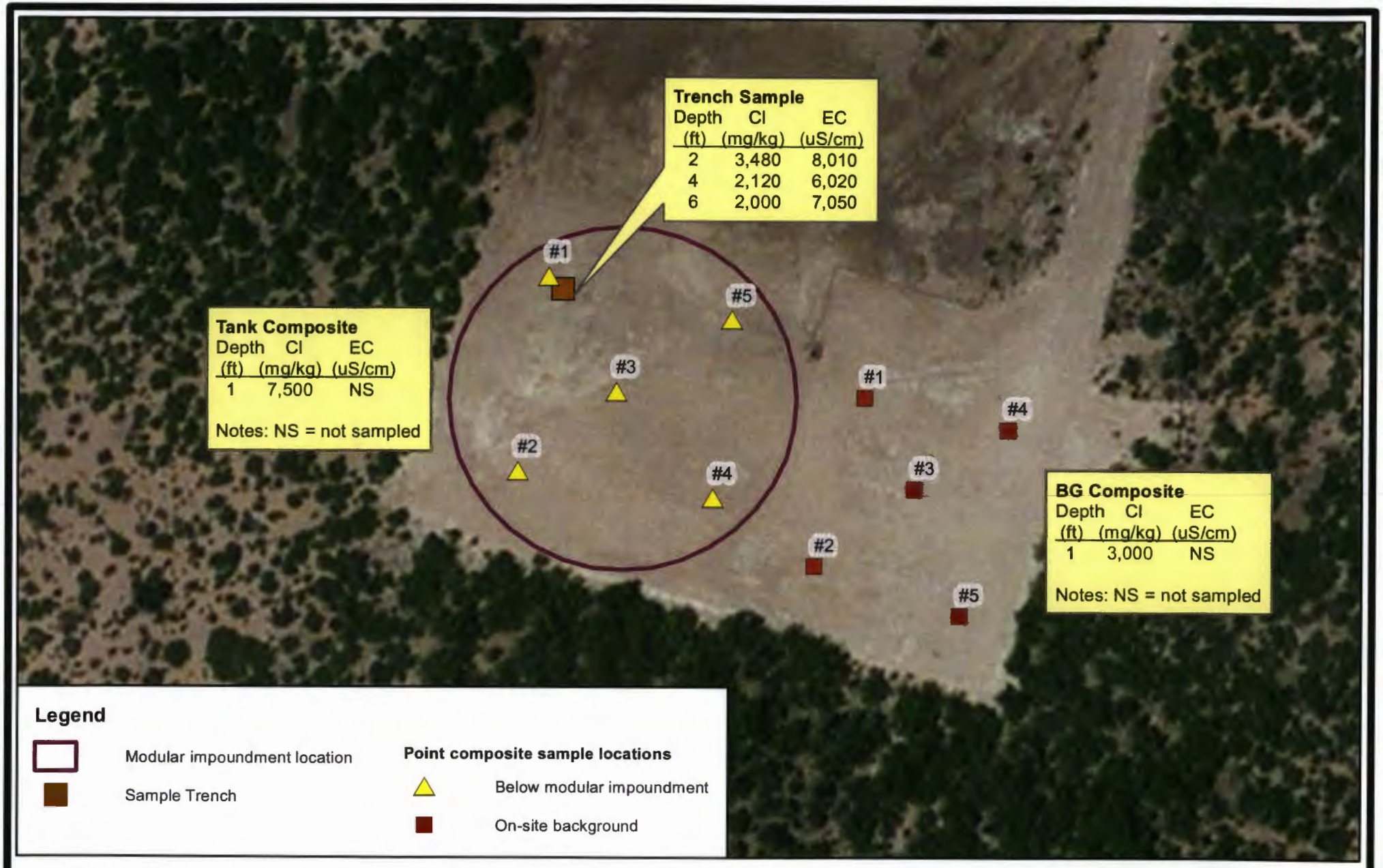
- the moist soil at a depth of 6 feet, which exhibits 2,000 mg/kg chloride, is likely impacted by shallow groundwater wicking up from the underlying brine groundwater zone,
- the moist soil near the surface (Trench Sample) is likely from recent precipitation events and past releases at the site, and
- soil at depths from 1 to 5 feet below surface have chloride and EC concentrations that will support vegetation. Re-vegetating the impacted area is included in the remediation plan and also satisfies BLM's request for interim reclamation.

The remediation plan is presented below.

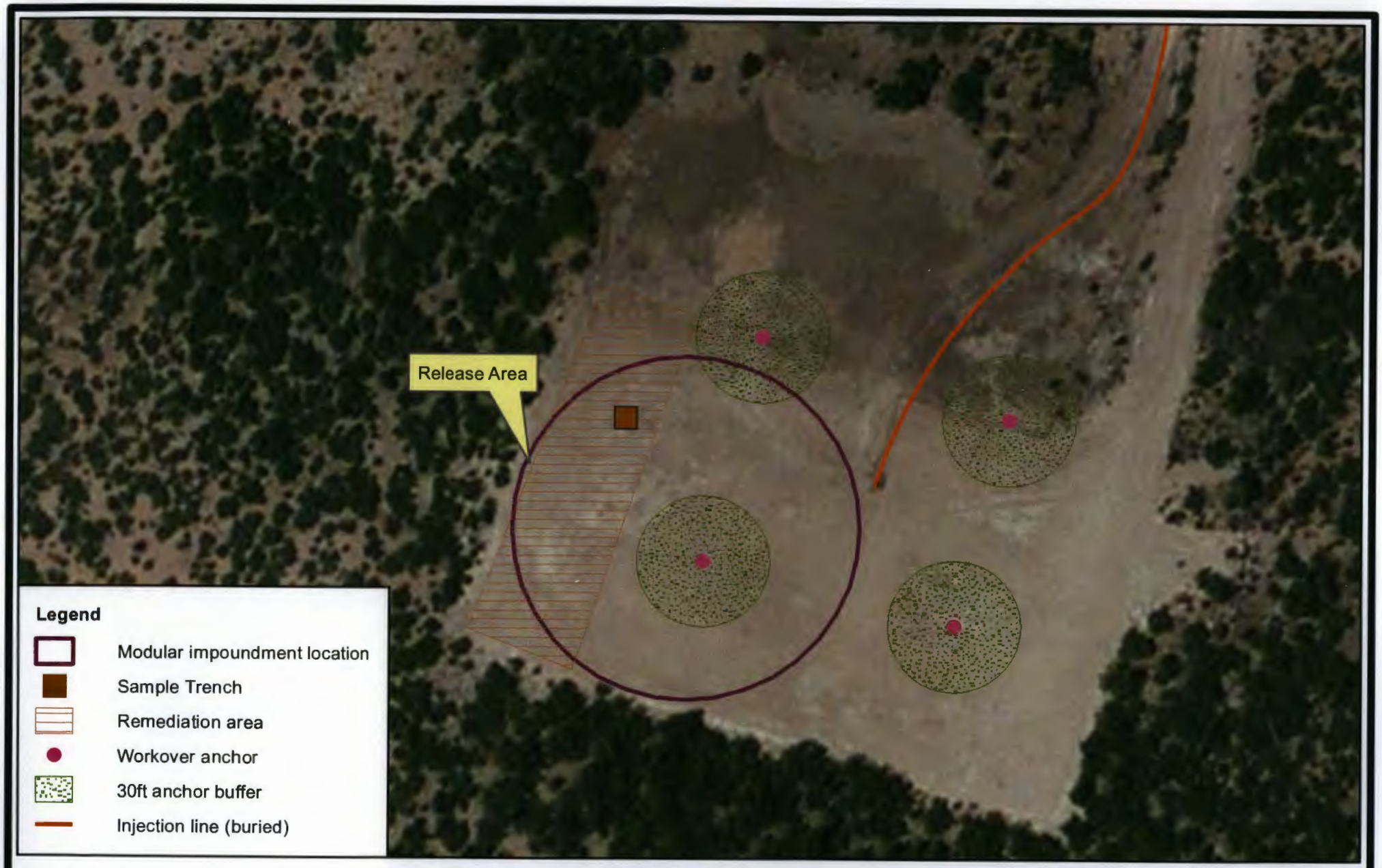
Remediation Plan

XTO Energy proposes to excavate and dispose of the western third (30%) of the caliche pad that was in contact with the modular impoundment. The 30% area includes the release area and out beyond to the edge of the caliche pad. Plate 2 identifies the area proposed for remediation. The excavated material will be transported to R360 or equivalent for proper disposal.

The remediated area will be contoured and seeded using BLM Seed Mixture Type 4 with Giant Sacaton seed added to the mixture. The excavated area is also subject to BLM's interim reclamation plan.



R.T. Hicks Consultants, Ltd 901 Rio Grande Blvd NW Suite F-142 Albuquerque, NM 87104 Ph: 505.266.5004	Chloride Concentrations in Soil	Plate 1
	XTO Energy: Nash Unit 29 API: 30-015-29434	March 2013



R.T. Hicks Consultants, Ltd 901 Rio Grande Blvd NW Suite F-142 Albuquerque, NM 87104 Ph: 505.266.5004	Reclamation Area	Plate 2
	XTO Energy: Nash Unit 29 API: 30-015-29434	March 2013

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

November 29, 2012

Andrew Parker
R.T. Hicks Consultants, LTD
901 Rio Grande Blvd. NW
Suite F-142
Albuquerque, NM 87104
TEL: (505) 266-5004
FAX (505) 266-0745

RE: XTO Energy Nash Unit 29 OrderNo.: 1211653

Dear Andrew Parker:

Hall Environmental Analysis Laboratory received 2 sample(s) on 11/14/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD
Client Sample ID: Tank Composite
Project: XTO Energy Nash Unit 29
Collection Date: 11/13/2012
Lab ID: 1211653-001
Matrix: SOIL
Received Date: 11/14/2012 10:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/20/2012 6:22:22 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/20/2012 6:22:22 AM
Surr: DNOP	102	77.6-140		%REC	1	11/20/2012 6:22:22 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/16/2012 2:32:25 PM
Surr: BFB	108	84-116		%REC	1	11/16/2012 2:32:25 PM
EPA METHOD 300.0: ANIONS						Analyst: **JRR**
Chloride	7500	300		mg/Kg	200	11/20/2012 6:54:44 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Toluene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Ethylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Methyl tert-butyl ether (MTBE)	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,2,4-Trimethylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,3,5-Trimethylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,2-Dichloroethane (EDC)	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,2-Dibromoethane (EDB)	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Naphthalene	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
1-Methylnaphthalene	ND	0.19		mg/Kg	1	11/21/2012 7:19:43 PM
2-Methylnaphthalene	ND	0.19		mg/Kg	1	11/21/2012 7:19:43 PM
Acetone	ND	0.73		mg/Kg	1	11/21/2012 7:19:43 PM
Bromobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Bromodichloromethane	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Bromoform	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Bromomethane	ND	0.15		mg/Kg	1	11/21/2012 7:19:43 PM
2-Butanone	ND	0.49		mg/Kg	1	11/21/2012 7:19:43 PM
Carbon disulfide	ND	0.49		mg/Kg	1	11/21/2012 7:19:43 PM
Carbon tetrachloride	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
Chlorobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Chloroethane	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
Chloroform	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Chloromethane	ND	0.15		mg/Kg	1	11/21/2012 7:19:43 PM
2-Chlorotoluene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
4-Chlorotoluene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
cis-1,2-DCE	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
cis-1,3-Dichloropropene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,2-Dibromo-3-chloropropane	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
Dibromochloromethane	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Dibromomethane	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
1,2-Dichlorobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD
Client Sample ID: Tank Composite
Project: XTO Energy Nash Unit 29
Collection Date: 11/13/2012
Lab ID: 1211653-001
Matrix: SOIL
Received Date: 11/14/2012 10:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
1,3-Dichlorobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,4-Dichlorobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Dichlorodifluoromethane	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,1-Dichloroethane	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
1,1-Dichloroethene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,2-Dichloropropane	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,3-Dichloropropane	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
2,2-Dichloropropane	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
1,1-Dichloropropene	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
Hexachlorobutadiene	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
2-Hexanone	ND	0.49		mg/Kg	1	11/21/2012 7:19:43 PM
Isopropylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
4-Isopropyltoluene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
4-Methyl-2-pentanone	ND	0.49		mg/Kg	1	11/21/2012 7:19:43 PM
Methylene chloride	ND	0.15		mg/Kg	1	11/21/2012 7:19:43 PM
n-Butylbenzene	ND	0.15		mg/Kg	1	11/21/2012 7:19:43 PM
n-Propylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
sec-Butylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Styrene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
tert-Butylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,1,1,2-Tetrachloroethane	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,1,2,2-Tetrachloroethane	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Tetrachloroethene (PCE)	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
trans-1,2-DCE	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
trans-1,3-Dichloropropene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,2,3-Trichlorobenzene	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
1,2,4-Trichlorobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,1,1-Trichloroethane	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,1,2-Trichloroethane	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Trichloroethene (TCE)	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Trichlorofluoromethane	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,2,3-Trichloropropane	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
Vinyl chloride	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Xylenes, Total	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
Surr: 1,2-Dichloroethane-d4	93.2	70-130		%REC	1	11/21/2012 7:19:43 PM
Surr: 4-Bromofluorobenzene	92.4	70-130		%REC	1	11/21/2012 7:19:43 PM
Surr: Dibromofluoromethane	90.7	70-130		%REC	1	11/21/2012 7:19:43 PM
Surr: Toluene-d8	101	70-130		%REC	1	11/21/2012 7:19:43 PM
EPA METHOD 418.1: TPH						Analyst: **LRW**
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	11/21/2012

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD
Client Sample ID: BG Composite
Project: XTO Energy Nash Unit 29
Collection Date: 11/13/2012
Lab ID: 1211653-002 **Matrix:** SOIL **Received Date:** 11/14/2012 10:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/20/2012 8:28:08 AM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	11/20/2012 8:28:08 AM
Surr: DNOP	98.6	77.6-140		%REC	1	11/20/2012 8:28:08 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/16/2012 3:01:11 PM
Surr: BFB	101	84-116		%REC	1	11/16/2012 3:01:11 PM
EPA METHOD 300.0: ANIONS						Analyst: **JRR**
Chloride	3000	150		mg/Kg	100	11/20/2012 7:07:09 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Toluene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Ethylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Methyl tert-butyl ether (MTBE)	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,2,4-Trimethylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,3,5-Trimethylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,2-Dichloroethane (EDC)	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,2-Dibromoethane (EDB)	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Naphthalene	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	11/21/2012 7:48:47 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	11/21/2012 7:48:47 PM
Acetone	ND	0.74		mg/Kg	1	11/21/2012 7:48:47 PM
Bromobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Bromodichloromethane	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Bromoform	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Bromomethane	ND	0.15		mg/Kg	1	11/21/2012 7:48:47 PM
2-Butanone	ND	0.49		mg/Kg	1	11/21/2012 7:48:47 PM
Carbon disulfide	ND	0.49		mg/Kg	1	11/21/2012 7:48:47 PM
Carbon tetrachloride	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
Chlorobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Chloroethane	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
Chloroform	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Chloromethane	ND	0.15		mg/Kg	1	11/21/2012 7:48:47 PM
2-Chlorotoluene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
4-Chlorotoluene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
cis-1,2-DCE	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
cis-1,3-Dichloropropene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,2-Dibromo-3-chloropropane	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
Dibromochloromethane	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Dibromomethane	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
1,2-Dichlorobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD
Client Sample ID: BG Composite
Project: XTO Energy Nash Unit 29
Collection Date: 11/13/2012
Lab ID: 1211653-002 **Matrix:** SOIL **Received Date:** 11/14/2012 10:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
1,3-Dichlorobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,4-Dichlorobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Dichlorodifluoromethane	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,1-Dichloroethane	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
1,1-Dichloroethene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,2-Dichloropropane	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,3-Dichloropropane	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
2,2-Dichloropropane	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
1,1-Dichloropropene	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
Hexachlorobutadiene	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
2-Hexanone	ND	0.49		mg/Kg	1	11/21/2012 7:48:47 PM
Isopropylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
4-Isopropyltoluene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
4-Methyl-2-pentanone	ND	0.49		mg/Kg	1	11/21/2012 7:48:47 PM
Methylene chloride	ND	0.15		mg/Kg	1	11/21/2012 7:48:47 PM
n-Butylbenzene	ND	0.15		mg/Kg	1	11/21/2012 7:48:47 PM
n-Propylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
sec-Butylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Styrene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
tert-Butylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,1,1,2-Tetrachloroethane	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,1,2,2-Tetrachloroethane	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Tetrachloroethene (PCE)	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
trans-1,2-DCE	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
trans-1,3-Dichloropropene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,2,3-Trichlorobenzene	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
1,2,4-Trichlorobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,1,1-Trichloroethane	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,1,2-Trichloroethane	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Trichloroethene (TCE)	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Trichlorofluoromethane	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,2,3-Trichloropropane	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
Vinyl chloride	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Xylenes, Total	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
Surr: 1,2-Dichloroethane-d4	94.2	70-130		%REC	1	11/21/2012 7:48:47 PM
Surr: 4-Bromofluorobenzene	87.7	70-130		%REC	1	11/21/2012 7:48:47 PM
Surr: Dibromofluoromethane	91.6	70-130		%REC	1	11/21/2012 7:48:47 PM
Surr: Toluene-d8	105	70-130		%REC	1	11/21/2012 7:48:47 PM
EPA METHOD 418.1: TPH						Analyst: **LRW**
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	11/21/2012

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211653**

29-Nov-12

Client: R.T. Hicks Consultants, LTD

Project: XTO Energy Nash Unit 29

Sample ID **MB-4894**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **4894**	RunNo: **7001**
Prep Date: **11/19/2012**	Analysis Date: **11/19/2012**	SeqNo: **202928** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID **LCS-4894**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **4894**	RunNo: **7001**
Prep Date: **11/19/2012**	Analysis Date: **11/19/2012**	SeqNo: **202929** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	90.0	90	110			

Qualifiers:

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- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211653**

29-Nov-12

Client: R.T. Hicks Consultants, LTD

Project: XTO Energy Nash Unit 29

Sample ID **MB-4901**	SampType: **MBLK**	TestCode: **EPA Method 418.1: TPH**
Client ID: **PBS**	Batch ID: **4901**	RunNo: **7021**
Prep Date: **11/19/2012**	Analysis Date: **11/21/2012**	SeqNo: **203589** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID **LCS-4901**	SampType: **LCS**	TestCode: **EPA Method 418.1: TPH**
Client ID: **LCSS**	Batch ID: **4901**	RunNo: **7021**
Prep Date: **11/19/2012**	Analysis Date: **11/21/2012**	SeqNo: **203590** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	100	20	100.0	0	104	80	120			

Sample ID **LCSD-4901**	SampType: **LCSD**	TestCode: **EPA Method 418.1: TPH**
Client ID: **LCSS02**	Batch ID: **4901**	RunNo: **7021**
Prep Date: **11/19/2012**	Analysis Date: **11/21/2012**	SeqNo: **203591** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	110	20	100.0	0	106	80	120	1.28	20	

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211653**

29-Nov-12

Client: R.T. Hicks Consultants, LTD

Project: XTO Energy Nash Unit 29

Sample ID **MB-4900**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **4900**	RunNo: **6989**
Prep Date: **11/19/2012**	Analysis Date: **11/20/2012**	SeqNo: **202423** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.9		10.00		98.8	77.6	140			

Sample ID **LCS-4900**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **4900**	RunNo: **6989**
Prep Date: **11/19/2012**	Analysis Date: **11/20/2012**	SeqNo: **202424** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	102	47.4	122			
Surr: DNOP	4.0		5.000		80.2	77.6	140			

Sample ID **1211653-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **Tank Composite**	Batch ID: **4900**	RunNo: **6989**
Prep Date: **11/19/2012**	Analysis Date: **11/20/2012**	SeqNo: **202426** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	10	50.97	0	106	12.6	148			
Surr: DNOP	4.8		5.097		94.6	77.6	140			

Sample ID **1211653-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **Tank Composite**	Batch ID: **4900**	RunNo: **6989**
Prep Date: **11/19/2012**	Analysis Date: **11/20/2012**	SeqNo: **202569** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	10	51.18	0	104	12.6	148	0.773	22.5	
Surr: DNOP	5.1		5.118		98.8	77.6	140	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211653**

29-Nov-12

Client: R.T. Hicks Consultants, LTD

Project: XTO Energy Nash Unit 29

Sample ID **MB-4851**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **4851**	RunNo: **6951**
Prep Date: **11/15/2012**	Analysis Date: **11/16/2012**	SeqNo: **202014** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	990		1000		99.3	84	116			

Sample ID **LCS-4851**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **4851**	RunNo: **6951**
Prep Date: **11/15/2012**	Analysis Date: **11/16/2012**	SeqNo: **202015** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.3	74	117			
Surr: BFB	1000		1000		104	84	116			

Sample ID **1211653-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **Tank Composite**	Batch ID: **4851**	RunNo: **6951**
Prep Date: **11/15/2012**	Analysis Date: **11/16/2012**	SeqNo: **202020** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	4.9	24.63	0	118	70	130			
Surr: BFB	1100		985.2		109	84	116			

Sample ID **1211653-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **Tank Composite**	Batch ID: **4851**	RunNo: **6951**
Prep Date: **11/15/2012**	Analysis Date: **11/16/2012**	SeqNo: **202021** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	24.75	0	118	70	130	0.0876	22.1	
Surr: BFB	1100		990.1		109	84	116	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211653**

29-Nov-12

Client: R.T. Hicks Consultants, LTD

Project: XTO Energy Nash Unit 29

Sample ID **mb-4851**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS**	Batch ID: **4851**	RunNo: **7060**
Prep Date: **11/15/2012**	Analysis Date: **11/21/2012**	SeqNo: **204634** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Methyl tert-butyl ether (MTBE)	ND	0.050								
1,2,4-Trimethylbenzene	ND	0.050								
1,3,5-Trimethylbenzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
1,2-Dibromoethane (EDB)	ND	0.050								
Naphthalene	ND	0.10								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
Acetone	ND	0.75								
Bromobenzene	ND	0.050								
Bromodichloromethane	ND	0.050								
Bromoform	ND	0.050								
Bromomethane	ND	0.15								
2-Butanone	ND	0.50								
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.10								
Chlorobenzene	ND	0.050								
Chloroethane	ND	0.10								
Chloroform	ND	0.050								
Chloromethane	ND	0.15								
2-Chlorotoluene	ND	0.050								
4-Chlorotoluene	ND	0.050								
cis-1,2-DCE	ND	0.050								
cis-1,3-Dichloropropene	ND	0.050								
1,2-Dibromo-3-chloropropane	ND	0.10								
Dibromochloromethane	ND	0.050								
Dibromomethane	ND	0.10								
1,2-Dichlorobenzene	ND	0.050								
1,3-Dichlorobenzene	ND	0.050								
1,4-Dichlorobenzene	ND	0.050								
Dichlorodifluoromethane	ND	0.050								
1,1-Dichloroethane	ND	0.10								
1,1-Dichloroethene	ND	0.050								
1,2-Dichloropropane	ND	0.050								
1,3-Dichloropropane	ND	0.050								
2,2-Dichloropropane	ND	0.10								
1,1-Dichloropropene	ND	0.10								
Hexachlorobutadiene	ND	0.10								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211653**

29-Nov-12

Client: R.T. Hicks Consultants, LTD

Project: XTO Energy Nash Unit 29

Sample ID **mb-4851**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS**	Batch ID: **4851**	RunNo: **7060**
Prep Date: **11/15/2012**	Analysis Date: **11/21/2012**	SeqNo: **204634** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	0.50								
Isopropylbenzene	ND	0.050								
4-Isopropyltoluene	ND	0.050								
4-Methyl-2-pentanone	ND	0.50								
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.15								
n-Propylbenzene	ND	0.050								
sec-Butylbenzene	ND	0.050								
Styrene	ND	0.050								
tert-Butylbenzene	ND	0.050								
1,1,1,2-Tetrachloroethane	ND	0.050								
1,1,2,2-Tetrachloroethane	ND	0.050								
Tetrachloroethene (PCE)	ND	0.050								
trans-1,2-DCE	ND	0.050								
trans-1,3-Dichloropropene	ND	0.050								
1,2,3-Trichlorobenzene	ND	0.10								
1,2,4-Trichlorobenzene	ND	0.050								
1,1,1-Trichloroethane	ND	0.050								
1,1,2-Trichloroethane	ND	0.050								
Trichloroethene (TCE)	ND	0.050								
Trichlorofluoromethane	ND	0.050								
1,2,3-Trichloropropane	ND	0.10								
Vinyl chloride	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.2	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.5000		89.4	70	130			
Surr: Dibromofluoromethane	0.46		0.5000		92.3	70	130			
Surr: Toluene-d8	0.52		0.5000		103	70	130			

Sample ID **lcs-4851**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS**	Batch ID: **4851**	RunNo: **7060**
Prep Date: **11/15/2012**	Analysis Date: **11/21/2012**	SeqNo: **204635** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	101	70	130			
Toluene	1.1	0.050	1.000	0	108	80	120			
Chlorobenzene	1.0	0.050	1.000	0	101	70	130			
1,1-Dichloroethene	1.1	0.050	1.000	0	110	74	124			
Trichloroethene (TCE)	0.88	0.050	1.000	0	87.9	70	130			
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		96.4	70	130			
Surr: 4-Bromofluorobenzene	0.43		0.5000		86.1	70	130			

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211653**

29-Nov-12

Client: R.T. Hicks Consultants, LTD

Project: XTO Energy Nash Unit 29

Sample ID **lcs-4851** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **LCSS** Batch ID: **4851** RunNo: **7060**

Prep Date: **11/15/2012** Analysis Date: **11/21/2012** SeqNo: **204635** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.47		0.5000		93.7	70	130			
Surr: Toluene-d8	0.51		0.5000		103	70	130			

Sample ID **1211653-002ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **BG Composite** Batch ID: **4851** RunNo: **7060**

Prep Date: **11/15/2012** Analysis Date: **11/21/2012** SeqNo: **204638** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.049	0.9804	0	92.9	80.9	118			
Toluene	0.95	0.049	0.9804	0	97.4	69.5	119			
Chlorobenzene	0.87	0.049	0.9804	0	88.9	75.7	115			
1,1-Dichloroethene	0.99	0.049	0.9804	0.01122	100	68.6	126			
Trichloroethene (TCE)	0.81	0.049	0.9804	0	82.4	68.7	115			
Surr: 1,2-Dichloroethane-d4	0.47		0.4902		96.4	70	130			
Surr: 4-Bromofluorobenzene	0.42		0.4902		85.6	70	130			
Surr: Dibromofluoromethane	0.47		0.4902		95.4	70	130			
Surr: Toluene-d8	0.50		0.4902		102	70	130			

Sample ID **1211653-002amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **BG Composite** Batch ID: **4851** RunNo: **7060**

Prep Date: **11/15/2012** Analysis Date: **11/21/2012** SeqNo: **204639** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.049	0.9891	0	93.3	80.9	118	1.30	20	
Toluene	0.98	0.049	0.9891	0	98.8	69.5	119	2.28	20	
Chlorobenzene	0.88	0.049	0.9891	0	89.3	75.7	115	1.32	20	
1,1-Dichloroethene	1.0	0.049	0.9891	0.01122	99.6	68.6	126	0.357	24.8	
Trichloroethene (TCE)	0.82	0.049	0.9891	0	83.3	68.7	115	1.99	20	
Surr: 1,2-Dichloroethane-d4	0.47		0.4946		95.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.41		0.4946		83.4	70	130	0	0	
Surr: Dibromofluoromethane	0.48		0.4946		96.6	70	130	0	0	
Surr: Toluene-d8	0.51		0.4946		104	70	130	0	0	

Sample ID **mb-4881** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **PBS** Batch ID: **4881** RunNo: **7060**

Prep Date: **11/19/2012** Analysis Date: **11/21/2012** SeqNo: **204640** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.5	70	130			
Surr: 4-Bromofluorobenzene	0.44		0.5000		88.8	70	130			
Surr: Dibromofluoromethane	0.46		0.5000		92.1	70	130			
Surr: Toluene-d8	0.51		0.5000		103	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211653**

29-Nov-12

Client: R.T. Hicks Consultants, LTD

Project: XTO Energy Nash Unit 29

Sample ID **lcs-4881**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS**	Batch ID: **4881**	RunNo: **7060**
Prep Date: **11/19/2012**	Analysis Date: **11/21/2012**	SeqNo: **204641** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		94.6	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.5000		89.1	70	130			
Surr: Dibromofluoromethane	0.46		0.5000		92.8	70	130			
Surr: Toluene-d8	0.53		0.5000		106	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: RT HICKS Work Order Number: 1211653

Received by/date: MG 11/14/12

Logged By: **Anne Thorne** 11/14/2012 10:50:00 AM Anne Thorne

Completed By: **Anne Thorne** 11/19/2012 Anne Thorne

Reviewed By: AT 11/19/12

Chain of Custody

1. Were seals intact?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Client		

Log In

4. Coolers are present? (see 19. for cooler specific information)	Yes ☐	No ☐	NA ☑
5. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
7. Sample(s) in proper container(s)?	Yes ☑	No ☐	
8. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
9. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
10. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
11. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
12. Were any sample containers received broken?	Yes ☐	No ☑	
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
14. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
15. Is it clear what analyses were requested?	Yes ☑	No ☐	
16. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Not Present			

Chain-of-Custody Record

Client: R.T. Hicks Consultants

Mailing Address: on file

Phone #: 505.266.5004

email or Fax#: andrew@rthicksconsult.com

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

Accreditation
☐ NELAP ☐ Other ______

☐ EDD (Type) ______

Turn-Around Time:
☒ Standard ☐ Rush ______

Project Name:
XTO Energy Nash Unit #29

Project #:

Project Manager:
Andrew Parker

Sampler: Andrew Parker

On Ice:

Sample Temperature:

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1211153	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4) 300.1	8081 Pesticides / 8082 PCB's	8260B (~~VOA~~)	8270 (Semi-VOA)					Air Bubbles (Y or N)
11.13.12	1254	soil	tank # 1 @ 8"	4oz glass	ice				↓	↓				↓		↓						
"	1256	"	tank # 2 @ 8"	"	"																	
"	1259	"	tank # 3 @ 8"	"	"																	
"	1303	"	tank # 4 @ 8"	"	"																	
"	1305	"	tank # 5 @ 8"	"	"																	
"	1311	"	BG # 1 @ 8"	"	"																	
"	1314	"	BG # 2 @ 8"	"	"																	
"	1317	"	BG # 3 @ 8"	"	"																	
"	1325	"	BG # 4 @ 8"	"	"																	
"	1327	"	BG # 5 @ 8"	"	"																	
"			Tank composite *			-001			X	X				X		X						
			BG composite **			-002			X	X				X		X						

Date:	Time:	Relinquished by:	Received by:	Date	Time
11/14	10.50	Andrew Parker	[signature]	11/14/12	10:50

Remarks:
* Do not analyze point samples tank #1 - #5
** Do not analize point samples BG #1 → 5
Lab composite Tank #1-5; Lab composite BG #1-5

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

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

February 18, 2013

ANDREW PARKER

R T HICKS CONSULTANTS

901 RIO GRANDE BLVD SUITE F-142

ALBUQUERQUE, NM 87104

RE: XTO NASH UNIT 29

Enclosed are the results of analyses for samples received by the laboratory on 02/13/13 7:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

R T HICKS CONSULTANTS
ANDREW PARKER
901 RIO GRANDE BLVD SUITE F-142
ALBUQUERQUE NM, 87104
Fax To: NONE

Received:	02/13/2013	Sampling Date:	02/11/2013
Reported:	02/18/2013	Sampling Type:	Soil
Project Name:	XTO NASH UNIT 29	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	UNIT 'J', SEC. 13, T23S, R29E		

Sample ID: SAMPLE TRENCH @ 2' BGS (H300404-01)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3480**	16.0	02/18/2013	ND	448	112	400	0.00	

Conductivity 120.1 uS/cm **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Conductivity*	**8010**	1.00	02/15/2013		476	95.2	500	0.752	

Sample ID: SAMPLE TRENCH @ 4' BGS (H300404-02)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2120**	16.0	02/18/2013	ND	416	104	400	3.77	

Conductivity 120.1 uS/cm **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Conductivity*	**6020**	1.00	02/15/2013		476	95.2	500	0.752	

Sample ID: SAMPLE TRENCH @ 6' BGS (H300404-03)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2000**	16.0	02/18/2013	ND	416	104	400	3.77	

Conductivity 120.1 uS/cm **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Conductivity*	**7050**	1.00	02/15/2013		476	95.2	500	0.752	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: R.T. Hicks Consultants
Project Manager: Andrew Parker
Address:
City: State: Zip:
Phone #: Fax #:
Project #: Project Owner: Murchison
Project Name: XTO Nash Unit 29
Project Location: Unit 'J', Sec. 13, T23S, R29E
Sampler Name: Kristin Pope

BILL TO
P.O. #:
Company: R.T. Hicks
Attn:
Address:
City:
State: Zip:
Phone #:
Fax #:

ANALYSIS REQUEST

FOR LAB USE ONLY				MATRIX					PRESERV.		SAMPLING			
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME	Cl-	EC
H30640																
1	Sample trench @ 2' BGS	X	1			X							2.11.13	0840	X	X
2	Sample trench @ 4' BGS	X	1			X							"	0842	X	X
3	Sample trench @ 6' BGS	X	1			X							"	0850	X	X

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by client for the analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

Relinquished By:	Date:	Received By:	Phone Result: ☐ Yes ☐ No	Add'l Phone #:
Kristin Pope	2.13.13		Fax Result: ☐ Yes ☐ No	Add'l Fax #:
Relinquished By:	Time: 0900	Received By:	REMARKS:	
	Date:			
	Time:			

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

Sample Condition		CHECKED BY: (Initials)
Cool	Intact	
☑ Yes ☐ No	☑ Yes ☐ No	

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Fax: 505.266-0745

December 5, 2013

Mr. Mike Bratcher
NMOCD District 2
811 South First Street
Artesia, New Mexico 88210

RE: Nash Draw #29 modular impoundment final spill report. API No: 30-015-29434
2RP-1674

Mr. Bratcher:

R.T. Hicks Consultants is pleased to submit the enclosed Form C-141 "Release Notification and Correction Action" final report on the behalf of XTO Energy.

On September 23 - 27th, 2013; we performed reclamation activities in accordance with our remediation plan outline in the March 15 report. The remediation plan states:

> *XTO Energy proposes to excavate and dispose of the western third (30%) of the caliche pad that was in contact with the modular impoundment. The 30% area includes the release area and out beyond to the edge of the caliche pad. Plate 2 identifies the area proposed for remediation. The excavated material will be transported to R360 or equivalent for proper disposal.*
>
> *The remediated area will be contoured and seeded using BLM Seed Mixture Type 4 with Giant Sacaton seed added to the mixture. The excavated area is also subject to BLM's interim reclamation plan.*

Appendix A contains the C-141 Initial Report, dated March 15, 2013; which includes our remediation plan. Appendix B is a discussion on sampling and analysis during remedial activites. Appendix C contains the laboratory Certificate of Analysis. Photo documentation of remedial activities is located in Appendix D.

If you have any questions please contact me at 970-570-9535.

Sincerely,
R.T. Hicks Consultants
Durango Field Office

Andrew Parker

Andrew Parker

Cc: David Luna, XTO Energy, via email

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
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

RECEIVED
DEC 09 2013
NMOCD ARTESIA

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

nMB1404130906

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company XTO Energy, INC 5380	Contact David Luna
Address 200 N. Loraine, Ste 800 Midland TX, 79701	Telephone No. 432-620-6742
Facility Name Nash Draw #29	Facility Type Treated produced water modular impoundment

Surface Owner BLM	Mineral Owner	API No. 30-015-29434

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	13	23S	29E	1980	South	2310	East	Eddy

12/05/2013

Latitude N. 32.30322 Longitude W. 103.93719

NATURE OF RELEASE

Type of Release Treated and non-treated produced water	Volume of Release	Volume Recovered
Source of Release Modular impoundment - western edge	Date and Hour of Occurrence	Date and Hour of Discovery 08/27/2012
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom? NA	
By Whom? NA	Date and Hour NA	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. NA	

If a Watercourse was Impacted, Describe Fully.*

NA

Describe Cause of Problem and Remedial Action Taken.*

On August 27th, 2012 the modular impoundment liner detached from the top of the tank along the western edge releasing approximately 3 barrels of treated produced water. Mr. Randy Green of XTO Energy mobilized water haul trucks to the site and lowered the water level to prevent further leakage and reattached the liner to the top of the tank. The water was transferred to Nash Draw 49 Hand Nash Draw Unit# 57 H for use in well stimulation. Soil sampling was conducted per C-144 closure requirements.

Describe Area Affected and Cleanup Action Taken.*

The release affected the southwest corner of the production pad, adjacent to the modular impoundment. The area of impact was approximately 15 X15 square feet. No cleanup action was taken due to limited access caused by the location of the modular impoundment along the edge of the production pad; beyond the modular impoundment heavy mosquito vegetation exists. On October 23 - 27, 2013; remedial activities were performed according to spill report submitted on March 18, 2013 (Release ID: 2RP-1674). Appendix B discusses remedial activities.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

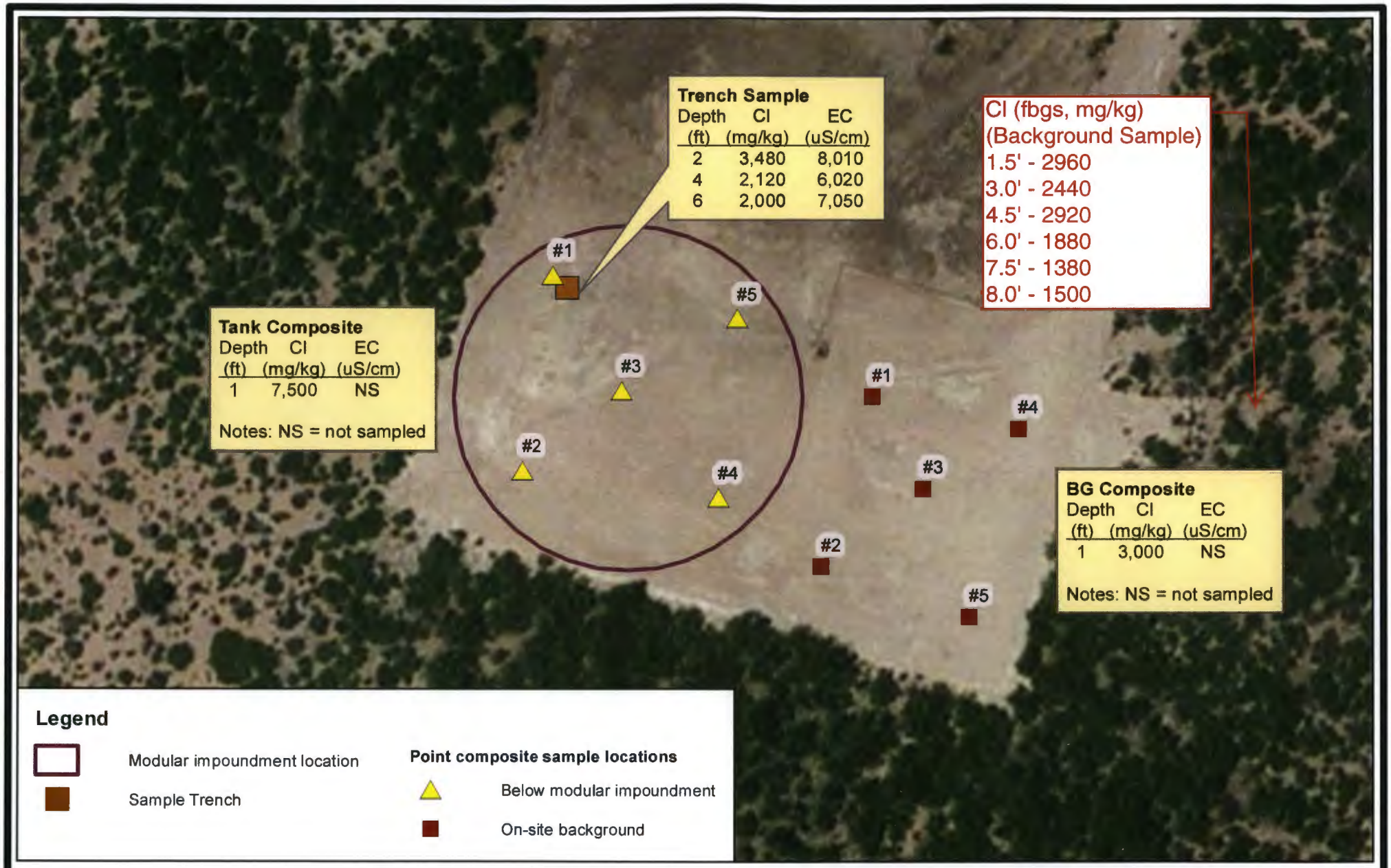
Signature: David Luna	OIL CONSERVATION DIVISION Signed By Mike Bratcher
Printed Name: David Luna	Approved by Environmental Specialist:
Title: Operations Engineer	Approval Date: JAN 14 2014 Expiration Date: N/A
E-mail Address: David_Luna@xtoenergy.com	Conditions of Approval: N/A - Final ☐ Attached
Date: 12/05/2013 Phone: 432-620-6742	

* Attach Additional Sheets If Necessary

2RP-1674

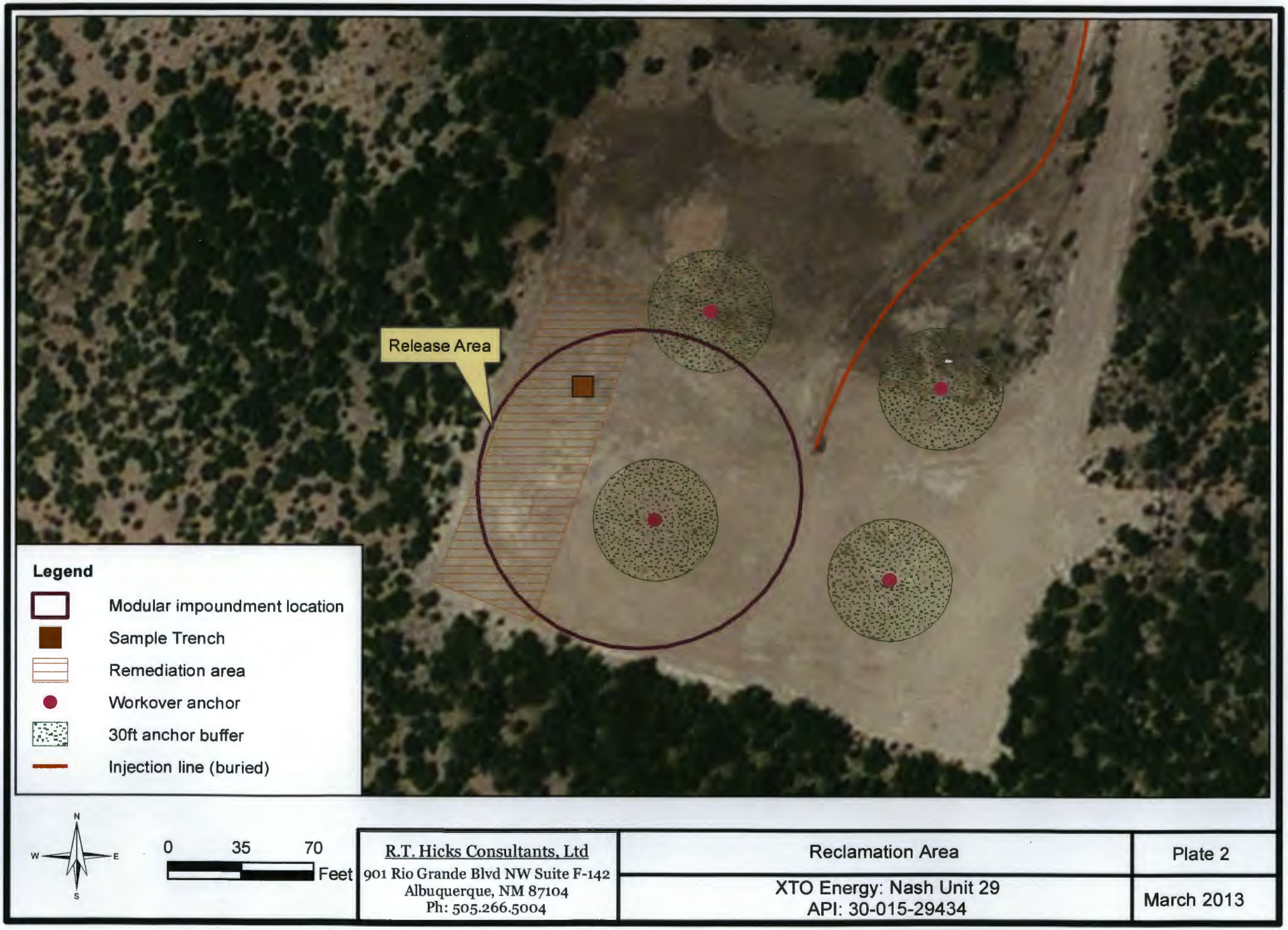
Plates

R.T. Hicks Consultants, Ltd.
901 Rio Grande Blvd. NW, Suite F-142
Albuquerque, NM 87104



R.T. Hicks Consultants, Ltd
901 Rio Grande Blvd NW Suite F-142
Albuquerque, NM 87104
Ph: 505.266.5004

Chloride Concentrations in Soil	Plate 1
XTO Energy: Nash Unit 29 API: 30-015-29434	March 2013



R.T. Hicks Consultants, Ltd 901 Rio Grande Blvd NW Suite F-142 Albuquerque, NM 87104 Ph: 505.266.5004	Reclamation Area	Plate 2
	XTO Energy: Nash Unit 29 API: 30-015-29434	March 2013

Appendix A

C-141 Initial Report

R.T. Hicks Consultants, Ltd.
901 Rio Grande Blvd. NW, Suite F-142
Albuquerque, NM 87104

R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Fax: 505.266-0745

March 15, 2013

Mr. Mike Bratcher
NMOCD District 2
811 South First Street
Artesia, New Mexico 88210

Mr. Brad Jones
NMOCD
1220 S. St. Francis Drive
Santa Fe, NM

RE: Nash Draw Unit #29 modular impoundment spill report. API No: 30-015-29434

Dear Sirs:

R.T. Hicks Consultants is pleased to submit the enclosed Form C-141 Release Notification and Correction Action on the behalf of XTO Energy.

The release from the modular impoundment was brought to our attention during the submittal of the C-144 Closure Report submitted to Mr. Bratcher, via email, on December 17, 2012.

We will revise the C-144 closure report to include results of the remediation plan that is the subject of this spill report. Included in the revision, per request of Mr. Jones, will be the inclusion of the entire C-144 permit application and correction to applicable dates and signatures.

We will submit the report to Mr. Jones with a copy to Mr. Bratcher. Both submittals will be delivered via certified mail/return receipt.

If you have any questions please contact me at 970-570-9535.

Sincerely,
R.T. Hicks Consultants
Durango Field Office

Andrew Parker

Cc: David Luna, XTO Energy, via email
Jennifer Van Curen, BLM - Carlsbad Field Office, via certified mail/return receipt

RECEIVED
MAR 25 2013
NMOCD ARTESIA

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
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

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

nMLB1401430906

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company XTO Energy, Inc 5380	Contact David Luna
Address 200 N. Loraine, Suite 800 Midland, TX 79701	Telephone No. 432-620-6742
Facility Name Nash Unit #29	Facility Type Treated produced water modular impoundment

Surface Owner BLM	Mineral Owner	API No. 30-015-29434

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	13	23S	29E	1980	SOUTH	2310	EAST	EDDY

Latitude N 32.30322 Longitude W 103.93719

NATURE OF RELEASE

Type of Release Treated and non-treated produced water	Volume of Release < 5 bbls	Volume Recovered None
Source of Release Modular Impoundment - western edge	Date and Hour of Occurrence 8/27/12	Date and Hour of Discovery 8/27/12
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom? NA	
By Whom? NA	Date and Hour NA	
Was a Watercourse Reached? X ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. NA	

If a Watercourse was Impacted, Describe Fully.*

NA

Describe Cause of Problem and Remedial Action Taken.*

On August 27th, 2012 the modular impoundment liner detached from the top of the tank along the western edge releasing approximately 3 barrels of treated produced water. Mr. Randy Green of XTO Energy mobilized water haul trucks to the site and lowered the water level to prevent further leakage and reattached the liner to the top of the tank. The water was transferred to Nash Draw 49 H and Nash Draw Unit # 57 H. Soil sampling was conducted per C-144 closure requirements. The attached document presents the sampling results and proposes a remediation plan.

Describe Area Affected and Cleanup Action Taken.*

The release affected the southwest corner of the production pad, adjacent to the modular impoundment. The area of impact was approximately 15 X15 square feet. No cleanup action was taken due to limited access caused by the location of the modular impoundment along the edge of the production pad; beyond the modular impoundment heavy mesquite vegetation exists.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: David Luna

Printed Name: David Luna

Title: Operations Engineer

E-mail Address: David_Luna@xtoenergy.com

Date: 3/15/13 Phone: 432-620-6742

* Attach Additional Sheets If Necessary

OIL CONSERVATION DIVISION

Signed By Mike Bratcher

Approved by Environmental Specialist:

Approval Date: MAY 31 2013 Expiration Date:

Conditions of Approval:

Remediation per OCD Rule & Guidelines. SUBMIT REMEDIATION PROPOSAL NO LATER THAN: 7/1/2013

Attached ☐

2RP-1674

Soil Chemistry

On November 13, 2012, Hicks Consultants collected two 5-point soil samples on location for closure of the modular impoundment employed for hydraulic fracturing of five wells in 2012. On February 11, 2013 Hicks Consultants performed additional characterization to determine the vertical extent of chloride in soil near the western edge of the former modular impoundment, near the area of the reported release.

The location and chloride chemistry of the samples are presented on Plate 1. The chemistry is summarized in Table 1, below. Table 2 shows the lithology of the "Trench Sample". The laboratory certificate of analysis is attached.

The point samples for the Tank Composite and BG Composite were collected approximately two inches below the caliche pad/soil interface at a depth of approximately 1-foot. The Trench Sample consisted of discrete samples at 2, 4, and 6 foot depths.

Figure 1: Summary of soil chemistry

Sample ID	Date	Depth (ft)	Chloride mg/kg	EC uS/cm	Benzene mg/kg	BTEX mg/kg	TPH mg/kg	GRO/DRO mg/kg
NMAC 19.15.17.13.B(1).b			**500 or background**		**0.2**	**50**	**2,500**	**500**
Tank Composite	11/13/2012	1	7,500	NS	<0.49	ND	<20	<10
BG Composite	11/13/2012	1	3,000	NS	<0.49	ND	<20	<10
Trench Sample	2/11/2013	2	3,480	8,010	NS	NS	NS	NS
Trench Sample	2/11/2013	4	2,120	3,020	NS	NS	NS	NS
Trench Sample	2/11/2013	6	2,000	7,050	NS	NS	NS	NS

Notes

1. ND = non-detect
2 NS = not sampled

Figure 2: Lithology of Trench Sample

Depth (ft)	Description
0 - 1	Caliche pad
1 - 4	Top soil (loamy sand), dark brown, moist
4 - 6	Top soil, reddish brown, moist
6	Medim sand w/caliche, hard, brown, moist

Note: native hard caliche was observed below 6 feet.

The Tank Composite sample with a chloride concentration of 7,500 mg/kg indicates production activities have impacted the western half of the caliche pad. The BG Composite sample has a chloride concentration comparable to the Trench Sample at the 2 foot depth (3,480 mg/kg). Soil chloride concentrations at the Trench Sample that is within the area of the Tank Composite sample show chloride concentrations are decreasing with depth, from 3,480 mg/kg at 2 feet to 2,000 mg/kg at 6 feet and indicate that the majority of chloride impairment is limited to the production pad surface.

The chemistry and lithology of the Trench Sample suggests that:

- the moist soil at a depth of 6 feet, which exhibits 2,000 mg/kg chloride, is likely impacted by shallow groundwater wicking up from the underlying brine groundwater zone,
- the moist soil near the surface (Trench Sample) is likely from recent precipitation events and past releases at the site, and
- soil at depths from 1 to 5 feet below surface have chloride and EC concentrations that will support vegetation. Re-vegetating the impacted area is included in the remediation plan and also satisfies BLM's request for interim reclamation.

The remediation plan is presented below.

Remediation Plan

XTO Energy proposes to excavate and dispose of the western third (30%) of the caliche pad that was in contact with the modular impoundment. The 30% area includes the release area and out beyond to the edge of the caliche pad. Plate 2 identifies the area proposed for remediation. The excavated material will be transported to R360 or equivalent for proper disposal.

The remediated area will be contoured and seeded using BLM Seed Mixture Type 4 with Giant Sacaton seed added to the mixture. The excavated area is also subject to BLM's interim reclamation plan.

Appendix B

Discussion of Sampling Results

R.T. Hicks Consultants, Ltd.
901 Rio Grande Blvd. NW, Suite F-142
Albuquerque, NM 87104

APPENDIX B

SUMMARY OF BACKGROUND SAMPLING RESULTS

Between November 13, 2012 and June 24, 2013, soil samples were obtained to determine the magnitude, extent, and background hydrocarbon and chloride concentrations associated with the reported release. Table 1 summarizes the results of soil sampling. Plate 1 shows the locations of the soil samples.

Table 1: Soil chemistry summary results

Sample ID	Date	Depth (ft)	Chloride mg/kg	EC uS/cm	Benzene mg/kg	BTEX mg/kg	TPH mg/kg	GRO/DRO mg/kg
NMAC 19.15.17.13.B(1).b			**500 or background**		**0.2**	**50**	**2,500**	**500**
Tank Composite	11/13/2012	1.0	7,500	NS	<0.49	ND	<20	<10
BG Composite	11/13/2012	1.0	3,000	NS	<0.49	ND	<20	<10
Trench Sample	2/11/2013	2.0	3,480	8,010	NS	NS	NS	NS
Trench Sample	2/11/2013	4.0	2,120	3,020	NS	NS	NS	NS
Trench Sample	2/11/2013	6.0	2,000	7,050	NS	NS	NS	NS
Background Sample	6/24/2013	1.5	2,960	NS	NS	NS	NS	NS
Background Sample	6/24/2013	3.0	2,440	NS	NS	NS	NS	NS
Background Sample	6/24/2013	4.5	2,920	NS	NS	NS	NS	NS
Background Sample	6/24/2013	6.0	1,880	NS	NS	NS	NS	NS
Background Sample	6/24/2013	7.5	1,380	NS	NS	NS	NS	NS
Background Sample	6/24/2013	8.0	1,500	NS	NS	NS	NS	NS

Notes

1. ND = non-detect
2. NS = not sampled

On November 13, 2012, Hicks Consultants collected two on-site 5-point composite soil samples for closure of the modular impoundment employed for hydraulic fracturing of five wells in 2012.

The point samples for the Tank Composite and BG Composite were collected approximately two inches below the caliche pad/soil interface at a depth of approximately 1-foot. The Trench Sample consisted of discrete samples at 2, 4, and 6 foot depths. Table 2 summarizes the lithology of the Trench Sample.

Table 2: Lithology of Trench Sample

Depth (ft)	Description
0 - 1	Caliche pad
1 - 4	Top soil (loamy sand), dark brown, moist
4 - 6	Top soil, reddish brown, moist
6	Medim sand w/caliche, hard, brown, moist

Note: native hard caliche was observed below 6 feet.

The Tank Composite sample with a chloride concentration of 7,500 mg/kg (see Table 1) indicates production activities have impacted the western half of the caliche pad. The BG Composite sample has a chloride concentration comparable to the Trench Sample at the 2 foot depth (3,480 mg/kg).

On February 11, 2013; in support of the C-141 initial report submission, Hicks Consultants performed additional characterization to determine the vertical extent of chloride in soil near the western edge of the former modular impoundment, in proximity of the reported release. The "Trench Sample" identified in Table 1 and on Plate 1 represents the February 2013 sample.

Soil chloride concentrations at the Trench Sample (collected within the area of the Tank Composite sample) show chloride concentrations are decreasing with depth, from 3,480 mg/kg at 2 feet to 2,000 mg/kg at 6 feet and indicate that the majority of chloride impairment is limited to the production pad surface.

On June 24, 2013 we sampled an off-site background location (Background Sample) per C-141/Part 29 approval conditions/stipulations for release event 2RP-1674. The background location was located in an area not impacted by past or current production activities.

Table 3: Chloride concentration comparison between an on-site and off-site (background)

	Chloride (mg/kg)	
Depth (+/- 0.5 ft)	Trench Sample	Background Sample
1.5 - 2	3,480	2,960
4	2,120	2,920
6	2,000	1,880

Comparing the on-site Trench Sample (Table 3) to the off-site Background Sample at depths below 2-feet bgs, the on-site chloride concentrations are either near or lower than off-site background concentrations.

The chemistry and lithology of the trench samples suggest that:

- the moist soil at a depth of 6 feet, which exhibits approximately 2,000 mg/kg chloride, is likely impacted by shallow groundwater wicking up from the underlying brine groundwater zone,
- the moist soil near the surface (Trench Sample) was likely from recent precipitation events and past releases at the site,
- soil at depths from 1 to 5 feet below surface have chloride and EC concentrations that will support vegetation. Re-vegetation of the impacted area is included in the C-141 remediation plan and also satisfies BLM's request for interim reclamation, and
- the eastern portion of the location is not measurably impaired by production activities as the BG sample result (3,000 mg/kg) is not different from the background samples

Removing the upper 2-feet of soil within the remediation area as shown on Plate 2 will remediate the observed higher chlorides and allow for vegetation.

Appendix C

Certificate of Analyses

R.T. Hicks Consultants, Ltd.
901 Rio Grande Blvd. NW, Suite F-142
Albuquerque, NM 87104

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

November 29, 2012

Andrew Parker
R.T. Hicks Consultants, LTD
901 Rio Grande Blvd. NW
Suite F-142
Albuquerque, NM 87104
TEL: (505) 266-5004
FAX (505) 266-0745

RE: XTO Energy Nash Unit 29 OrderNo.: 1211653

Dear Andrew Parker:

Hall Environmental Analysis Laboratory received 2 sample(s) on 11/14/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD
Client Sample ID: Tank Composite
Project: XTO Energy Nash Unit 29
Collection Date: 11/13/2012
Lab ID: 1211653-001 **Matrix:** SOIL **Received Date:** 11/14/2012 10:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/20/2012 6:22:22 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/20/2012 6:22:22 AM
Surr: DNOP	102	77.6-140		%REC	1	11/20/2012 6:22:22 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/16/2012 2:32:25 PM
Surr: BFB	108	84-116		%REC	1	11/16/2012 2:32:25 PM
EPA METHOD 300.0: ANIONS						Analyst: **JRR**
Chloride	7500	300		mg/Kg	200	11/20/2012 6:54:44 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Toluene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Ethylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Methyl tert-butyl ether (MTBE)	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,2,4-Trimethylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,3,5-Trimethylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,2-Dichloroethane (EDC)	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,2-Dibromoethane (EDB)	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Naphthalene	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
1-Methylnaphthalene	ND	0.19		mg/Kg	1	11/21/2012 7:19:43 PM
2-Methylnaphthalene	ND	0.19		mg/Kg	1	11/21/2012 7:19:43 PM
Acetone	ND	0.73		mg/Kg	1	11/21/2012 7:19:43 PM
Bromobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Bromodichloromethane	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Bromoform	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Bromomethane	ND	0.15		mg/Kg	1	11/21/2012 7:19:43 PM
2-Butanone	ND	0.49		mg/Kg	1	11/21/2012 7:19:43 PM
Carbon disulfide	ND	0.49		mg/Kg	1	11/21/2012 7:19:43 PM
Carbon tetrachloride	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
Chlorobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Chloroethane	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
Chloroform	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Chloromethane	ND	0.15		mg/Kg	1	11/21/2012 7:19:43 PM
2-Chlorotoluene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
4-Chlorotoluene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
cis-1,2-DCE	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
cis-1,3-Dichloropropene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,2-Dibromo-3-chloropropane	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
Dibromochloromethane	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Dibromomethane	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
1,2-Dichlorobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD
Client Sample ID: Tank Composite
Project: XTO Energy Nash Unit 29
Collection Date: 11/13/2012
Lab ID: 1211653-001
Matrix: SOIL
Received Date: 11/14/2012 10:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
1,3-Dichlorobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,4-Dichlorobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Dichlorodifluoromethane	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,1-Dichloroethane	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
1,1-Dichloroethene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,2-Dichloropropane	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,3-Dichloropropane	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
2,2-Dichloropropane	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
1,1-Dichloropropene	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
Hexachlorobutadiene	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
2-Hexanone	ND	0.49		mg/Kg	1	11/21/2012 7:19:43 PM
Isopropylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
4-Isopropyltoluene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
4-Methyl-2-pentanone	ND	0.49		mg/Kg	1	11/21/2012 7:19:43 PM
Methylene chloride	ND	0.15		mg/Kg	1	11/21/2012 7:19:43 PM
n-Butylbenzene	ND	0.15		mg/Kg	1	11/21/2012 7:19:43 PM
n-Propylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
sec-Butylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Styrene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
tert-Butylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,1,1,2-Tetrachloroethane	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,1,2,2-Tetrachloroethane	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Tetrachloroethene (PCE)	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
trans-1,2-DCE	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
trans-1,3-Dichloropropene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,2,3-Trichlorobenzene	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
1,2,4-Trichlorobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,1,1-Trichloroethane	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,1,2-Trichloroethane	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Trichloroethene (TCE)	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Trichlorofluoromethane	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,2,3-Trichloropropane	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
Vinyl chloride	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Xylenes, Total	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
Surr: 1,2-Dichloroethane-d4	93.2	70-130		%REC	1	11/21/2012 7:19:43 PM
Surr: 4-Bromofluorobenzene	92.4	70-130		%REC	1	11/21/2012 7:19:43 PM
Surr: Dibromofluoromethane	90.7	70-130		%REC	1	11/21/2012 7:19:43 PM
Surr: Toluene-d8	101	70-130		%REC	1	11/21/2012 7:19:43 PM
EPA METHOD 418.1: TPH						Analyst: **LRW**
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	11/21/2012

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD
Client Sample ID: BG Composite
Project: XTO Energy Nash Unit 29
Collection Date: 11/13/2012
Lab ID: 1211653-002
Matrix: SOIL
Received Date: 11/14/2012 10:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/20/2012 8:28:08 AM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	11/20/2012 8:28:08 AM
Surr: DNOP	98.6	77.6-140		%REC	1	11/20/2012 8:28:08 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/16/2012 3:01:11 PM
Surr: BFB	101	84-116		%REC	1	11/16/2012 3:01:11 PM
EPA METHOD 300.0: ANIONS						Analyst: **JRR**
Chloride	3000	150		mg/Kg	100	11/20/2012 7:07:09 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Toluene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Ethylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Methyl tert-butyl ether (MTBE)	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,2,4-Trimethylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,3,5-Trimethylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,2-Dichloroethane (EDC)	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,2-Dibromoethane (EDB)	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Naphthalene	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	11/21/2012 7:48:47 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	11/21/2012 7:48:47 PM
Acetone	ND	0.74		mg/Kg	1	11/21/2012 7:48:47 PM
Bromobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Bromodichloromethane	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Bromoform	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Bromomethane	ND	0.15		mg/Kg	1	11/21/2012 7:48:47 PM
2-Butanone	ND	0.49		mg/Kg	1	11/21/2012 7:48:47 PM
Carbon disulfide	ND	0.49		mg/Kg	1	11/21/2012 7:48:47 PM
Carbon tetrachloride	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
Chlorobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Chloroethane	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
Chloroform	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Chloromethane	ND	0.15		mg/Kg	1	11/21/2012 7:48:47 PM
2-Chlorotoluene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
4-Chlorotoluene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
cis-1,2-DCE	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
cis-1,3-Dichloropropene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,2-Dibromo-3-chloropropane	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
Dibromochloromethane	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Dibromomethane	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
1,2-Dichlorobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD
Client Sample ID: BG Composite
Project: XTO Energy Nash Unit 29
Collection Date: 11/13/2012
Lab ID: 1211653-002
Matrix: SOIL
Received Date: 11/14/2012 10:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
1,3-Dichlorobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,4-Dichlorobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Dichlorodifluoromethane	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,1-Dichloroethane	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
1,1-Dichloroethene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,2-Dichloropropane	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,3-Dichloropropane	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
2,2-Dichloropropane	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
1,1-Dichloropropene	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
Hexachlorobutadiene	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
2-Hexanone	ND	0.49		mg/Kg	1	11/21/2012 7:48:47 PM
Isopropylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
4-Isopropyltoluene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
4-Methyl-2-pentanone	ND	0.49		mg/Kg	1	11/21/2012 7:48:47 PM
Methylene chloride	ND	0.15		mg/Kg	1	11/21/2012 7:48:47 PM
n-Butylbenzene	ND	0.15		mg/Kg	1	11/21/2012 7:48:47 PM
n-Propylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
sec-Butylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Styrene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
tert-Butylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,1,1,2-Tetrachloroethane	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,1,2,2-Tetrachloroethane	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Tetrachloroethene (PCE)	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
trans-1,2-DCE	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
trans-1,3-Dichloropropene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,2,3-Trichlorobenzene	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
1,2,4-Trichlorobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,1,1-Trichloroethane	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,1,2-Trichloroethane	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Trichloroethene (TCE)	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Trichlorofluoromethane	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,2,3-Trichloropropane	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
Vinyl chloride	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Xylenes, Total	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
Surr: 1,2-Dichloroethane-d4	94.2	70-130		%REC	1	11/21/2012 7:48:47 PM
Surr: 4-Bromofluorobenzene	87.7	70-130		%REC	1	11/21/2012 7:48:47 PM
Surr: Dibromofluoromethane	91.6	70-130		%REC	1	11/21/2012 7:48:47 PM
Surr: Toluene-d8	105	70-130		%REC	1	11/21/2012 7:48:47 PM
EPA METHOD 418.1: TPH						Analyst: **LRW**
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	11/21/2012

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211653**

29-Nov-12

Client: R.T. Hicks Consultants, LTD

Project: XTO Energy Nash Unit 29

Sample ID	**MB-4894**	SampType:	**MBLK**		TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**4894**		RunNo:	**7001**					
Prep Date:	**11/19/2012**	Analysis Date:	**11/19/2012**		SeqNo:	**202928**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	**LCS-4894**	SampType:	**LCS**		TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**4894**		RunNo:	**7001**					
Prep Date:	**11/19/2012**	Analysis Date:	**11/19/2012**		SeqNo:	**202929**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	14	1.5	15.00	0	90.0	90	110				

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211653**

29-Nov-12

Client: R.T. Hicks Consultants, LTD

Project: XTO Energy Nash Unit 29

Sample ID **MB-4901**	SampType: **MBLK**	TestCode: **EPA Method 418.1: TPH**							
Client ID: **PBS**	Batch ID: **4901**	RunNo: **7021**							
Prep Date: **11/19/2012**	Analysis Date: **11/21/2012**	SeqNo: **203589**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID **LCS-4901**	SampType: **LCS**	TestCode: **EPA Method 418.1: TPH**							
Client ID: **LCSS**	Batch ID: **4901**	RunNo: **7021**							
Prep Date: **11/19/2012**	Analysis Date: **11/21/2012**	SeqNo: **203590**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	100	20	100.0	0	104	80	120			

Sample ID **LCSD-4901**	SampType: **LCSD**	TestCode: **EPA Method 418.1: TPH**							
Client ID: **LCSS02**	Batch ID: **4901**	RunNo: **7021**							
Prep Date: **11/19/2012**	Analysis Date: **11/21/2012**	SeqNo: **203591**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	110	20	100.0	0	106	80	120	1.28	20	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211653**

29-Nov-12

Client: R.T. Hicks Consultants, LTD

Project: XTO Energy Nash Unit 29

Sample ID **MB-4900**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **4900**	RunNo: **6989**
Prep Date: **11/19/2012**	Analysis Date: **11/20/2012**	SeqNo: **202423** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.9		10.00		98.8	77.6	140			

Sample ID **LCS-4900**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **4900**	RunNo: **6989**
Prep Date: **11/19/2012**	Analysis Date: **11/20/2012**	SeqNo: **202424** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	102	47.4	122			
Surr: DNOP	4.0		5.000		80.2	77.6	140			

Sample ID **1211653-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **Tank Composite**	Batch ID: **4900**	RunNo: **6989**
Prep Date: **11/19/2012**	Analysis Date: **11/20/2012**	SeqNo: **202426** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	10	50.97	0	106	12.6	148			
Surr: DNOP	4.8		5.097		94.6	77.6	140			

Sample ID **1211653-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **Tank Composite**	Batch ID: **4900**	RunNo: **6989**
Prep Date: **11/19/2012**	Analysis Date: **11/20/2012**	SeqNo: **202569** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	10	51.18	0	104	12.6	148	0.773	22.5	
Surr: DNOP	5.1		5.118		98.8	77.6	140	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211653**

29-Nov-12

Client: R.T. Hicks Consultants, LTD

Project: XTO Energy Nash Unit 29

Sample ID **MB-4851**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **4851**	RunNo: **6951**
Prep Date: **11/15/2012**	Analysis Date: **11/16/2012**	SeqNo: **202014** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	990		1000		99.3	84	116			

Sample ID **LCS-4851**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **4851**	RunNo: **6951**
Prep Date: **11/15/2012**	Analysis Date: **11/16/2012**	SeqNo: **202015** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.3	74	117			
Surr: BFB	1000		1000		104	84	116			

Sample ID **1211653-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **Tank Composite**	Batch ID: **4851**	RunNo: **6951**
Prep Date: **11/15/2012**	Analysis Date: **11/16/2012**	SeqNo: **202020** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	4.9	24.63	0	118	70	130			
Surr: BFB	1100		985.2		109	84	116			

Sample ID **1211653-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **Tank Composite**	Batch ID: **4851**	RunNo: **6951**
Prep Date: **11/15/2012**	Analysis Date: **11/16/2012**	SeqNo: **202021** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	24.75	0	118	70	130	0.0876	22.1	
Surr: BFB	1100		990.1		109	84	116	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

WO#: **1211653**

Hall Environmental Analysis Laboratory, Inc.

29-Nov-12

Client: R.T. Hicks Consultants, LTD
Project: XTO Energy Nash Unit 29

Sample ID **mb-4851**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS**	Batch ID: **4851**	RunNo: **7060**
Prep Date: **11/15/2012**	Analysis Date: **11/21/2012**	SeqNo: **204634** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Methyl tert-butyl ether (MTBE)	ND	0.050								
1,2,4-Trimethylbenzene	ND	0.050								
1,3,5-Trimethylbenzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
1,2-Dibromoethane (EDB)	ND	0.050								
Naphthalene	ND	0.10								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
Acetone	ND	0.75								
Bromobenzene	ND	0.050								
Bromodichloromethane	ND	0.050								
Bromoform	ND	0.050								
Bromomethane	ND	0.15								
2-Butanone	ND	0.50								
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.10								
Chlorobenzene	ND	0.050								
Chloroethane	ND	0.10								
Chloroform	ND	0.050								
Chloromethane	ND	0.15								
2-Chlorotoluene	ND	0.050								
4-Chlorotoluene	ND	0.050								
cis-1,2-DCE	ND	0.050								
cis-1,3-Dichloropropene	ND	0.050								
1,2-Dibromo-3-chloropropane	ND	0.10								
Dibromochloromethane	ND	0.050								
Dibromomethane	ND	0.10								
1,2-Dichlorobenzene	ND	0.050								
1,3-Dichlorobenzene	ND	0.050								
1,4-Dichlorobenzene	ND	0.050								
Dichlorodifluoromethane	ND	0.050								
1,1-Dichloroethane	ND	0.10								
1,1-Dichloroethene	ND	0.050								
1,2-Dichloropropane	ND	0.050								
1,3-Dichloropropane	ND	0.050								
2,2-Dichloropropane	ND	0.10								
1,1-Dichloropropene	ND	0.10								
Hexachlorobutadiene	ND	0.10								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211653**

29-Nov-12

Client: R.T. Hicks Consultants, LTD

Project: XTO Energy Nash Unit 29

Sample ID **mb-4851**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS**	Batch ID: **4851**	RunNo: **7060**
Prep Date: **11/15/2012**	Analysis Date: **11/21/2012**	SeqNo: **204634** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	0.50								
Isopropylbenzene	ND	0.050								
4-Isopropyltoluene	ND	0.050								
4-Methyl-2-pentanone	ND	0.50								
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.15								
n-Propylbenzene	ND	0.050								
sec-Butylbenzene	ND	0.050								
Styrene	ND	0.050								
tert-Butylbenzene	ND	0.050								
1,1,1,2-Tetrachloroethane	ND	0.050								
1,1,2,2-Tetrachloroethane	ND	0.050								
Tetrachloroethene (PCE)	ND	0.050								
trans-1,2-DCE	ND	0.050								
trans-1,3-Dichloropropene	ND	0.050								
1,2,3-Trichlorobenzene	ND	0.10								
1,2,4-Trichlorobenzene	ND	0.050								
1,1,1-Trichloroethane	ND	0.050								
1,1,2-Trichloroethane	ND	0.050								
Trichloroethene (TCE)	ND	0.050								
Trichlorofluoromethane	ND	0.050								
1,2,3-Trichloropropane	ND	0.10								
Vinyl chloride	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.2	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.5000		89.4	70	130			
Surr: Dibromofluoromethane	0.46		0.5000		92.3	70	130			
Surr: Toluene-d8	0.52		0.5000		103	70	130			

Sample ID **lcs-4851**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS**	Batch ID: **4851**	RunNo: **7060**
Prep Date: **11/15/2012**	Analysis Date: **11/21/2012**	SeqNo: **204635** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	101	70	130			
Toluene	1.1	0.050	1.000	0	108	80	120			
Chlorobenzene	1.0	0.050	1.000	0	101	70	130			
1,1-Dichloroethene	1.1	0.050	1.000	0	110	74	124			
Trichloroethene (TCE)	0.88	0.050	1.000	0	87.9	70	130			
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		96.4	70	130			
Surr: 4-Bromofluorobenzene	0.43		0.5000		86.1	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211653**

29-Nov-12

Client: R.T. Hicks Consultants, LTD

Project: XTO Energy Nash Unit 29

Sample ID **lcs-4851** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **LCSS** Batch ID: **4851** RunNo: **7060**

Prep Date: **11/15/2012** Analysis Date: **11/21/2012** SeqNo: **204635** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.47		0.5000		93.7	70	130			
Surr: Toluene-d8	0.51		0.5000		103	70	130			

Sample ID **1211653-002ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **BG Composite** Batch ID: **4851** RunNo: **7060**

Prep Date: **11/15/2012** Analysis Date: **11/21/2012** SeqNo: **204638** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.049	0.9804	0	92.9	80.9	118			
Toluene	0.95	0.049	0.9804	0	97.4	69.5	119			
Chlorobenzene	0.87	0.049	0.9804	0	88.9	75.7	115			
1,1-Dichloroethene	0.99	0.049	0.9804	0.01122	100	68.6	126			
Trichloroethene (TCE)	0.81	0.049	0.9804	0	82.4	68.7	115			
Surr: 1,2-Dichloroethane-d4	0.47		0.4902		96.4	70	130			
Surr: 4-Bromofluorobenzene	0.42		0.4902		85.6	70	130			
Surr: Dibromofluoromethane	0.47		0.4902		95.4	70	130			
Surr: Toluene-d8	0.50		0.4902		102	70	130			

Sample ID **1211653-002amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **BG Composite** Batch ID: **4851** RunNo: **7060**

Prep Date: **11/15/2012** Analysis Date: **11/21/2012** SeqNo: **204639** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.049	0.9891	0	93.3	80.9	118	1.30	20	
Toluene	0.98	0.049	0.9891	0	98.8	69.5	119	2.28	20	
Chlorobenzene	0.88	0.049	0.9891	0	89.3	75.7	115	1.32	20	
1,1-Dichloroethene	1.0	0.049	0.9891	0.01122	99.6	68.6	126	0.357	24.8	
Trichloroethene (TCE)	0.82	0.049	0.9891	0	83.3	68.7	115	1.99	20	
Surr: 1,2-Dichloroethane-d4	0.47		0.4946		95.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.41		0.4946		83.4	70	130	0	0	
Surr: Dibromofluoromethane	0.48		0.4946		96.6	70	130	0	0	
Surr: Toluene-d8	0.51		0.4946		104	70	130	0	0	

Sample ID **mb-4881** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **PBS** Batch ID: **4881** RunNo: **7060**

Prep Date: **11/19/2012** Analysis Date: **11/21/2012** SeqNo: **204640** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.5	70	130			
Surr: 4-Bromofluorobenzene	0.44		0.5000		88.8	70	130			
Surr: Dibromofluoromethane	0.46		0.5000		92.1	70	130			
Surr: Toluene-d8	0.51		0.5000		103	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211653**

29-Nov-12

Client: R.T. Hicks Consultants, LTD

Project: XTO Energy Nash Unit 29

Sample ID **lcs-4881**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS**	Batch ID: **4881**	RunNo: **7060**
Prep Date: **11/19/2012**	Analysis Date: **11/21/2012**	SeqNo: **204641** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		94.6	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.5000		89.1	70	130			
Surr: Dibromofluoromethane	0.46		0.5000		92.8	70	130			
Surr: Toluene-d8	0.53		0.5000		106	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: RT HICKS — Work Order Number: 1211653

Received by/date: MG 11/14/12

Logged By: **Anne Thorne** 11/14/2012 10:50:00 AM — Ann Thorne

Completed By: **Anne Thorne** 11/19/2012 — Ann Thorne

Reviewed By: A 11/19/12

Chain of Custody

1. Were seals intact?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Client		

Log In

4. Coolers are present? (see 19. for cooler specific information)	Yes ☐	No ☐	NA ☑
5. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
7. Sample(s) in proper container(s)?	Yes ☑	No ☐	
8. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
9. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
10. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
11. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
12. Were any sample containers received broken?	Yes ☐	No ☑	
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
14. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
15. Is it clear what analyses were requested?	Yes ☑	No ☐	
16. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Not Present			

Chain-of-Custody Record

Client: R.T. Hicks Consultants

Mailing Address: on file

Phone #: 505.266.5004

email or Fax#: andrew@rthicksconsult.com

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: XTO Energy Nash Unit #29

Project #:

Project Manager: Andrew Parker

Sampler: Andrew Parker

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.2

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1211453	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F^-, Cl^-, NO_3^-, NO_2^-, PO_4^{3-}, SO_4^{2-})	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
11.13.12	1254	soil	tank # 1 @ 8"	4oz glass	ice				✓	✓				✓		✓						
"	1256	"	tank # 2 @ 8"	"	"																	
"	1259	"	tank # 3 @ 8"	"	"																	
"	1303	"	tank # 4 @ 8"	"	"																	
"	1305	"	tank # 5 @ 8"	"	"																	
"	1311	"	BG # 1 @ 8"	"	"																	
"	1314	"	BG # 2 @ 8"	"	"																	
"	1317	"	BG # 3 @ 8"	"	"																	
"	1325	"	BG # 4 @ 8"	"	"																	
"	1327	"	BG # 5 @ 8"	"	"																	
"			Tank composite*			-001			X	X				X		X						
			Bg composite**			-002			X	X				X		X						

Date: 11/14 Time: 10.50 Relinquished by: Andrew Parker

Received by: Michelle Gonzales Date: 11/14/12 Time: 10:50

Date: Time: Relinquished by:

Received by: Date: Time:

Remarks:
* Do not analyze point samples tank #1 - #5
** Do not analyze point samples Bg #1 → 5
Lab composite Tank #1-5; Lab composite Bg #1

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

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

February 18, 2013

ANDREW PARKER

R T HICKS CONSULTANTS

901 RIO GRANDE BLVD SUITE F-142

ALBUQUERQUE, NM 87104

RE: XTO NASH UNIT 29

Enclosed are the results of analyses for samples received by the laboratory on 02/13/13 7:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

R T HICKS CONSULTANTS
ANDREW PARKER
901 RIO GRANDE BLVD SUITE F-142
ALBUQUERQUE NM, 87104
Fax To: NONE

Received:	02/13/2013	Sampling Date:	02/11/2013
Reported:	02/18/2013	Sampling Type:	Soil
Project Name:	XTO NASH UNIT 29	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	UNIT 'J', SEC. 13, T23S, R29E		

Sample ID: SAMPLE TRENCH @ 2' BGS (H300404-01)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3480**	16.0	02/18/2013	ND	448	112	400	0.00	

Conductivity 120.1 uS/cm **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Conductivity*	**8010**	1.00	02/15/2013		476	95.2	500	0.752	

Sample ID: SAMPLE TRENCH @ 4' BGS (H300404-02)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2120**	16.0	02/18/2013	ND	416	104	400	3.77	

Conductivity 120.1 uS/cm **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Conductivity*	**6020**	1.00	02/15/2013		476	95.2	500	0.752	

Sample ID: SAMPLE TRENCH @ 6' BGS (H300404-03)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2000**	16.0	02/18/2013	ND	416	104	400	3.77	

Conductivity 120.1 uS/cm **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Conductivity*	**7050**	1.00	02/15/2013		476	95.2	500	0.752	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: R.T. Hicks Consultants
Project Manager: Andrew Parker
Address:
City: State: Zip:
Phone #: Fax #:
Project #: Project Owner: Murchison
Project Name: XTO Nash Unit 29
Project Location: Unit 'J', Sec. 13, T23S, R29E
Sampler Name: Kristin Pope

BILL TO
P.O. #:
Company: R.T. Hicks
Attn:
Address:
City:
State: Zip:
Phone #:
Fax #:

Lab I.D. (FOR LAB USE ONLY)	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE / COOL	OTHER	DATE	TIME	Cl-	EC
H3CC404																
1	Sample trench @ 2' BGS	X	1			X							2.11.13	0840	X	X
2	Sample trench @ 4' BGS	X	1			X							"	0842	X	X
3	Sample trench @ 6' BGS	X	1			X							"	0850	X	X

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Kristin Pope
Date: 2.13.13
Time: [illegible]
Received By: [signature]

Relinquished By:
Date:
Time:
Received By:

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

Sample Condition
Cool: ☒ Yes ☐ No
Intact: ☒ Yes ☐ No

CHECKED BY: (Initials) [initials]

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS:
email results to
andrew@rthicksconsult.com
Kristin @ ...

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

5.5° #2

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

June 28, 2013

KRISTIN POPE

R T HICKS CONSULTANTS

901 RIO GRANDE BLVD SUITE F-142

ALBUQUERQUE, NM 87104

RE: XTO NASH UNIT 29

Enclosed are the results of analyses for samples received by the laboratory on 06/26/13 8:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

R T HICKS CONSULTANTS
KRISTIN POPE
901 RIO GRANDE BLVD SUITE F-142
ALBUQUERQUE NM, 87104
Fax To: NONE

Received:	06/26/2013	Sampling Date:	06/24/2013
Reported:	06/28/2013	Sampling Type:	Soil
Project Name:	XTO NASH UNIT 29	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	UNIT 'J', SEC. 13, T23S, R29E		

Sample ID: BACKGROUND @ 1.5' (H301491-01)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2960**	16.0	06/28/2013	ND	448	112	400	3.64	

Sample ID: BACKGROUND @ 3' (H301491-02)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2440**	16.0	06/28/2013	ND	448	112	400	3.64	

Sample ID: BACKGROUND @ 4.5' (H301491-03)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2920**	16.0	06/28/2013	ND	448	112	400	3.64	

Sample ID: BACKGROUND @ 6' (H301491-04)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1880**	16.0	06/28/2013	ND	448	112	400	3.64	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

R T HICKS CONSULTANTS
KRISTIN POPE
901 RIO GRANDE BLVD SUITE F-142
ALBUQUERQUE NM, 87104
Fax To: NONE

Received:	06/26/2013	Sampling Date:	06/24/2013
Reported:	06/28/2013	Sampling Type:	Soil
Project Name:	XTO NASH UNIT 29	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	UNIT 'J', SEC. 13, T23S, R29E		

Sample ID: BACKGROUND @ 7.5' (H301491-05)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1380**	16.0	06/28/2013	ND	448	112	400	3.64	

Sample ID: BACKGROUND @ 8' (H301491-06)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1500**	16.0	06/28/2013	ND	448	112	400	3.64	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name:	R.T. Hicks Consultants	**BILL TO**	
Project Manager:	Kristin Pope	P.O. #:	
Address:		Company:	RT Hicks
City:	State: Zip:	Attn:	
Phone #:	Fax #:	Address:	
Project #:	Project Owner: XTO	City:	
Project Name:	XTO Nash Draw 29	State: Zip:	
Project Location:	Eddy County	Phone #:	
Sampler Name:	K. Pope	Fax #:	

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	Cl-
H301491															
1	Background @ 1.5'	G	1			~							062413		~
2	" 3'	~	1			~							"		~
3	" 4.5'	~	1			~							"		~
4	" 6'	~	1			~							"		~
5	" 7.5'	~	1			~							"		~
6	" 8'	~	1			~							"		~

Relinquished By: Kristin Pope	Date: 062613 Time: 0700	Received By: Douglas Rye	
Relinquished By:	Date: Time:	Received By: Jodi Henson	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	5°C	Sample Condition: Cool: Yes / No; Intact: Yes / No	CHECKED BY: (Initials)

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS:

Email to andrew@rthicksconsult.com
and Kristin @ "

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

Appendix D

Photo Documentation

R.T. Hicks Consultants, Ltd.

901 Rio Grande Blvd. NW, Suite F-142
Albuquerque, NM 87104

Figure 1: Stockpiling chloride impacted caliche near western 1/3 of location pad.

Figure 2: Stockpiled imapcted caclihe (two right soil piles) waiting transport to R360. The far left soil pile (background) is clean soil to be used for BLM interim reclamation activities.

Figure 3: Stockpiled chloride impacted caliche being loaded for trasnport to R360.

Figure 4: Western 1/3 of caliche pad removed and ready for ripping and seeding. Portions of the caliche pad were included in BLM interim reclamation activities.

Figure 5: Photo of remediated western 1/3 of caliche pad, viewing north. Area was ripped and seeded with BLM seed mixture #4 and Alkali Sacaton.

APPENDIX D

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

November 29, 2012

Andrew Parker

R.T. Hicks Consultants, LTD
901 Rio Grande Blvd. NW
Suite F-142
Albuquerque, NM 87104
TEL: (505) 266-5004
FAX (505) 266-0745

RE: XTO Energy Nash Unit 29 OrderNo.: 1211653

Dear Andrew Parker:

Hall Environmental Analysis Laboratory received 2 sample(s) on 11/14/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD
Client Sample ID: Tank Composite
Project: XTO Energy Nash Unit 29
Collection Date: 11/13/2012
Lab ID: 1211653-001
Matrix: SOIL
Received Date: 11/14/2012 10:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/20/2012 6:22:22 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/20/2012 6:22:22 AM
Surr: DNOP	102	77.6-140		%REC	1	11/20/2012 6:22:22 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/16/2012 2:32:25 PM
Surr: BFB	108	84-116		%REC	1	11/16/2012 2:32:25 PM
EPA METHOD 300.0: ANIONS						Analyst: **JRR**
Chloride	7500	300		mg/Kg	200	11/20/2012 6:54:44 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Toluene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Ethylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Methyl tert-butyl ether (MTBE)	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,2,4-Trimethylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,3,5-Trimethylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,2-Dichloroethane (EDC)	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,2-Dibromoethane (EDB)	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Naphthalene	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
1-Methylnaphthalene	ND	0.19		mg/Kg	1	11/21/2012 7:19:43 PM
2-Methylnaphthalene	ND	0.19		mg/Kg	1	11/21/2012 7:19:43 PM
Acetone	ND	0.73		mg/Kg	1	11/21/2012 7:19:43 PM
Bromobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Bromodichloromethane	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Bromoform	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Bromomethane	ND	0.15		mg/Kg	1	11/21/2012 7:19:43 PM
2-Butanone	ND	0.49		mg/Kg	1	11/21/2012 7:19:43 PM
Carbon disulfide	ND	0.49		mg/Kg	1	11/21/2012 7:19:43 PM
Carbon tetrachloride	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
Chlorobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Chloroethane	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
Chloroform	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Chloromethane	ND	0.15		mg/Kg	1	11/21/2012 7:19:43 PM
2-Chlorotoluene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
4-Chlorotoluene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
cis-1,2-DCE	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
cis-1,3-Dichloropropene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,2-Dibromo-3-chloropropane	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
Dibromochloromethane	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Dibromomethane	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
1,2-Dichlorobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2
- R RPD outside accepted recovery limits
- RL Reporting Detection Limit
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD
Client Sample ID: Tank Composite
Project: XTO Energy Nash Unit 29
Collection Date: 11/13/2012
Lab ID: 1211653-001
Matrix: SOIL
Received Date: 11/14/2012 10:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
1,3-Dichlorobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,4-Dichlorobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Dichlorodifluoromethane	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,1-Dichloroethane	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
1,1-Dichloroethene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,2-Dichloropropane	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,3-Dichloropropane	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
2,2-Dichloropropane	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
1,1-Dichloropropene	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
Hexachlorobutadiene	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
2-Hexanone	ND	0.49		mg/Kg	1	11/21/2012 7:19:43 PM
Isopropylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
4-Isopropyltoluene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
4-Methyl-2-pentanone	ND	0.49		mg/Kg	1	11/21/2012 7:19:43 PM
Methylene chloride	ND	0.15		mg/Kg	1	11/21/2012 7:19:43 PM
n-Butylbenzene	ND	0.15		mg/Kg	1	11/21/2012 7:19:43 PM
n-Propylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
sec-Butylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Styrene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
tert-Butylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,1,1,2-Tetrachloroethane	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,1,2,2-Tetrachloroethane	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Tetrachloroethene (PCE)	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
trans-1,2-DCE	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
trans-1,3-Dichloropropene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,2,3-Trichlorobenzene	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
1,2,4-Trichlorobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,1,1-Trichloroethane	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,1,2-Trichloroethane	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Trichloroethene (TCE)	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Trichlorofluoromethane	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
1,2,3-Trichloropropane	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
Vinyl chloride	ND	0.049		mg/Kg	1	11/21/2012 7:19:43 PM
Xylenes, Total	ND	0.097		mg/Kg	1	11/21/2012 7:19:43 PM
Surr: 1,2-Dichloroethane-d4	93.2	70-130		%REC	1	11/21/2012 7:19:43 PM
Surr: 4-Bromofluorobenzene	92.4	70-130		%REC	1	11/21/2012 7:19:43 PM
Surr: Dibromofluoromethane	90.7	70-130		%REC	1	11/21/2012 7:19:43 PM
Surr: Toluene-d8	101	70-130		%REC	1	11/21/2012 7:19:43 PM
EPA METHOD 418.1: TPH						Analyst: **LRW**
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	11/21/2012

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD
Client Sample ID: BG Composite
Project: XTO Energy Nash Unit 29
Collection Date: 11/13/2012
Lab ID: 1211653-002
Matrix: SOIL
Received Date: 11/14/2012 10:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/20/2012 8:28:08 AM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	11/20/2012 8:28:08 AM
Surr: DNOP	98.6	77.6-140		%REC	1	11/20/2012 8:28:08 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/16/2012 3:01:11 PM
Surr: BFB	101	84-116		%REC	1	11/16/2012 3:01:11 PM
EPA METHOD 300.0: ANIONS						Analyst: **JRR**
Chloride	3000	150		mg/Kg	100	11/20/2012 7:07:09 PM
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Toluene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Ethylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Methyl tert-butyl ether (MTBE)	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,2,4-Trimethylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,3,5-Trimethylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,2-Dichloroethane (EDC)	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,2-Dibromoethane (EDB)	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Naphthalene	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
1-Methylnaphthalene	ND	0.20		mg/Kg	1	11/21/2012 7:48:47 PM
2-Methylnaphthalene	ND	0.20		mg/Kg	1	11/21/2012 7:48:47 PM
Acetone	ND	0.74		mg/Kg	1	11/21/2012 7:48:47 PM
Bromobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Bromodichloromethane	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Bromoform	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Bromomethane	ND	0.15		mg/Kg	1	11/21/2012 7:48:47 PM
2-Butanone	ND	0.49		mg/Kg	1	11/21/2012 7:48:47 PM
Carbon disulfide	ND	0.49		mg/Kg	1	11/21/2012 7:48:47 PM
Carbon tetrachloride	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
Chlorobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Chloroethane	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
Chloroform	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Chloromethane	ND	0.15		mg/Kg	1	11/21/2012 7:48:47 PM
2-Chlorotoluene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
4-Chlorotoluene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
cis-1,2-DCE	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
cis-1,3-Dichloropropene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,2-Dibromo-3-chloropropane	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
Dibromochloromethane	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Dibromomethane	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
1,2-Dichlorobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: R.T. Hicks Consultants, LTD
Project: XTO Energy Nash Unit 29
Lab ID: 1211653-002 **Matrix:** SOIL

Client Sample ID: BG Composite
Collection Date: 11/13/2012
Received Date: 11/14/2012 10:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**
1,3-Dichlorobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,4-Dichlorobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Dichlorodifluoromethane	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,1-Dichloroethane	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
1,1-Dichloroethene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,2-Dichloropropane	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,3-Dichloropropane	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
2,2-Dichloropropane	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
1,1-Dichloropropene	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
Hexachlorobutadiene	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
2-Hexanone	ND	0.49		mg/Kg	1	11/21/2012 7:48:47 PM
Isopropylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
4-Isopropyltoluene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
4-Methyl-2-pentanone	ND	0.49		mg/Kg	1	11/21/2012 7:48:47 PM
Methylene chloride	ND	0.15		mg/Kg	1	11/21/2012 7:48:47 PM
n-Butylbenzene	ND	0.15		mg/Kg	1	11/21/2012 7:48:47 PM
n-Propylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
sec-Butylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Styrene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
tert-Butylbenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,1,1,2-Tetrachloroethane	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,1,2,2-Tetrachloroethane	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Tetrachloroethene (PCE)	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
trans-1,2-DCE	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
trans-1,3-Dichloropropene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,2,3-Trichlorobenzene	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
1,2,4-Trichlorobenzene	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,1,1-Trichloroethane	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,1,2-Trichloroethane	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Trichloroethene (TCE)	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Trichlorofluoromethane	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
1,2,3-Trichloropropane	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
Vinyl chloride	ND	0.049		mg/Kg	1	11/21/2012 7:48:47 PM
Xylenes, Total	ND	0.099		mg/Kg	1	11/21/2012 7:48:47 PM
Surr: 1,2-Dichloroethane-d4	94.2	70-130		%REC	1	11/21/2012 7:48:47 PM
Surr: 4-Bromofluorobenzene	87.7	70-130		%REC	1	11/21/2012 7:48:47 PM
Surr: Dibromofluoromethane	91.6	70-130		%REC	1	11/21/2012 7:48:47 PM
Surr: Toluene-d8	105	70-130		%REC	1	11/21/2012 7:48:47 PM
EPA METHOD 418.1: TPH						Analyst: **LRW**
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	11/21/2012

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211653**

29-Nov-12

Client: R.T. Hicks Consultants, LTD

Project: XTO Energy Nash Unit 29

Sample ID	**MB-4894**	SampType:	**MBLK**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**4894**	RunNo:	**7001**					
Prep Date:	**11/19/2012**	Analysis Date:	**11/19/2012**	SeqNo:	**202928**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-4894**	SampType:	**LCS**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**4894**	RunNo:	**7001**					
Prep Date:	**11/19/2012**	Analysis Date:	**11/19/2012**	SeqNo:	**202929**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	90.0	90	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211653**

29-Nov-12

Client: R.T. Hicks Consultants, LTD

Project: XTO Energy Nash Unit 29

Sample ID **MB-4901**	SampType: **MBLK**	TestCode: **EPA Method 418.1: TPH**
Client ID: **PBS**	Batch ID: **4901**	RunNo: **7021**
Prep Date: **11/19/2012**	Analysis Date: **11/21/2012**	SeqNo: **203589** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID **LCS-4901**	SampType: **LCS**	TestCode: **EPA Method 418.1: TPH**
Client ID: **LCSS**	Batch ID: **4901**	RunNo: **7021**
Prep Date: **11/19/2012**	Analysis Date: **11/21/2012**	SeqNo: **203590** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	100	20	100.0	0	104	80	120			

Sample ID **LCSD-4901**	SampType: **LCSD**	TestCode: **EPA Method 418.1: TPH**
Client ID: **LCSS02**	Batch ID: **4901**	RunNo: **7021**
Prep Date: **11/19/2012**	Analysis Date: **11/21/2012**	SeqNo: **203591** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	110	20	100.0	0	106	80	120	1.28	20	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211653**

29-Nov-12

Client: R.T. Hicks Consultants, LTD

Project: XTO Energy Nash Unit 29

Sample ID **MB-4900**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **4900**	RunNo: **6989**
Prep Date: **11/19/2012**	Analysis Date: **11/20/2012**	SeqNo: **202423** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.9		10.00		98.8	77.6	140			

Sample ID **LCS-4900**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **4900**	RunNo: **6989**
Prep Date: **11/19/2012**	Analysis Date: **11/20/2012**	SeqNo: **202424** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	102	47.4	122			
Surr: DNOP	4.0		5.000		80.2	77.6	140			

Sample ID **1211653-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **Tank Composite**	Batch ID: **4900**	RunNo: **6989**
Prep Date: **11/19/2012**	Analysis Date: **11/20/2012**	SeqNo: **202426** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	10	50.97	0	106	12.6	148			
Surr: DNOP	4.8		5.097		94.6	77.6	140			

Sample ID **1211653-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **Tank Composite**	Batch ID: **4900**	RunNo: **6989**
Prep Date: **11/19/2012**	Analysis Date: **11/20/2012**	SeqNo: **202569** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	10	51.18	0	104	12.6	148	0.773	22.5	
Surr: DNOP	5.1		5.118		98.8	77.6	140	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211653**

29-Nov-12

Client: R.T. Hicks Consultants, LTD

Project: XTO Energy Nash Unit 29

Sample ID **MB-4851**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **4851**	RunNo: **6951**
Prep Date: **11/15/2012**	Analysis Date: **11/16/2012**	SeqNo: **202014** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	990		1000		99.3	84	116			

Sample ID **LCS-4851**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **4851**	RunNo: **6951**
Prep Date: **11/15/2012**	Analysis Date: **11/16/2012**	SeqNo: **202015** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.3	74	117			
Surr: BFB	1000		1000		104	84	116			

Sample ID **1211653-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **Tank Composite**	Batch ID: **4851**	RunNo: **6951**
Prep Date: **11/15/2012**	Analysis Date: **11/16/2012**	SeqNo: **202020** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	4.9	24.63	0	118	70	130			
Surr: BFB	1100		985.2		109	84	116			

Sample ID **1211653-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **Tank Composite**	Batch ID: **4851**	RunNo: **6951**
Prep Date: **11/15/2012**	Analysis Date: **11/16/2012**	SeqNo: **202021** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	24.75	0	118	70	130	0.0876	22.1	
Surr: BFB	1100		990.1		109	84	116	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211653**

29-Nov-12

Client: R.T. Hicks Consultants, LTD

Project: XTO Energy Nash Unit 29

Sample ID **mb-4851**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS**	Batch ID: **4851**	RunNo: **7060**
Prep Date: **11/15/2012**	Analysis Date: **11/21/2012**	SeqNo: **204634** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Methyl tert-butyl ether (MTBE)	ND	0.050								
1,2,4-Trimethylbenzene	ND	0.050								
1,3,5-Trimethylbenzene	ND	0.050								
1,2-Dichloroethane (EDC)	ND	0.050								
1,2-Dibromoethane (EDB)	ND	0.050								
Naphthalene	ND	0.10								
1-Methylnaphthalene	ND	0.20								
2-Methylnaphthalene	ND	0.20								
Acetone	ND	0.75								
Bromobenzene	ND	0.050								
Bromodichloromethane	ND	0.050								
Bromoform	ND	0.050								
Bromomethane	ND	0.15								
2-Butanone	ND	0.50								
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.10								
Chlorobenzene	ND	0.050								
Chloroethane	ND	0.10								
Chloroform	ND	0.050								
Chloromethane	ND	0.15								
2-Chlorotoluene	ND	0.050								
4-Chlorotoluene	ND	0.050								
cis-1,2-DCE	ND	0.050								
cis-1,3-Dichloropropene	ND	0.050								
1,2-Dibromo-3-chloropropane	ND	0.10								
Dibromochloromethane	ND	0.050								
Dibromomethane	ND	0.10								
1,2-Dichlorobenzene	ND	0.050								
1,3-Dichlorobenzene	ND	0.050								
1,4-Dichlorobenzene	ND	0.050								
Dichlorodifluoromethane	ND	0.050								
1,1-Dichloroethane	ND	0.10								
1,1-Dichloroethene	ND	0.050								
1,2-Dichloropropane	ND	0.050								
1,3-Dichloropropane	ND	0.050								
2,2-Dichloropropane	ND	0.10								
1,1-Dichloropropene	ND	0.10								
Hexachlorobutadiene	ND	0.10								

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211653**

29-Nov-12

Client: R.T. Hicks Consultants, LTD

Project: XTO Energy Nash Unit 29

Sample ID **mb-4851** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **PBS** Batch ID: **4851** RunNo: **7060**

Prep Date: **11/15/2012** Analysis Date: **11/21/2012** SeqNo: **204634** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Hexanone	ND	0.50								
Isopropylbenzene	ND	0.050								
4-Isopropyltoluene	ND	0.050								
4-Methyl-2-pentanone	ND	0.50								
Methylene chloride	ND	0.15								
n-Butylbenzene	ND	0.15								
n-Propylbenzene	ND	0.050								
sec-Butylbenzene	ND	0.050								
Styrene	ND	0.050								
tert-Butylbenzene	ND	0.050								
1,1,1,2-Tetrachloroethane	ND	0.050								
1,1,2,2-Tetrachloroethane	ND	0.050								
Tetrachloroethene (PCE)	ND	0.050								
trans-1,2-DCE	ND	0.050								
trans-1,3-Dichloropropene	ND	0.050								
1,2,3-Trichlorobenzene	ND	0.10								
1,2,4-Trichlorobenzene	ND	0.050								
1,1,1-Trichloroethane	ND	0.050								
1,1,2-Trichloroethane	ND	0.050								
Trichloroethene (TCE)	ND	0.050								
Trichlorofluoromethane	ND	0.050								
1,2,3-Trichloropropane	ND	0.10								
Vinyl chloride	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.2	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.5000		89.4	70	130			
Surr: Dibromofluoromethane	0.46		0.5000		92.3	70	130			
Surr: Toluene-d8	0.52		0.5000		103	70	130			

Sample ID **lcs-4851** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **LCSS** Batch ID: **4851** RunNo: **7060**

Prep Date: **11/15/2012** Analysis Date: **11/21/2012** SeqNo: **204635** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	101	70	130			
Toluene	1.1	0.050	1.000	0	108	80	120			
Chlorobenzene	1.0	0.050	1.000	0	101	70	130			
1,1-Dichloroethene	1.1	0.050	1.000	0	110	74	124			
Trichloroethene (TCE)	0.88	0.050	1.000	0	87.9	70	130			
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		96.4	70	130			
Surr: 4-Bromofluorobenzene	0.43		0.5000		86.1	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211653**

29-Nov-12

Client: R.T. Hicks Consultants, LTD

Project: XTO Energy Nash Unit 29

Sample ID **lcs-4851**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS**	Batch ID: **4851**	RunNo: **7060**
Prep Date: **11/15/2012**	Analysis Date: **11/21/2012**	SeqNo: **204635** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.47		0.5000		93.7	70	130			
Surr: Toluene-d8	0.51		0.5000		103	70	130			

Sample ID **1211653-002ams**	SampType: **MS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BG Composite**	Batch ID: **4851**	RunNo: **7060**
Prep Date: **11/15/2012**	Analysis Date: **11/21/2012**	SeqNo: **204638** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.049	0.9804	0	92.9	80.9	118			
Toluene	0.95	0.049	0.9804	0	97.4	69.5	119			
Chlorobenzene	0.87	0.049	0.9804	0	88.9	75.7	115			
1,1-Dichloroethene	0.99	0.049	0.9804	0.01122	100	68.6	126			
Trichloroethene (TCE)	0.81	0.049	0.9804	0	82.4	68.7	115			
Surr: 1,2-Dichloroethane-d4	0.47		0.4902		96.4	70	130			
Surr: 4-Bromofluorobenzene	0.42		0.4902		85.6	70	130			
Surr: Dibromofluoromethane	0.47		0.4902		95.4	70	130			
Surr: Toluene-d8	0.50		0.4902		102	70	130			

Sample ID **1211653-002amsd**	SampType: **MSD**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BG Composite**	Batch ID: **4851**	RunNo: **7060**
Prep Date: **11/15/2012**	Analysis Date: **11/21/2012**	SeqNo: **204639** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.049	0.9891	0	93.3	80.9	118	1.30	20	
Toluene	0.98	0.049	0.9891	0	98.8	69.5	119	2.28	20	
Chlorobenzene	0.88	0.049	0.9891	0	89.3	75.7	115	1.32	20	
1,1-Dichloroethene	1.0	0.049	0.9891	0.01122	99.6	68.6	126	0.357	24.8	
Trichloroethene (TCE)	0.82	0.049	0.9891	0	83.3	68.7	115	1.99	20	
Surr: 1,2-Dichloroethane-d4	0.47		0.4946		95.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.41		0.4946		83.4	70	130	0	0	
Surr: Dibromofluoromethane	0.48		0.4946		96.6	70	130	0	0	
Surr: Toluene-d8	0.51		0.4946		104	70	130	0	0	

Sample ID **mb-4881**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBS**	Batch ID: **4881**	RunNo: **7060**
Prep Date: **11/19/2012**	Analysis Date: **11/21/2012**	SeqNo: **204640** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.5	70	130			
Surr: 4-Bromofluorobenzene	0.44		0.5000		88.8	70	130			
Surr: Dibromofluoromethane	0.46		0.5000		92.1	70	130			
Surr: Toluene-d8	0.51		0.5000		103	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211653**

29-Nov-12

Client: R.T. Hicks Consultants, LTD

Project: XTO Energy Nash Unit 29

Sample ID **lcs-4881**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSS**	Batch ID: **4881**	RunNo: **7060**
Prep Date: **11/19/2012**	Analysis Date: **11/21/2012**	SeqNo: **204641** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		94.6	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.5000		89.1	70	130			
Surr: Dibromofluoromethane	0.46		0.5000		92.8	70	130			
Surr: Toluene-d8	0.53		0.5000		106	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: RT HICKS Work Order Number: 1211653

Received by/date: MG 11/14/12

Logged By: **Anne Thorne** 11/14/2012 10:50:00 AM Anne Thorne

Completed By: **Anne Thorne** 11/19/2012 Anne Thorne

Reviewed By: AT 11/19/12

Chain of Custody

1. Were seals intact?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Client		

Log In

4. Coolers are present? (see 19. for cooler specific information)	Yes ☐	No ☐	NA ☑
5. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
7. Sample(s) in proper container(s)?	Yes ☑	No ☐	
8. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
9. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
10. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
11. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
12. Were any sample containers received broken?	Yes ☐	No ☑	
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
14. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
15. Is it clear what analyses were requested?	Yes ☑	No ☐	
16. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Not Present			

Chain-of-Custody Record

Client: R.T. Hicks Consultants

Mailing Address: on file

Phone #: 505.266.5004

email or Fax#: andrew@rthicksconsult.com

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: XTO Energy Nash Unit #29

Project #: 97

Project Manager: Andrew Parker

Sampler: Andrew Parker

On Ice: ☒ Yes ☐ No

Sample Temperature: 4 °C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1211153	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F^-,Cl^-,NO_3^-,NO_2^-,PO_4^{3-},SO_4^{2-})	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)						Air Bubbles (Y or N)
11.13.12	1254	soil	tank # 1 @ 8"	4oz glass	ice				↓	↓				↓		↓							
"	1256	"	tank # 2 @ 8"	"	"																		
"	1259	"	tank # 3 @ 8"	"	"																		
"	1303	"	tank # 4 @ 8"	"	"																		
"	1305	"	tank # 5 @ 8"	"	"																		
"	1311	"	BG # 1 @ 8"	"	"																		
"	1314	"	BG # 2 @ 8"	"	"																		
"	1317	"	BG # 3 @ 8"	"	"																		
"	1325	"	BG # 4 @ 8"	"	"																		
"	1327	"	BG # 5 @ 8"	"	"																		
"			Tank composite*			-001			X	X				X		X							
			Bb composite **			-002			X	X				X		X							

Date:	Time:	Relinquished by:	Received by:	Date	Time
11/14	10.50	Andrew Parker	Monica Kuehn	11/14/12	10:50
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:
* Do not analyze point samples tank #1 - #5
** Do not analize point samples Bb #1 → 5
Lab composite Tank #1-5 ; Lab composite Bb #1

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

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

February 18, 2013

ANDREW PARKER

R T HICKS CONSULTANTS

901 RIO GRANDE BLVD SUITE F-142

ALBUQUERQUE, NM 87104

RE: XTO NASH UNIT 29

Enclosed are the results of analyses for samples received by the laboratory on 02/13/13 7:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

R T HICKS CONSULTANTS
ANDREW PARKER
901 RIO GRANDE BLVD SUITE F-142
ALBUQUERQUE NM, 87104
Fax To: NONE

Received:	02/13/2013	Sampling Date:	02/11/2013
Reported:	02/18/2013	Sampling Type:	Soil
Project Name:	XTO NASH UNIT 29	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	UNIT 'J', SEC. 13, T23S, R29E		

Sample ID: SAMPLE TRENCH @ 2' BGS (H300404-01)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3480**	16.0	02/18/2013	ND	448	112	400	0.00	

Conductivity 120.1 uS/cm **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Conductivity*	**8010**	1.00	02/15/2013		476	95.2	500	0.752	

Sample ID: SAMPLE TRENCH @ 4' BGS (H300404-02)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2120**	16.0	02/18/2013	ND	416	104	400	3.77	

Conductivity 120.1 uS/cm **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Conductivity*	**6020**	1.00	02/15/2013		476	95.2	500	0.752	

Sample ID: SAMPLE TRENCH @ 6' BGS (H300404-03)

Chloride, SM4500Cl-B mg/kg **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2000**	16.0	02/18/2013	ND	416	104	400	3.77	

Conductivity 120.1 uS/cm **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Conductivity*	**7050**	1.00	02/15/2013		476	95.2	500	0.752	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: R.T. Hicks Consultants
Project Manager: Andrew Parker
Address:
City: State: Zip:
Phone #: Fax #:
Project #: Project Owner: Murchison
Project Name: XTO Nash Unit 29
Project Location: Unit 'J', Sec. 13, T23S, R29E
Sampler Name: Kristin Pope

BILL TO
P.O. #:
Company: R.T. Hicks
Attn:
Address:
City:
State: Zip:
Phone #:
Fax #:

ANALYSIS REQUEST

FOR LAB USE ONLY				MATRIX					PRESERV			SAMPLING			
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE / COOL	OTHER	DATE	TIME	Cl-	EC
#306404																
1	Sample trench @ 2' BGS	X	1			X							2.11.13	0840	X	X
2	Sample trench @ 4' BGS	X	1			X							"	0842	X	X
3	Sample trench @ 6' BGS	X	1			X							"	0850	X	X

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for the analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

Relinquished By: Kristin Pope
Date: 2.13.13
Time: 0920
Received By:
Relinquished By:
Date:
Time:
Received By:

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

Sample Condition: Cool: Yes / No; Intact: Yes / No
CHECKED BY: (Initials)

Phone Result: Yes / No Add'l Phone #:
Fax Result: Yes / No Add'l Fax #:
REMARKS:

[illegible]@rthicksconsult.com
Kristin @ "

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

55° #2

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

June 28, 2013

KRISTIN POPE

R T HICKS CONSULTANTS

901 RIO GRANDE BLVD SUITE F-142

ALBUQUERQUE, NM 87104

RE: XTO NASH UNIT 29

Enclosed are the results of analyses for samples received by the laboratory on 06/26/13 8:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

R T HICKS CONSULTANTS
KRISTIN POPE
901 RIO GRANDE BLVD SUITE F-142
ALBUQUERQUE NM, 87104
Fax To: NONE

Received:	06/26/2013	Sampling Date:	06/24/2013
Reported:	06/28/2013	Sampling Type:	Soil
Project Name:	XTO NASH UNIT 29	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	UNIT 'J', SEC. 13, T23S, R29E		

Sample ID: BACKGROUND @ 1.5' (H301491-01)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2960**	16.0	06/28/2013	ND	448	112	400	3.64	

Sample ID: BACKGROUND @ 3' (H301491-02)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2440**	16.0	06/28/2013	ND	448	112	400	3.64	

Sample ID: BACKGROUND @ 4.5' (H301491-03)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2920**	16.0	06/28/2013	ND	448	112	400	3.64	

Sample ID: BACKGROUND @ 6' (H301491-04)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1880**	16.0	06/28/2013	ND	448	112	400	3.64	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

R T HICKS CONSULTANTS
KRISTIN POPE
901 RIO GRANDE BLVD SUITE F-142
ALBUQUERQUE NM, 87104
Fax To: NONE

Received:	06/26/2013	Sampling Date:	06/24/2013
Reported:	06/28/2013	Sampling Type:	Soil
Project Name:	XTO NASH UNIT 29	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	UNIT 'J', SEC. 13, T23S, R29E		

Sample ID: BACKGROUND @ 7.5' (H301491-05)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1380**	16.0	06/28/2013	ND	448	112	400	3.64	

Sample ID: BACKGROUND @ 8' (H301491-06)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: DW**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1500**	16.0	06/28/2013	ND	448	112	400	3.64	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: R.T. Hicks Consultants	**BILL TO**
Project Manager: Kristin Pope	P.O. #:
Address:	Company: RT Hicks
City: State: Zip:	Attn:
Phone #: Fax #:	Address:
Project #: Project Owner: XTO	City:
Project Name: XTO Nash Draw 29	State: Zip:
Project Location: Eddy County	Phone #:
Sampler Name: K. Pope	Fax #:

ANALYSIS REQUEST

Cl-

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME
H301491														
1	Background @ 1.5'	G	1			X							062413	
2	" 3'		1			X							"	
3	" 4.5'		1			X							"	
4	" 6'		1			X							"	
5	" 7.5'		1			X							"	
6	" 8'		1			X							"	

Relinquished By: Kristin Pope	Date: 062613 Time: 0700	Received By: Douglas Page	
Relinquished By:	Date: Time:	Received By: Jodi Henson	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	5°C	Sample Condition: Cool ☐ Yes ☐ No; Intact ☑ Yes ☐ No	CHECKED BY: (Initials)

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS:

Email to andrew@rthicksconsult.com
and kristin@ "

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

#40

APPENDIX E

Andrew Parker

From: Andrew Parker <andrew@rthicksconsult.com>
Sent: Friday, October 12, 2012 12:06 PM
To: 'Bratcher, Mike, EMNRD'
Cc: 'Jones, Brad A., EMNRD'; 'David_Luna@xtoenergy.com'
Subject: 72-hour Notice of Closure for Nash Unit #29 Modular Impoundment

Mike:

Please accept this email as the 72-hour notice to NMOCD for closure of the Nash Unit #29 Modular Impoundment located in Section 13 T23S R29E Eddy County NM. Hicks Consultants will oversee closure activities as presented in the C-144. We will submit all required forms at the completion of the closure. We will begin closure activities after October 18th.

Please contact me if you have any questions.

Andrew Parker
RT Hicks Consultants
Ph: 505-266-5004
Cell: 505-350-5535

Andrew Parker

From: Andrew Parker <andrew@rthicksconsult.com>
Sent: Friday, October 12, 2012 12:21 PM
To: 'Bratcher, Mike, EMNRD'
Cc: 'Jones, Brad A., EMNRD'; 'David_Luna@xtoenergy.com'
Subject: RE: 72-hour Notice of Closure for Nash Unit #29 Modular Impoundment

More info:

This is for XTO Energy. API # 30-015-29434. Unit Letter J Section 13 T23S R29E.

Andrew Parker
RT Hicks Consultants
Ph: 505-266-5004
Cell: 505-350-5535

From: Andrew Parker [mailto:andrew@rthicksconsult.com]
Sent: Friday, October 12, 2012 12:06 PM
To: 'Bratcher, Mike, EMNRD'
Cc: 'Jones, Brad A., EMNRD'; 'David_Luna@xtoenergy.com'
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Please contact me if you have any questions.

Andrew Parker
RT Hicks Consultants
Ph: 505-266-5004
Cell: 505-350-5535

Andrew Parker

From: Andrew Parker <andrew@rthicksconsult.com>
Sent: Thursday, November 08, 2012 5:08 PM
To: 'Bratcher, Mike, EMNRD'
Cc: 'David_Luna@xtoenergy.com'
Subject: 72-hour Sampling Notice for Closure at Nash Unit #29 Modular Impoundment

Hello Mike:

Please accept this email as the 72-hour closure sampling notice for the below site:

Nash Unit #29 Modular Impoundment located in Section 13 T23S R29E Eddy County NM (API # 30-015-29434). Either on Tuesday Nov. 13 or Wednesday Nov. 14th we will perform post closure sampling as described in the June 13, 2012 C-144 Closure section. Please call me if you have any questions.

Andrew Parker
RT Hicks Consultants
Ph: 505-266-5004
Cell: 505-350-5535

From: Andrew Parker [mailto:andrew@rthicksconsult.com]
Sent: Friday, October 12, 2012 12:21 PM
To: 'Bratcher, Mike, EMNRD'
Cc: 'Jones, Brad A., EMNRD'; 'David_Luna@xtoenergy.com'
Subject: RE: 72-hour Notice of Closure for Nash Unit #29 Modular Impoundment

More info:

This is for XTO Energy. API # 30-015-29434. Unit Letter J Section 13 T23S R29E.

Andrew Parker
RT Hicks Consultants
Ph: 505-266-5004
Cell: 505-350-5535

From: Andrew Parker [mailto:andrew@rthicksconsult.com]
Sent: Friday, October 12, 2012 12:06 PM
To: 'Bratcher, Mike, EMNRD'
Cc: 'Jones, Brad A., EMNRD'; 'David_Luna@xtoenergy.com'
Subject: 72-hour Notice of Closure for Nash Unit #29 Modular Impoundment

Mike:

Please accept this email as the 72-hour notice to NMOCD for closure of the Nash Unit #29 Modular Impoundment located in Section 13 T23S R29E Eddy County NM. Hicks Consultants will oversee closure activities as presented in the C-144. We will submit all required forms at the completion of the closure. We will begin closure activities after October 18th.

Please contact me if you have any questions.

Andrew Parker
RT Hicks Consultants
Ph: 505-266-5004
Cell: 505-350-5535

Andrew Parker

From: Andrew Parker <andrew@rthicksconsult.com>
Sent: Monday, December 17, 2012 10:39 AM
To: mike.bratcher@state.nm.us
Cc: Van Curen, Jennifer E (jvancure@blm.gov); David_Luna@xtoenergy.com
Subject: XTO Nash Unit #29 Closure Plan
Attachments: Closure Report for C-144 Nash Draw 29 Poseidon Tank.pdf

Mike:

Attached is the C-144 Closure Plan for Nash Unit #29 Modular Impoundment located in Section 13 T23S R29E Eddy County NM (API # 30-015-29434). Per the Pit Rule, we are only submitting the closure plan at the District level. As appropriate, we will let you determine whether it is necessary to forward the closure plan to Santa Fe.

Please contact us with any questions or comments.

Andrew Parker
RT Hicks Consultants
Cell: 505-350-5535 (Preferred)
Office: 505-266-5004

Andrew Parker

From: Andrew Parker <andrew@rthicksconsult.com>
Sent: Thursday, December 20, 2012 12:47 PM
To: mike.bratcher@state.nm.us
Cc: David_Luna@xtoenergy.com
Subject: Nash Unit #29 Poseidon Tank Interim Reclamation Update

Hello Mike:

I want to let you know the status of the interim reclamation as required by the BLM at the above referenced location. As stated in our closure report dated December 17, 2012, we will be submitting an interim reclamation plan to the BLM within the next few weeks. Before submitting such a plan, we will perform additional sampling at the location to determine if chloride concentrations in the soil is influenced by the brackish water of the nearby salt lake and to determine off-location chloride concentrations. We need to acquire this additional information in order to know how to properly reclaim the location. After we receive analytical results from our additional soil sampling, we will submit an interim reclamation plan to the BLM with a copy to NMOCD. Any near surface soils affected from the less than three barrel leak from the tank will be included in the interim reclamation.

Andrew Parker
RT Hicks Consultants
Cell: 505-350-5535 (Preferred)
Office: 505-266-5004

Andrew Parker

From: Andrew Parker <andrew@rthicksconsult.com>
Sent: Tuesday, June 04, 2013 7:06 AM
To: Jones, Brad A., EMNRD <brad.a.jones@state.nm.us> (brad.a.jones@state.nm.us); 'mike.bratcher@state.nm.us'
Cc: Van Curen, Jennifer E (jvancure@blm.gov); David_Luna@xtoenergy.com; 'Randall Hicks'
Subject: XTO Nash Unit 29 Modular Impoundment Spill Report and Remediation Plan Status Inquiry - API No: 30-015-29434

Mr. Jones and Mr. Bratcher:

I am concerned there is confusion who is reviewing the Nash Unit 29 Modular Impoundment Spill Report that contains a remediation plan. The spill report is dated March 15, 2013 and was submit to District 2 - Artesia and the Environmental Bureau – Santa Fe via certified mail . Please let me know at your convenience when we can expect a response so we can begin work on the remediation. During the remediation, we will also conduct interim reclamation for the BLM. BLM is anxious to see interim reclamation begin.

Thank you.

Andrew Parker
RT Hicks Consultants
Durango Field Office
(970) 570-9535

Andrew Parker

From: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>
Sent: Wednesday, June 05, 2013 8:44 AM
To: Andrew Parker; Jones, Brad A., EMNRD
Cc: Van Curen, Jennifer E; David_Luna@xtoenergy.com; 'Randall Hicks'
Subject: RE: XTO Nash Unit 29 Modular Impoundment Spill Report and Remediation Plan Status Inquiry - API No: 30-015-29434
Attachments: Nash Draw 29 background sample.jpg

Andrew,

The review of the C-141/Part 29 release event will be handled by the District 2 office. There was a misunderstanding on my part as to who would oversee that portion of the project. OCD tracking number for this release event is **2RP-1674**. The remediation proposal submitted is approved with the following conditions/stipulations:

- Like approval by BLM
- Notify OCD 48 hours prior to commencement of remedial activities.
- Notify OCD 48 hours prior to obtaining samples where the analyses are to be presented to OCD
- A representative sample is to be obtained in an area off the location pad, unaffected by any activities that may have occurred related to any drilling, completion, production, injection or movement of produced fluids at this location. The analysis of this sample will be considered natural background for the area. Attached is a Google image indicating the preferred area to obtain this sample, assuming the area is unaffected by human and/or production activities.
- OCD may require additional remedial or investigatory actions after receipt and review of the above referenced sample analysis.
- A form C-141 marked Final Report, and a closure report, is to be submitted to OCD upon satisfactory completion of project.

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

If you have any questions or concerns, and for notifications, please contact me.

Mike Bratcher
NMOCD District 2
811 S. First Street
Artesia, NM 88210
O: 575-748-1283 X108
C: 575-626-0857
F: 575-748-9720

From: Andrew Parker [mailto:andrew@rthicksconsult.com]
Sent: Tuesday, June 04, 2013 7:06 AM
To: Jones, Brad A., EMNRD; Bratcher, Mike, EMNRD
Cc: Van Curen, Jennifer E; David_Luna@xtoenergy.com; 'Randall Hicks'
Subject: XTO Nash Unit 29 Modular Impoundment Spill Report and Remediation Plan Status Inquiry - API No: 30-015-29434

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Thank you.

_____

Andrew Parker
RT Hicks Consultants
Durango Field Office
(970) 570-9535

Andrew Parker

From: Andrew Parker <andrew@rthicksconsult.com>
Sent: Tuesday, June 11, 2013 9:13 AM
To: mike.bratcher@state.nm.us
Cc: David_Luna@xtoenergy.com; kristin@rthicksconsult.com
Subject: FW: XTO Nash Unit 29 Modular Impoundment Spill Report and Remediation Plan Status Inquiry - API No: 30-015-29434
Attachments: Nash Draw 29 background sample_AlternateSmallSize.jpg

Mike:

Sorry for the large size in the earlier email. I removed the photos and reduce the aerial image showing the location of the proposed background sample. From my original email:

We staked the proposed background sample location. We had to move the suggested location east of the pad, rather than SE of the pad per your suggestion. The mesquite was to dense in your suggested location. We chose the proposed location as there is a small opening through the mesquite. Is the new proposed location acceptable to NMOCD that is located east of the well pad versus southeast of the well pad (see attached map)?

Our preliminary plan for sampling is to obtain a surface sample and a sample every 1.5 to 2 feet for chloride until 8 to 9 feet below ground surface is reached. We will field titrate for chloride and select representative samples for laboratory analysis. We will use a backhoe to obtain the samples.

Andrew Parker
RT Hicks Consultants
Durango Field Office
(970) 570-9535

From: Kristin Pope [mailto:kristin@rthicksconsult.com]
Sent: Monday, June 10, 2013 10:09 PM
To: 'Andrew Parker'
Subject: RE: XTO Nash Unit 29 Modular Impoundment Spill Report and Remediation Plan Status Inquiry - API No: 30-015-29434

I staked the background sample point approximately 50-60 ft off the eastern edge of the pad/road, due east of the well. The coordinates are 32.30312 N, 103.93643 W

Not able to connect to the server tonight for some reason, but next time I can, I'll post the attached pics in the file.

As soon as I get the go-ahead from you and OCD, I will coordinate w/Parker Energy and Gene for sampling.

Kristin Pope
R.T. Hicks Consultants
Carlsbad Field Office
575.302.6755

From: Andrew Parker [mailto:andrew@rthicksconsult.com]
Sent: Monday, June 10, 2013 9:44 AM
To: kristin@rthicksconsult.com
Cc: David_Luna@xtoenergy.comk
Subject: FW: XTO Nash Unit 29 Modular Impoundment Spill Report and Remediation Plan Status Inquiry - API No: 30-015-29434

Kristin:

We need to obtain a background sample near the location noted on the attached map as part of the approval of our reclamation plan. Mr. Bratcher is not familiar with the site and his location is in the middle of mesquite. Obviously this will not work.

We will use Parker Energy for the backhoe trench sampling. We will call Gene to coordinate the backhoe when we are ready. But first, I need you to go down to the location and mark the backhoe trench location for the one call. Call me so we can discuss potential locations for the sample location other than Mr. Bratcher's mesquite location. I am thinking of collecting a sample for chloride at the surface and 1.5 foot intervals thereafter until we reach the extent of the backhoe reach; which should be approximately 8 to 9 feet. I am hoping to show increasing chloride with depth as we approach the brackish saturated zone.

Andrew Parker
RT Hicks Consultants
Durango Field Office
(970) 570-9535

From: Bratcher, Mike, EMNRD [mailto:mike.bratcher@state.nm.us]
Sent: Wednesday, June 05, 2013 8:44 AM
To: Andrew Parker; Jones, Brad A., EMNRD
Cc: Van Curen, Jennifer E; David_Luna@xtoenergy.com; 'Randall Hicks'
Subject: RE: XTO Nash Unit 29 Modular Impoundment Spill Report and Remediation Plan Status Inquiry - API No: 30-015-29434

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Mike Bratcher
NMOCD District 2
811 S. First Street
Artesia, NM 88210
O: 575-748-1283 X108
C: 575-626-0857
F: 575-748-9720

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To: Jones, Brad A., EMNRD; Bratcher, Mike, EMNRD
Cc: Van Curen, Jennifer E; David_Luna@xtoenergy.com; 'Randall Hicks'
Subject: XTO Nash Unit 29 Modular Impoundment Spill Report and Remediation Plan Status Inquiry - API No: 30-015-29434

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Thank you.

Andrew Parker
RT Hicks Consultants
Durango Field Office
(970) 570-9535

Andrew Parker

From: Andrew Parker <andrew@rthicksconsult.com>
Sent: Tuesday, June 11, 2013 11:22 AM
To: kristin@rthicksconsult.com
Subject: FW: XTO Nash Unit 29 Modular Impoundment Spill Report and Remediation Plan Status Inquiry - API No: 30-015-29434

Looks like we have the go ahead. Please initiate the one call via Gene.

Andrew Parker
RT Hicks Consultants
Durango Field Office
(970) 570-9535

From: Bratcher, Mike, EMNRD [mailto:mike.bratcher@state.nm.us]
Sent: Tuesday, June 11, 2013 10:01 AM
To: Andrew Parker
Cc: David_Luna@xtoenergy.com; kristin@rthicksconsult.com
Subject: RE: XTO Nash Unit 29 Modular Impoundment Spill Report and Remediation Plan Status Inquiry - API No: 30-015-29434

Andrew,

The proposed location will be fine. I just want to use an undisturbed/unaffected area to get an idea of what natural background is for this area. It was a concern for some of the folks in SF that the background sample was obtained on the site pad, so I think what you are proposing should alleviate that issue.

Thanks,

Mike Bratcher
NMOCD District 2
811 S. First Street
Artesia, NM 88210
O: 575-748-1283 X108
C: 575-626-0857
F: 575-748-9720

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Sent: Tuesday, June 11, 2013 9:13 AM
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Andrew Parker
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Cc: Van Curen, Jennifer E; David_Luna@xtoenergy.com; 'Randall Hicks'
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Artesia, NM 88210
O: 575-748-1283 X108
C: 575-626-0857
F: 575-748-9720

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To: Jones, Brad A., EMNRD; Bratcher, Mike, EMNRD
Cc: Van Curen, Jennifer E; David_Luna@xtoenergy.com; 'Randall Hicks'
Subject: XTO Nash Unit 29 Modular Impoundment Spill Report and Remediation Plan Status Inquiry - API No: 30-015-29434

Mr. Jones and Mr. Bratcher:

I am concerned there is confusion who is reviewing the Nash Unit 29 Modular Impoundment Spill Report that contains a remediation plan. The spill report is dated March 15, 2013 and was submit to District 2 - Artesia and the Environmental Bureau – Santa Fe via certified mail . Please let me know at your convenience when we can expect a response so we can begin work on the remediation. During the remediation, we will also conduct interim reclamation for the BLM. BLM is anxious to see interim reclamation begin.

Thank you.

Andrew Parker
RT Hicks Consultants
Durango Field Office
(970) 570-9535

Andrew Parker

From: Andrew Parker <andrew@rthicksconsult.com>
Sent: Monday, June 17, 2013 10:12 AM
To: mike.bratcher@state.nm.us
Cc: 'Kristin Pope'
Subject: XTO Nash Unit 29 C-141/Part 29 release event #2RP-1674 48 hour notice

Mr. Bratcher:

Per your reclamation plan condition of approval for NMOCD Release # 2RP-1674, please accept this email as the 48 hour notice for background sampling. The sampling is scheduled for Friday June 21, 2013. The condition of approval that is the topic of this email is noted below.

- Notify OCD 48 hours prior to obtaining samples where the analyses are to be presented to OCD

We plan to obtain one background soil sampling east of the location in an area that is undisturbed from past oil field operations. We proposed to obtain soil samples at the surface and every 1.5 to 2 feet below ground surface to approximately 8 feet below ground surface. We will field titrate for chloride and submit the sample showing the highest chloride for laboratory testing for chloride. Please contact me if you have any questions or comments.

Andrew Parker
RT Hicks Consultants
Durango Field Office
(970) 570-9535

From: Bratcher, Mike, EMNRD [mailto:mike.bratcher@state.nm.us]
Sent: Wednesday, June 05, 2013 8:44 AM
To: Andrew Parker; Jones, Brad A., EMNRD
Cc: Van Curen, Jennifer E; David_Luna@xtoenergy.com; 'Randall Hicks'
Subject: RE: XTO Nash Unit 29 Modular Impoundment Spill Report and Remediation Plan Status Inquiry - API No: 30-015-29434

Andrew,

The review of the C-141/Part 29 release event will be handled by the District 2 office. There was a misunderstanding on my part as to who would oversee that portion of the project. OCD tracking number for this release event is **2RP-1674**. The remediation proposal submitted is approved with the following conditions/stipulations:

- Like approval by BLM
- Notify OCD 48 hours prior to commencement of remedial activities.
- Notify OCD 48 hours prior to obtaining samples where the analyses are to be presented to OCD
- A representative sample is to be obtained in an area off the location pad, unaffected by any activities that may have occurred related to any drilling, completion, production, injection or movement of produced fluids at this location. The analysis of this sample will be considered natural background for the area. Attached is a Google image indicating the preferred area to obtain this sample, assuming the area is unaffected by human and/or production activities.

- OCD may require additional remedial or investigatory actions after receipt and review of the above referenced sample analysis.
- A form C-141 marked Final Report, and a closure report, is to be submitted to OCD upon satisfactory completion of project.

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

If you have any questions or concerns, and for notifications, please contact me.

Mike Bratcher
NMOCD District 2
811 S. First Street
Artesia, NM 88210
O: 575-748-1283 X108
C: 575-626-0857
F: 575-748-9720

From: Andrew Parker [mailto:andrew@rthicksconsult.com]
Sent: Tuesday, June 04, 2013 7:06 AM
To: Jones, Brad A., EMNRD; Bratcher, Mike, EMNRD
Cc: Van Curen, Jennifer E; David_Luna@xtoenergy.com; 'Randall Hicks'
Subject: XTO Nash Unit 29 Modular Impoundment Spill Report and Remediation Plan Status Inquiry - API No: 30-015-29434

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Thank you.

Andrew Parker
RT Hicks Consultants
Durango Field Office
(970) 570-9535

Andrew Parker

From: Andrew Parker <andrew@rthicksconsult.com>
Sent: Wednesday, June 19, 2013 8:33 AM
To: mike.bratcher@state.nm.us
Subject: FW: XTO Nash Unit 29 C-141/Part 29 release event #2RP-1674 48 hour notice

Mr. Bratcher:

The background sampling was delayed until Monday June 24th, 2013.

Andrew Parker
RT Hicks Consultants
Durango Field Office
(970) 570-9535

From: Kristin Pope [mailto:kristin@rthicksconsult.com]
Sent: Wednesday, June 19, 2013 1:10 AM
To: 'Andrew Parker'
Subject: RE: XTO Nash Unit 29 C-141/Part 29 release event #2RP-1674 48 hour notice

Parker Energy "Mike" called me Tuesday and said they had to reschedule for Monday morning. Ugh. Sorry.

Kristin Pope
R.T. Hicks Consultants
Carlsbad Field Office
575.302.6755

From: Andrew Parker [mailto:andrew@rthicksconsult.com]
Sent: Monday, June 17, 2013 10:12 AM
To: mike.bratcher@state.nm.us
Cc: 'Kristin Pope'
Subject: XTO Nash Unit 29 C-141/Part 29 release event #2RP-1674 48 hour notice

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Andrew Parker
RT Hicks Consultants
Durango Field Office
(970) 570-9535

From: Bratcher, Mike, EMNRD [mailto:mike.bratcher@state.nm.us]
Sent: Wednesday, June 05, 2013 8:44 AM
To: Andrew Parker; Jones, Brad A., EMNRD
Cc: Van Curen, Jennifer E; David_Luna@xtoenergy.com; 'Randall Hicks'
Subject: RE: XTO Nash Unit 29 Modular Impoundment Spill Report and Remediation Plan Status Inquiry - API No: 30-015-29434

Andrew,

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If you have any questions or concerns, and for notifications, please contact me.

Mike Bratcher
NMOCD District 2
811 S. First Street
Artesia, NM 88210
O: 575-748-1283 X108
C: 575-626-0857
F: 575-748-9720

From: Andrew Parker [mailto:andrew@rthicksconsult.com]
Sent: Tuesday, June 04, 2013 7:06 AM
To: Jones, Brad A., EMNRD; Bratcher, Mike, EMNRD

Cc: Van Curen, Jennifer E; David_Luna@xtoenergy.com; 'Randall Hicks'
Subject: XTO Nash Unit 29 Modular Impoundment Spill Report and Remediation Plan Status Inquiry - API No: 30-015-29434

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Thank you.

Andrew Parker
RT Hicks Consultants
Durango Field Office
(970) 570-9535

Andrew Parker

From: Andrew Parker <andrew@rthicksconsult.com>
Sent: Friday, August 16, 2013 4:55 PM
To: 'Bratcher, Mike, EMNRD'
Cc: 'David_Luna@xtoenergy.com'
Subject: NMOCD 2RP-1674 - XTO Nash Unit 29 Modular Impoundment Spill Report and Remediation Plan
Attachments: Plate1_backgroundSample.pdf; Plate2_reclamationLayout.pdf; backgroundSamplingJune26_2013.pdf

Mike:

We sampled a background location per C-141/Part 29 approval conditions/stipulations for release event 2RP-1674. Attached is a map (Plate 1) showing the location and results of the Background Sample collected on June 24, 2013. Results are shown in the white box with red outline. Included is the laboratory Certificate of Analysis. We will follow this email with a hard copy to be sent via Certified Mail.

The Background Sample shows an average chloride concentration of 2,773 mg/kg between 1.5 and 4.5 feet below ground surface (bgs). Below 4.5 feet chloride concentration is less than 2,000 mg/kg. The Trench Sample shows a higher chloride concentration of approximately 520 mg/kg between 1.5 and 2-feet bgs. Comparing the Trench Sample to the Background Sample, the average chloride concentration in the Trench Sample between 4 and 6 feet bgs is lower.

- average concentration of chloride between 4 and 6 feet bgs in the Trench Sample is 2,060 mg/kg.
- average concentration of chloride between 4.5 and 6 feet bgs in the Background Sample is 2,400 mg/kg.

Removing the upper 2-feet of soil within the remediation area as shown on Plate 2 will remediate the observed higher chlorides.

For your convenience, we reproduced a portion of our remediation plan as presented in our March 15 spill report, below:

> *XTO Energy proposes to excavate and dispose of the western third (30%) of the caliche pad that was in contact with the modular impoundment. The 30% area includes the release area and out beyond to the edge of the caliche pad. Plate 2 identifies the area proposed for remediation. The excavated material will be transported to R360 or equivalent for proper disposal.*
> *The remediated area will be contoured and seeded using BLM Seed Mixture Type 4 with Giant Sacaton seed added to the mixture.*

We anticipate starting remedial activities within the next few weeks. We will notify NMOCD 48-hours prior to remedial activities.

Please contact me at 970-570-9535 if you have any questions or comments.

Andrew Parker
RT Hicks Consultants
Durango Field Office
(970) 570-9535

From: Bratcher, Mike, EMNRD [mailto:mike.bratcher@state.nm.us]
Sent: Wednesday, June 05, 2013 8:44 AM
To: Andrew Parker; Jones, Brad A., EMNRD
Cc: Van Curen, Jennifer E; David_Luna@xtoenergy.com; 'Randall Hicks'
Subject: RE: XTO Nash Unit 29 Modular Impoundment Spill Report and Remediation Plan Status Inquiry - API No: 30-015-29434

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O: 575-748-1283 X108
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F: 575-748-9720

Andrew Parker

From: Andrew Parker <andrew@rthicksconsult.com>
Sent: Tuesday, September 17, 2013 10:04 AM
To: 'Bratcher, Mike, EMNRD'
Cc: 'David_Luna@xtoenergy.com'
Subject: RE: NMOCD 2RP-1674 - XTO Nash Unit 29 Modular Impoundment Spill Report and Remediation Plan

Mr. Bratcher:

This email is the 72-hour notice to perform the spill remediation for the above referenced site per the C-141 spill report. We will begin work on Monday September 23rd, 2013.

Andrew Parker
RT Hicks Consultants
Durango Field Office
(970) 570-9535

Andrew Parker

From: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>
Sent: Wednesday, October 23, 2013 9:37 AM
To: Andrew Parker
Subject: RE: Fall Color

Andrew,

That must be horrible to have such beautiful scenery all around you. Very nice.

I will try to get all the paperwork on my end together and imaged, but it will be at least next week before I can work on it.

Thanks,

Mike Bratcher
NMOCD District 2
811 S. First Street
Artesia, NM 88210
O: 575-748-1283 X108
C: 575-626-0857
F: 575-748-9720

From: Andrew Parker [mailto:andrew@rthicksconsult.com]
Sent: Wednesday, October 23, 2013 9:14 AM
To: Bratcher, Mike, EMNRD
Subject: Fall Color

Mike:

Thanks for the suggestions on how to finalize the spill report. FYI: The last image online is the approved C-144 by Mr. Jones.

And a little view up the road from my house (see attached photo).

Andrew Parker
RT Hicks Consultants
Durango Field Office
(970) 570-9535

Andrew Parker

From: Andrew Parker <andrew@rthicksconsult.com>
Sent: Monday, January 13, 2014 10:14 AM
To: 'Bratcher, Mike, EMNRD'
Cc: David_Luna@xtoenergy.com
Subject: XTO Nash Unit 29 C-141/Part 29 release event #2RP-1674

Mr. Bratcher:

Per my phone message to you a few weeks ago, please upload the approved C-141 initial plan and final report to NMOCD imaging. I followed your recommendation to submit the C-144 final closure report that included the C-141 Final Closure Report to Mr. Jones prior to having a signed final report.

Mr. Jones called me and "dinged" me for :

- not including a signed/approved C-141 Final Report. I included the report but not the approved version.
- not including a signed/approved C-141 Intial Report. I did not think NMOCD-Santa Fe would want the extra paperwork. I was wrong.

Thanks Mike.

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Andrew Parker

From: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>
Sent: Thursday, January 16, 2014 9:21 AM
To: Andrew Parker
Cc: David_Luna@xtoenergy.com
Subject: RE: XTO Nash Unit 29 C-141/Part 29 release event #2RP-1674

Andrew,

I just completed the imaging process for this project. The initial and final C-141 have made it to the well file (30-015-29434) and are available there now. Most of the entire project should be in the admin order file (2RP-1674), including the C-141s. I just checked and that is still uploading, some 600 + pages, but it should all be in there by end of day.

Sorry for the delay, but as always, I try to do the best I can with what resources I have available.

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