

LT Environmental, Inc.

3300 North "A" Street Building 1, Unit 103 Midland, Texas 79705 432.704.5178

October 30, 2019

Mr. Mike Bratcher New Mexico Oil Conservation Division 811 South First Street Artesia, New Mexico 88210

RE: Revised Remediation Work Plan – SVE System

James Ranch Unit #10 Battery

Remediation Permit Numbers 2RP-3179, 2RP-3464, and 2RP-5243

**Eddy County, New Mexico** 

Dear Mr. Bratcher:

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), is pleased to present the New Mexico Oil Conservation Division (NMOCD) with this Revised Remediation Work Plan (Work Plan) for the James Ranch Unit #10 Battery (Site). The Site is located in Unit H, Section 1, Township 23 South, Range 30 East, in Eddy County, New Mexico (Figure 1).

This Work Plan summarizes the release history, assessment, and remediation activities completed to date and the proposed remedial actions, specifically the installation and operation of a soil vapor extraction (SVE) system, to address residual subsurface soil impacts at the Site. The Work Plan is submitted to comply with Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC) as amended on August 14, 2018 and Bureau of Land Management (BLM) requirements for no further actions related to these releases. The Work Plan addresses comments from the NMOCD to conduct active remediation of subsurface hydrocarbon impacts.

### **BACKGROUND**

Of the three open Remediation Permits (RPs) at the Site, two of the RPs (2RP-3179 and 2RP-3464) occurred while the facility was operated by the previous operator; however, XTO is the current operator and is committed to addressing any releases that remain unresolved. The releases were reported to NMOCD on a Release Notification and Corrective Action Form C-141 (Form C-141) and were assigned RP Numbers, which are included as Attachment 1.

Since the three releases occurred in the tank battery containment area, excavation and sampling activities were completed to address the three releases concurrently. RP Numbers 2RP-3179 and 2RP-3464 are included in the Compliance Agreement for Remediation for Historical Releases (Compliance Agreement) between XTO and NMOCD, effective November 13, 2018. The purpose of the Compliance Agreement is to ensure reportable releases that occurred prior to August 14, 2018, where XTO is responsible for the corrective action, comply with 19.15.29 NMAC. The



releases are categorized as a Tier III sites in the Compliance Agreement, meaning remediation of the releases began prior to August 14, 2018, the effective date of 19.15.29 NMAC; however, remediation was ongoing.

Spill response activities at the Site included excavation of impacted soil from February through April of 2019. Following initial excavation activities, LTE drilled into the subsurface with a hollow stem auger drilling rig to depths ranging from approximately 10 feet to 80 feet below ground surface (bgs) to vertically delineate subsurface soil impacts. Based on results from the drilling event, a production tank was relocated, and additional excavation was conducted. A liner was proposed in a Proposed Remediation Work Plan, dated April 12, 2019, and subsequently installed to address impacts to soil not removed by excavation. The Proposed Remediation Work Plan was denied with comments from NMOCD and BLM concerning depth to groundwater, additional delineation, and active remediation of mobile petroleum hydrocarbons in the subsurface. As a result, LTE submitted a Revised Remediation Work Plan, dated June 28, 2019. The Revised Remediation Work Plan summarized additional delineation by sonic drill rig, confirmation of depth to groundwater as greater than 150 feet bgs, and an analysis of exposure pathways to nearby receptors.

The additional drilling data allowed for revision of Closure Criteria presented in earlier reports. The following NMOCD Table 1 Closure Criteria were determined for the Site:

- Benzene: 10 milligrams per kilogram (mg/kg);
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg;
- <u>Total petroleum hydrocarbons gasoline range organics (TPH-GRO) and total petroleum hydrocarbons diesel range organics (TPH-DRO):</u> 1,000 mg/kg
- Total TPH: 2,500 mg/kg; and
- Chloride: 20,000 mg/kg.

The Revised Remediation Work Plan supported excavation and liner installation, relocation of the tank battery, and continued natural attenuation of residual subsurface soil impacts beneath the liner.

NMOCD denied the Revised Remediation Work Plan on July 25, 2019, and required a method for mitigating the deeper impacts, specifically, the light end hydrocarbons at depth. In response, LTE has evaluated remediation alternatives for the Site and conducted pilot testing for an SVE system. The result of these efforts is presented in the subsequent sections of this report and were used to design an active remedial approach to address petroleum hydrocarbons that exist deeper than is practical to excavate.





### **Completed Remediation Activities**

As outlined in the Revised Remediation Action Plan submitted on June 28, 2019, XTO has performed the following remedial actions to address the releases associated with RP Numbers 2RP-3179, 2RP-3464, and 2RP-5243:

- Free standing crude oil and produced water were vacuumed off the well pad to minimize saturation into surficial soil and future vertical migration;
- Excavation and disposal of produced water and crude oil impacted soil from the top 4
  feet. Surficial soil impacts have been remediated to 4 feet bgs as determined by field
  screening and laboratory analytical results for confirmation sidewall soil samples and
  delineation soil samples. Approximately 1,740 cubic yards of impacted soil were
  excavated and disposed of between February and April 2019; and
- A 30-mil poly liner was installed at the base of the excavation on April 12, 2019 to address any elevated subsurface chloride concentrations. The liner covered a surface area of approximately 11,230 square feet and extended up the sidewalls approximately 2 to 3 feet;
- To minimize the potential of future releases in the vicinity of these three open RPs, XTO constructed their tank battery in a different location within the Site. In addition, XTO evaluated the integrity of all equipment and components utilized in the construction of the tank battery to reduce the likelihood of future releases due to faulty and/or worn equipment and/or components.

#### SOIL VAPOR EXTRACTION PILOT TEST

LTE conducted an SVE pilot test to assess the viability of SVE to reduce and remediate residual petroleum hydrocarbon impacts as an alternative remediation approach. The petroleum hydrocarbon impacts are generally volatile (relatively high Henry's Constant) and amenable to microbial degradation processes. SVE has been an industry standard, cost effective technology for *in-situ* remediation of petroleum hydrocarbons. The objective of the SVE pilot test was to evaluate the effectiveness of the remedial technology to achieve site remediation cleanup goals. SVE pilot testing results assist in determining the required flow rate and applied vacuum to influence the subsurface and cause volatilization of petroleum hydrocarbons adsorbed to subsurface soil and to determine site-specific design radius of influence (ROI). The pilot testing program was designed based on previously observed geologic conditions, surface conditions, and current lateral and vertical extents of petroleum hydrocarbon impacts. Two SVE screen depths were tested (25 feet to 45 feet bgs and 15 feet to 30 feet bgs) to encourage uniform flow throughout the highest impacted interval (20 feet to 45 feet bgs).





### **SVE Well Installation**

Four SVE wells (SVE-PT-01 through SVE-PT-04) were installed prior to testing in the locations presented on Figure 2. During the advancement of each SVE well, continuous soil sampling was conducted, which included describing the lithology based on the Unified Soil Classification System (USCS) as specified in American Society for Testing and Materials (ASTM) D2488, observations of staining and odors, and field screening of volatile aromatic hydrocarbons and chloride utilizing a calibrated photo-ionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. Soil boring logs were completed at the time of drilling and are provided with the construction diagrams of the SVE wells as Attachment 2.

Soil samples from the four SVE wells were not submitted for laboratory analysis due to their proximity of previously drilled and sampled boreholes. Based on the soil boring logs and observations made during all subsurface investigations, lithology in the vicinity of the three releases was generally characterized as the following:

- 5 feet to 20 feet bgs was a mix of poorly graded to well graded sand, and
- 20 feet to approximately 50 feet bgs was classified as sandstone and claystone.

Soil boring SVE-PT-01 was completed to a depth of approximately 45 feet bgs, while SVE-PT-02, SVE-PT-03, and SVE-PT-04 were completed to a depth of approximately 30 feet bgs. The SVE wells were constructed with 2-inch polyvinyl chloride (PVC) casing. A 10-foot section of 0.010-inch slotted PVC screen was installed at the base of SVE wells SVE-PT-02 and SVE-PT-03. A 20-foot and 15-foot section of 0.010-inch slotted PVC screens were installed at the base of SVE wells SVE-PT-01 and SVE-PT-04, respectively. A 10-20 size silica sand pack was used to fill the annular space from the bottom of the screen to approximately 1 foot above the top of screen. Two feet of hydrated bentonite chips was placed on top of the sand pack. The well was then grouted from the top of the bentonite chips to the ground surface. The PVC casing for the SVE wells extended beyond the ground surface approximately 3 feet and protected with steel well protector monuments.

#### **Pilot Testing Procedure**

Vacuum was applied to two of the SVE wells (SVE-PT-01 and SVE-PT-04), while the other two SVE wells were utilized as observation wells (SVE-PT-02 and SVE-PT-03). SVE wells SVE-PT-02 and SVE-PT-03 will ultimately be utilized for full-scale SVE design. The SVE wells were screened across different lithologies observed in the subsurface to test applied vacuum responses and influence within those lithologies.

A vacuum was applied to the SVE wells via a vacuum truck and through a manifold designed to measure applied vacuum, flowrate, and vapor concentrations. The first test was conducted by applying a vacuum at SVE well SVE-PT-01. The same procedure was repeated for the pilot test on





SVE well SVE-PT-04. Pilot test monitoring data (applied vacuum, air flow rate, and volatile aromatic hydrocarbons stack measurements) were recorded at the test well, while (vacuum response) was measured at surrounding SVE wells during performance of the test. The following procedures were followed when conducting the SVE pilot test:

- 1. Measured the distances from the test SVE well to each observation well;
- 2. Collected background volatile organic compound measurements using a calibrated PID at the test SVE and observation wells;
- 3. Connected the vacuum truck to the test SVE well via a flexible hose and manifold then slowly opened the valve and monitored the vacuum and flow rate;
- 4. Applied a vacuum ranging from approximately 10 inches of water column (wc) to 50 inches wc at the designated SVE well for each test;
- Measured at least two events of stabilized vacuum/flow rate. Measured the vacuum at the observation wells and PID measurements from the test SVE well. Collected readings 15 minutes apart;
- After the test SVE well vacuum readings stabilized, the applied vacuum was increased by reducing the amount of blower bypass air and collected the above measurements at the higher vacuum/flow rate;
- 7. Closed the valve to eliminate the vacuum pressure and collected stabilization readings from each observation well;
- 8. At the conclusion of the testing period, the blower was turned off, the system was allowed to equilibrate, and a final round of vacuum readings was collected from the observation wells; and
- Collected air emission samples from SVE well SVE-PT-04 in laboratory-prepared containers and delivered under strict chain of custody (COC) protocol to Xenco Laboratories located in Midland, Texas (Xenco) for analysis of BTEX and total volatile petroleum hydrocarbons (TVPH).

The resulting field measurements were reviewed, and vacuum measurements were plotted versus distance from the appropriate SVE well. Diagrams were generated for each of the different vacuum/flowrates tested. All test forms and diagrams are provided as Attachment 3. The laboratory analytical report for the air emission sample is provided in Attachment 4.

### **SVE Pilot Test Results**

Pilot test data appears to indicate SVE is a viable technology to remediate petroleum hydrocarbons at the Site. The introduction of a vacuum into the subsurface enhanced



volatilization of petroleum hydrocarbons throughout the tested impacted soil column. SVE vacuum influences were observed in all SVE wells during each test.

An effective SVE ROI of approximately 30 feet to 40 feet was graphically estimated from a plot of the observed vacuum response versus the distance from the applied vacuum. Influence of greater than 0.1 inches wc was observed during testing of SVE well SVE-PT-01 via vacuum and flow rates ranging from 10 inches wc at 4 actual cubic feet per minute (acfm) to 50 inches wc at 14 acfm. Influence of greater than 2.5 inches wc was observed during testing of SVE well SVE-PT-04 via vacuum and flow rates ranging from 10 inches wc at 60 acfm to 35 inches wc at 124 acfm. LTE believes a lower flow rate during testing of SVE well SVE-PT-04 would produce similar results. Full-scale design is based on 20 acfm per well at 30 inches wc.

The air emission sample collected during testing of SVE well SVE-PT-04 indicated recovery of total petroleum hydrocarbons – gasoline range organics (TPH-GRO) and BTEX. In the air stream, TPH-GRO was detected at a concentration of 20.2 milligrams per liter (mg/L) and total BTEX was detected at 0.957 mg/L. The air emission sample results are included as Table 1. At a full-scale design flow rate of 200 acfm, it is estimated the initial petroleum hydrocarbon removal rate would be as high as 360 pounds TPH per day and 17 pounds BTEX per day. As the system remediates subsurface soil, the removal rate is anticipated to decline via first order decline rate. The petroleum hydrocarbon concentration detected in the SVE pilot test emissions further demonstrates the technology is a viable remedial approach for the deeper subsurface soil impacts. Air emission samples will be collected during full scale system operation to track remediation progress and to model anticipated shutdown dates.

#### PROPOSED SVE SYSTEM DESIGN

An additional six SVE wells are recommended to influence the hydrocarbon impacted area in both the horizontal and vertical extents, for a total of 10 SVE wells. A well layout plan is included as Figure 3. Figures 4, 5, and 6 illustrate the SVE wells influencing different intervals at depths, 5 feet to 20 feet bgs, 15 feet to 30 feet bgs, and 25 feet to 65 feet bgs (shallow, medium, and deep), respectively. The well screened intervals are included as Table 2.

For the full-scale system, it is recommended that the vacuum blower be capable of at least 200 acfm at 50 inches wc. This would allow the system to operate 20 acfm per well at a vacuum of at least 30 inches wc. The SVE system will be powered with an electrical drop that will operate a regenerative or rotary lobe blower. The full-scale system will include a manifold with vacuum gauges to adjust system operations as necessary. Measurements of volatile organic compounds with a PID will be collected per zone or well to determine the area of the site to focus operations. Upon approval of this Work Plan, the remediation system equipment and parts will be sourced.

LTE anticipates the system will operate for a one to two-year period to remediate the residual subsurface impacts. An estimated timeline breakdown includes:





- Equipment sourcing, manufacturing, and delivery is expected to take 3 months and will be completed by January 31, 2020;
- Well installation is anticipated to take one week;
- System installation and startup is expected to take two weeks and will be completed by February 28, 2020;
- Operation and Maintenance (O&M) will be performed weekly for the first month after initial startup;
- Monthly O&M checks on the system will be performed over the lifecycle of the system;
- Air emission samples will be collected at startup, two weeks, one month, two months, three months, then quarterly for the lifecycle of the system;
- Quarterly reports documenting runtime, air emission sampling results, and O&M data with any system changes or recommendations will be provided to NMOCD;
- Once air monitoring results indicate a TPH concentration of below 1 mg/L and the system has operated for at least a one-year period, confirmation soil samples will be collected. If the stack emissions do not drop below 1 mg/L TPH then confirmation sampling will occur following two years of system operation; and
- Confirmation soil samples will be collected in the vicinity of boreholes BH01, BH07, and BH08 and pothole PH01. Continuous sampling will be conducted via field screenings with a PID. Samples will be collected from similar intervals exceeding the Closure Criteria and submitted for laboratory analysis of BTEX and TPH.

Should NMOCD require more than 30 days to review and respond to this report, XTO reserves the right to modify the proposed schedule.

LTE, on behalf of XTO, requests approval of this Work Plan and implementation of the SVE system. If you have any questions or comments, please do not hesitate to contact Mr. Robert Rebel at (303) 548-5097 or Ms. Ashley Ager at (970) 946-1093.

Sincerely,

LT ENVIRONMENTAL, INC.

Robert T Rebel

Robert Rebel, P.E. Senior Engineer Ashley L. Ager, P.G. Senior Geologist





cc: Kyle Littrell, XTO

Bradford Billings, NMOCD Robert Hamlet, NMOCD

Jim Amos, U.S. Bureau of Land Management

### Attachments:

Figure 1	Site Location Map
Figure 2	FULL-SCALE SVE Pilot Test Layout
Figure 3	Proposed SVE System Layout
Figure 4	Shallow SVE Well Layout (5-20 feet bgs)
Figure 5	Medium SVE Well Layout (15-30 feet bgs)
Figure 6	Deep SVE Well Layout (25-65 feet bgs)

Table 1 Air Analytical Results
Table 2 SVE Well Completions

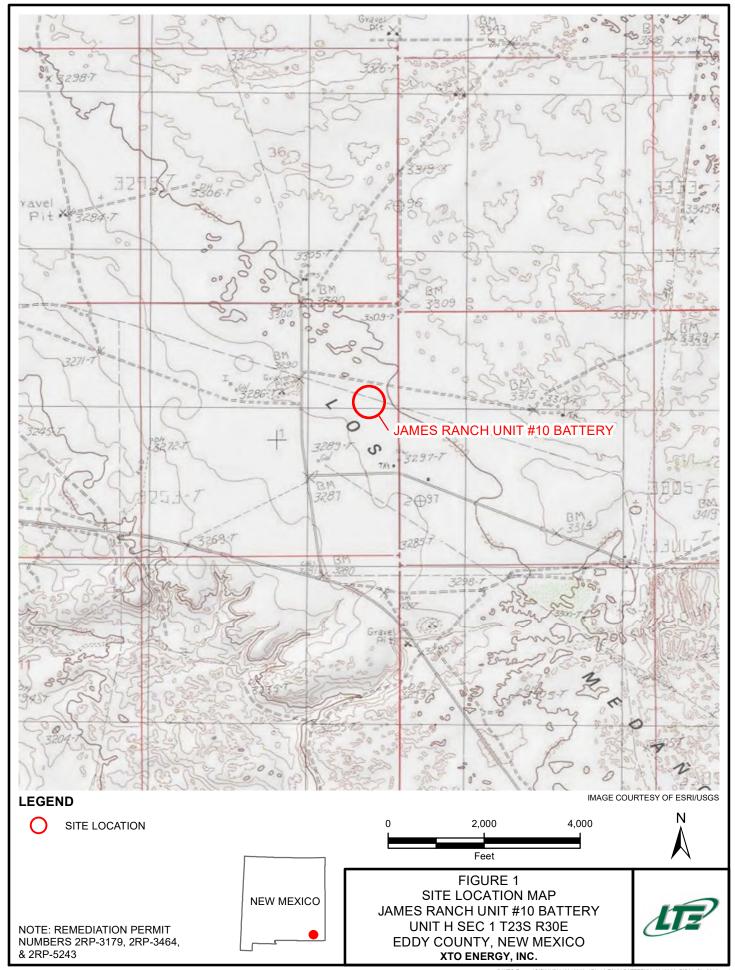
Attachment 1 Initial / Final NMOCD Form C-141s (2RP-3179, 2RP-3463, and 2RP-5243)

Attachment 2 Lithologic/Soil Sampling Logs

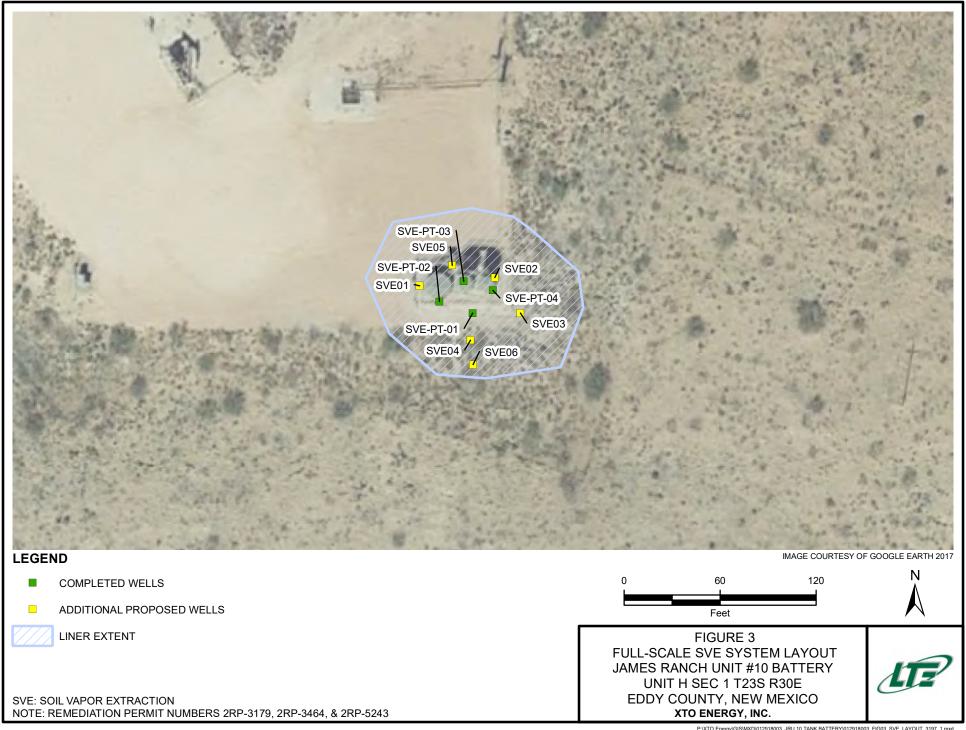
Attachment 3 Pilot Test Data

Attachment 4 Laboratory Analytical Report

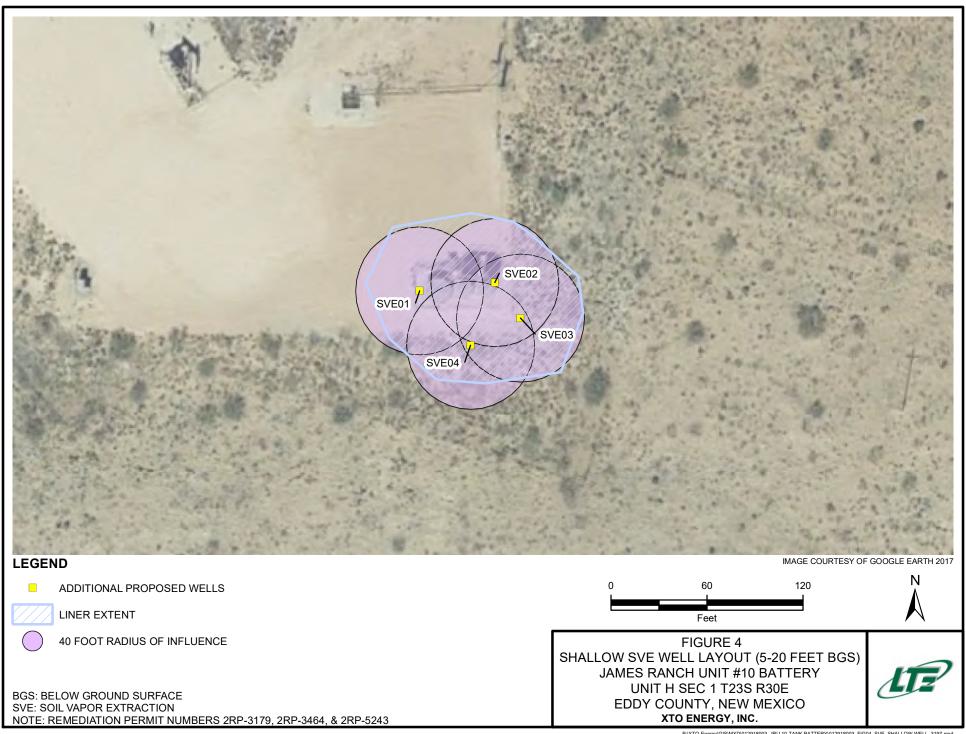








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### TABLE 1 AIR ANALYTICAL RESULTS

# REVISED REMEDIATION WORK PLAN JAMES RANCH UNIT #10 BATTERY REMEDIATION PERMIT NUMBERS 2RP-3179, 2RP-3464, and 2RP-5243 EDDY COUNTY, NEW MEXICO XTO ENERGY, INC.

Sample Name	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl-benzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)	TPH-GRO (mg/L)
SVE-PT-04	10/01/2019	0.0722	0.370	0.0208	0.494	0.957	20.2

#### **Notes:**

BTEX - benzene, toluene, ethylbenzene, and total xylenes

GRO - gasoline range organics

mg/L - milligrams per Liter

TPH - total petroleum hydrocarbons



### TABLE 2 SOIL VAPOR EXTRACTION (SVE) WELL COMPLETIONS

## JAMES RANCH UNIT #10 BATTERY REMEDIATION PERMIT NUMBERS 2RP-3179, 2RP-3464, and 2RP-5243 EDDY COUNTY, NEW MEXICO XTO ENERGY, INC.

SOIL VAPOR EXTRACTION WELL	TOTAL DEPTH (FEET)	BENTONITE WELL SEAL (FEET)	SAND PACK (FEET)	CASING (FEET)	WELL SCREEN (FEET)
SVE-PT-01	45	28	17	25	20
SVE-PT-02	30	18	12	20	10
SVE-PT-03	30	18	12	20	10
SVE-PT-04	30	18	12	15	15
SVE-01	20	10	10	10	10
SVE-02	15	5	10	5	10
SVE-03	20	10	10	10	10
SVE-04	20	10	10	10	10
SVE-05	60	40	20	45	15
SVE-06	65	45	20	50	15

### **Notes:**

Drill with auger rig

0.010 slot screen

SVE-PT wells were installed on September 18, 2019 for the pilot test



District 1 1625 N. French Dr., Hohbs, NM 88240 District III 811 S. First St., Artesia, NM 88210 District III 1000 Rto 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

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

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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-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID		
District RP	2RP-3179	
Facility ID		
Application ID		

### **Release Notification**

### **Responsible Party**

Responsible Party: XTO Energy, Inc					5380		
Contact Name: Kyle Littrell					Contact Telephone: (432)-221-7331		
Contact email: Kyle_Littrell@xtoenergy.com					Incident #: 2RP-3179		
Contact mailing address 522 W. Mermod, Suite 704 Carlsbad, NM 88220							
			Location	of Release S	Source		
atitude 32.3	35568		(NAD 83 in dec	Longitude cimal degrees to 5 dec	-103.827592imal places)		
Site Name JR	RU-10			Site Type	Exploration and Production		
Date Release	Discovered	07/29/15		API# (if ap	pplicable) 30-015-23075		
Unit Letter	Section	Township	Range	Cou	ntv		
Н	1	23S	30E	Ed			
	Materia	(s) Released (Select al	I that apply and attach	calculations or specifi	c justification for the volumes provided below)		
	Materia	l(s) Released (Select al	I that apply and attach	calculations or specifi	iustification for the volumes provided below)		
Crude Oil		Volume Release			Volume Recovered (bbls)		
□ Produced      □	Water	Volume Release			Volume Recovered (bbls) 13		
		Is the concentrat produced water >	ion of dissolved cl >10,000 mg/l?	hloride in the	☐ Yes ☐ No		
	te	Volume Release			Volume Recovered (bbls) 2		
Natural G	as	Volume Release	d (Mcf)		Volume Recovered (Mcf)		
Other (des	cribe)	Volume/Weight	Released (provide	units)	Volume/Weight Recovered (provide units)		
The spill impa	the water to	ransfer pump faile 1000 sq.ft. inside t red with a vacuum	he earthen contain	to overflow. The oment around the o	coupling was replaced the day of the release. Dil and produced water tanks. All of the free		

Form C-141 Page 2

### State of New Mexico Oil Conservation Division

Incident ID	
District RP	2RP-3179
Facility ID	
Application ID	

Was this a major	If YES, for what reason(s) does the responsible party consider this a	major release?
release as defined by 19.15.29.7(A) NMAC?	The release was greater than 25 bbls.	
	The release was greater than 25 bols.	
X Yes No		
	notice given to the OCD? By whom? To whom? When and by what m	
Yes, by Tony Savoie to	o Mike Bratcher/Heather Patterson (NMOCD), and Jim Amos (BLM) on	7/29/2015.
	Initial Response	
The responsible	e party must undertake the following actions immediately unless they could create a safety	hazard that would result in injury
The source of the rele	lease has been stonned.	
	as been secured to protect human health and the environment.	
	nave been contained via the use of berms or dikes, absorbent pads, or oth	er containment devices
	recoverable materials have been removed and managed appropriately.	or containment devices.
	ed above have <u>not</u> been undertaken, explain why:	
	<u> </u>	
Per 19.15.29.8 B. (4) NM	MAC the responsible party may commence remediation immediately after	er discovery of a release. If remediation
has begun, please attach	a narrative of actions to date. If remedial efforts have been successfuent area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information	lly completed or if the release occurred
I hereby certify that the infor	ormation given above is true and complete to the best of my knowledge and unde	erstand that pursuant to OCD rules and
regulations all operators are	e required to report and/or file certain release notifications and perform corrective required. The acceptance of a C-141 report by the OCD does not relieve the operation.	e actions for releases which may endanger
failed to adequately investiga	gate and remediate contamination that pose a threat to groundwater, surface wate	r. human health or the environment. In
addition, OCD acceptance of	of a C-141 report does not relieve the operator of responsibility for compliance v	rith any other federal, state, or local laws
and/or regulations.		
Printed Name: Kyle	le Littrell Title: SH&E Coordinate	or
Signature:	Date: 4/12/2019	
email: Kyle Littrell@xtoe	penergy.com Telephone: 432-221	-7331
OCD Only		
Received by:		
received by:	Date:	

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Incident ID	
District RP	2RP-3179
Facility ID	
Application ID	

### **Site Assessment/Characterization**

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	>150 (ft bgs)			
Did this release impact groundwater or surface water?	☐ Yes ⊠ No			
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ⊠ No			
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ⊠ No			
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ⊠ No			
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ⊠ No			
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ⊠ No			
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ⊠ No			
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ⊠ No			
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ⊠ No			
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes 🛛 No			
Are the lateral extents of the release within a 100-year floodplain?				
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	☐ Yes ⊠ No			
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vercontamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.	rtical extents of soil			
Characterization Report Checklist: Each of the following items must be included in the report.				
<ul> <li>         \infty Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring well         \infty Field data     </li> </ul>	ls.			
☐ Data table of soil contaminant concentration data				
Depth to water determination				
Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release				
<ul><li>☑ Boring or excavation logs</li><li>☑ Photographs including date and GIS information</li></ul>				
☐ Photographs including date and GIS information ☐ Topographic/Aerial maps				
☐ Laboratory data including chain of custody				

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Received by OCD: 10/30/2019 5:53:58 PM Form C-141 State of New Mexico Page 4 Oil Conservation Division

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Incident ID	
District RP	2RP-3179
Facility ID	
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I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.						
Printed Name:	Kyle Littrell_	Title:SH&E Supervisor				
Signature:	Facto	Date: <u>10/30/2019</u>				
email:Kyle_Littrell@xtoenergy.com Telephone:(432)-221-7331						
OCD Only						
Received by:		Date:				

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Incident ID	- U
District RP	2RP-3179
Facility ID	
Application ID	

### **Remediation Plan**

Remediation Plan Checklist: Each of the following items must be included in the plan.
<ul> <li>Detailed description of proposed remediation technique</li> <li>Scaled sitemap with GPS coordinates showing delineation points</li> <li>Estimated volume of material to be remediated</li> <li>Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC</li> <li>Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)</li> </ul>
Deferral Requests Only: Each of the following items must be confirmed as part of any request for deferral of remediation.
Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
Extents of contamination must be fully delineated.
Contamination does not cause an imminent risk to human health, the environment, or groundwater.
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.
Printed Name: Kyle Littrell Title: SH&E Supervisor
Signature: Date:
email:Kyle_Littrell@xtoenergy.com Telephone:(432)-221-7331
OCD Only
Received by: Date:
Approved
Signature: Date:

### **NM OIL CONSERVATION**

ARTESIA DISTRICT

DEC 2 2 2015

Form C-141 Revised August 8, 2011

Submit Copy to appropriate District Office in accordance with 19.15.29 NMAC.

### District 1 1625 N. French Dr., Hobbs, NM 88240; District II B11 S First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aziec, 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

Release Notification and Corrective Action NARIE 25754.257

Address: 522 W. Merrnod, Suite 704 Carlsbad, N.M. 88220 Facility Name: James Ranch Unit #10 Battery Facility Name: James Ranch Unit #10 Battery Facility Type: Exploration and Production  Surface Owner: Federal  Mineral Owner: Federal  API No. 30-015-23075  LOCATION OF RELEASE  Unit Letter Section Township 1980  Range 23S 30F. Feet from the North/South Line Feet from the Eas/West Line County Eddy  Facility Type: Exploration and Production  North South Can Feet Feet Feet Feet Feet Feet Feet Fee	Name of Co	200	Name of Company: BOPCO, L.P. 2/01/37								The second secon	
Facility Name: James Ranch Unit #10 Battery Facility Type: Exploration and Production  Surface Owner: Federal Mineral Owner: Federal API No. 30-015-23075  LOCATION OF RELEASE  Unit Letter Section Township 23S 30R Feet from the 1980 North Feet from the 660 East West Line County Eddy  Latitude 32.335560° Longitude -103.827584°  NATURE OF RELEASE  Type of Release Produced Water Volume of Release 81 bbls Volume Recovered 40 bbls Date and Hour of Occurrence 12/14/2015 time unknown 12/14/2015 11:15 am 17/15S. To Whom? Amy Ruth Date and Hour of Occurrence 12/14/2015 time unknown 12/14/2015 11:15 am 17/15S. To Whom? Mike Bratcher/Heather Patterson (NMOCD), Jim Amos (BLM)  By Whom? Amy Ruth Date and Hour 12/14/2015 4:52 pm Mike Bratcher/Heather Patterson (NMOCD), Jim Amos (BLM)  By Was a Watercourse was Impacted, Describe Fully.* No 1/15 West No 1							Contact: Amy Ruth					
Surface Owner: Federal   Mimeral Owner: Federal   API No. 30-015-23075	Facility Name: James Ranch Unit #10 Rattery											
Unit Letter H							A CONTRACTOR OF THE PARTY OF	z. Laparatan	and Fit			
Unit Letter H. Section I. Township JOFE 1980 M. North/South Line 660 East/West Line 660 M. East/East/East/East/East/East/East/East/	Surface Owi	ner: Fede	ral		Mineral	Owner:	Federal			API No	. 30-015-230	75
Unit Letter H. Section I. Township JOFE 1980 M. North/South Line 660 East/West Line 660 M. East/East/East/East/East/East/East/East/			Co. La T. A.	100	LOC	ATIO	N OF RE	LEASE				
Latitude 32,335560° Longitude -103,827584°  NATURE OF RELEASE  Type of Release Produced Water Volume of Release 81 bbls Volume Recovered 40 bbls Source of Release Tank Overflow  Was Immediate Notice Given?  Was Immediate Notice Given?  Was Immediate Notice Given?  Was Immediate Notice Given?  Was a Watercourse Reached?  Yes No Not Required Paterson (NMOCD), Jim Amos (BLM)  Date and Hour of Occurrence 12/14/2015 11:15 am  If YES, Volume Impacting the Watercourse.  N/A  Describe Cause of Problem and Remedial Action Taken.*  Coupling on water transfer pump failed and pump shut down. Produced water tank filled and overflowed into the battery earthen containment. It was repaired.  Describe Area Affected and Cleanup Action Taken.*  The leak affected 1550 ft' of well pad within the tank containment and standing fluids were recovered.  hereby certify that the Information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules upulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may end whole the action with the transfer perfect of the NMOCD marked as "final Report" does not relieve the operator of lia hould their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human of the environment. The acceptance of a C-141 report by the NMOCD marked as "final Report" does not relieve the operator of lia hould their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human of the environment. In addition, NMOCD Taceptance of a C-141 report does not relieve the operator of the operations have failed to adequately investigate and emediate contamination that pose a threat to ground water, surface water, human of the environment. In addition, NMOCD Taceptance of a C-141 report does not relieve the operator of the operations have failed to addition.		Section							Enst/V	Vest Line	County	
Produced Water    Source of Release   Produced Water   Volume of Release 81 bbls   Volume Recovered 40 bbls	1	1	235	30E	1980	North	TO LOOK	660		177 A 196		
Produced Water    Yourne of Release   Produced Water   Yourne of Release 81 bbls   Yolume Recovered 40 bbls		<b>.</b>										The same
Comparison of Release   Produced Water   Volume of Release   State   Volume Recovered   40 bbls				Lat	itude 32,335	560°	Longitude	-103.827584	0			
Yourne of Release   Produced Water   Yourne of Release   St. bbls   Yourne Recovered   40 bbls		14	L 7		NAT	TURE	OF REL	FASE				
Date and Hour of Occurrence 12/14/2015 time unknown  Vas Immediate Notice Given?    Yes	ype of Relea	ase	Produced W	ater				HISTORY OF THE PARTY.		Volume I	Recovered 40	bhls
Was Immediate Notice Given?  Yes No Not Required If YES, To Whom? Mike Bratcher/Heather Patterson (NMOCD), Jim Amos (BLM)  Was a Watercourse Reached?  Yes No If YES, Volume Impacting the Watercourse.  N/A  Poscribe Cause of Problem and Remedial Action Taken.*  Poupling on water transfer pump failed and pump shut down. Produced water tank filled and overflowed into the battery earthen containment. The acceptance of a Call report does not relieve the operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endual the leath or the environment. The acceptance of a Call report by the NMOCD maked as "Final Report" does not relieve the operator of the outline health or the environment. The acceptance of a Call report by the NMOCD maked as "Final Report" does not relieve the operator of the environment. In addition, NMOCD acceptance of a Call report does not relieve the operator of responsibility for compliance with any olderal, state, or local taws health or gualations.  OIL CONSERVATION DIVISION  Approved by Environmental Specialist:  Amy Q Ruth	ource of Rel	lease Ta	nk Overflow		The Asia	Last I	Date and I	lour of Occurrence				
Yes No Not Required Mike Bratcher/Heather Patterson (NMOCD), Jim Amos (BLM)  By Whom? Amy Ruth  Date and Hour 12/14/2015 4:52 pm  If YES, Volume Impacting the Watercourse.  N/A  Poscribe Cause of Prohlem and Remedial Action Taken.*  Coupling on water transfer pump failed and pump shut down. Produced water tank filled and overflowed into the battery earthen containment. To as repaired.  Poscribe Area Affected and Cleanup Action Taken.*  The leak affected 1550 ft² of well pad within the tank containment and standing fluids were recovered.  The provided into the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules guilations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may enduable health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of the overland water, surface water, human the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any of deral, state, or local laws addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any of deral, state, or local laws addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any of deral, state, or local laws addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any of deral, state, or local laws addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any of deral, state, or local laws addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any of deral, state, or local laws addition.	Vna Immodia	nto Meride	Given?				and the second name of the second		28-2			
Date and Hour 12/14/2015 4:52 pm  Was a Watercourse Reached?  Yes No If YES, Volume Impacting the Watercourse.  N/A  Describe Cause of Problem and Remedial Action Taken.*  Describe Cause of Problem and Remedial Action Taken.*  Describe Area Affected and Cleanup Action Taken.*  The leak affected 1550 ft² of well pad within the tank containment and standing fluids were recovered.  The leak affected 1550 ft² of well pad within the tank containment and standing fluids were recovered.  The leak affected 1550 ft² of well pad within the tank containment and standing fluids were recovered.  The leak affected 1550 ft² of well pad within the tank containment and standing fluids were recovered.  The leak affected 1550 ft² of well pad within the tank containment and standing fluids were recovered.  The leak affected 1550 ft² of well pad within the tank containment and standing fluids were recovered.  The leak affected 1550 ft² of well pad within the tank containment and standing fluids were recovered.  The leak affected 1550 ft² of well pad within the tank containment and standing fluids were recovered.  The leak affected 1550 ft² of well pad within the tank containment and standing fluids were recovered.  The leak affected 1550 ft² of well pad within the tank containment and standing fluids were recovered.  The leak affected 1550 ft² of well pad within the tank containment and standing fluids were recovered.  The leak affected 1550 ft² of well pad within the tank containment and standing fluids were recovered.  The leak affected 1550 ft² of well pad within the tank containment and standing fluids were recovered.  The leak affected 1550 ft² of well pad within the tank containment and standing fluids were recovered.  The leak affected 1550 ft² of well pad within the tank containment and standing fluids were recovered.  The leak affected 1550 ft² of well pad within the tank containment and standing fluids were recovered.  The leak affected 1550 ft² of well pad within the tank containment and standing fluids were recovered.	vuo minuedia	HIE MOTICE C		Yes F	No D Not R	emired			erron (A)	MOCD) 1	m Ames (DI 14	
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Fa Watercourse was Impacted, Describe Fully.*  WA  Describe Cause of Problem and Remedial Action Taken.*  Coupling on water transfer pump failed and pump shut down. Produced water tank filled and overflowed into the battery earthen containment. To as repaired.  Describe Area Affected and Cleanup Action Taken.*  The leak affected 1550 ft² of well pad within the tank containment and standing fluids were recovered.  The leak affected 1550 ft² of well pad within the tank containment and standing fluids were recovered.  The report of well pad within the tank containment and standing fluids were recovered.  The report of well pad within the tank containment and standing fluids were recovered.  The report of well pad within the tank containment and standing fluids were recovered.  The report of the best of my knowledge and understand that pursuant to NMOCD rules regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may end a utility to the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of its or the environment. In addition, NMOCD asceptance of a C-141 report does not relieve the operator of responsibility for compliance with any of its derail, state, or local taws and/or regulations.  OIL CONSERVATION DIVISION  Approved by Environmental Specialist:  Amy of Ruth  Approved by Environmental Specialist:							If VES V	dour 12/14/201:	4:52 p	mi .		
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Describe Cause of Problem and Remedial Action Taken.* Coupling on water transfer pump failed and pump shut down. Produced water tank filled and overflowed into the battery earthen containment. The acceptance of a containment and standing fluids were recovered.  Thereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may end a build their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any of deer all the contamination of the operator of responsibility for compliance with any of deer all the contamination.  OIL CONSERVATION DIVISION  Amy CRuth  Approved by Environmental Specialist:		rce was Im	nacted Descr	the Fully 9	-		_		77007			
rinted Name:  Amy C. Ruth  Amy C. Ruth  Amy C. Ruth  Approved by Environmental Specialist:  Amy C. Ruth  Approved by Environmental Specialist:  Approved by Environmental Specialist:	VA Describe Caus Coupling on v	water transf	em and Remo	dial Action	n Taken.	oduced w	vater tank fill	ed and overflowe	d into th	c battery co	arthen containm	oni. The pun
rinted Name: Amy Ruth Approved by Environmental Specialist:	N/A Describe Caus Coupling on v vas repaired. Describe Area	water transf	em and Remo fer pump faile and Cleanup A	d and pun Action Tak	n Taken.* ip shut down. Pr				d into th	e battery e	arthen containm	oni. The pun
	Describe Cause Coupling on verse repaired. Describe Area the leak affect the leak affect the leak affect the leak affect the could their operations all the could their operations the could their operations.	water transfer a Affected a Affected 1550 ff fy that the it operators or the environment. In a ment. In a	em and Reme fer pump faile and Cleanup / l' of well pad formation gi are required to contract. The ave failed to a	Action Tak within the ven above or report an acceptance dequately	in Taken.*  In shut down. Proceed.*  It is true and compador file certain record C-141 repetitives and record	olete to the	nding fluids to the best of my prifications as a NMOCD me	knowledge and und perform correctarked as "Final R	nderstan	ed that purs	uant to NMOCI	D rules and v endanger r of liability
itle: Remediation-Specialist Approval Date: 12 23 15 Expiration Date: NA	Describe Cause Coupling on votas repaired. Describe Area fee leak affect the leak affect the leak affect the leak affect the could their operations all ublic health of the environmental, state, the environmental, state, the leak affect the environmental of the environmental state, the environmental state, the environmental state, the leak affect the environmental state, the environmental state is the environmental state of the environ	Affected a cted 1550 fl	em and Rema fer pump faile and Cleanup / 12 of well pad of well pad information gi are required to contract. The ave failed to a ddittion, NMO	Action Tak within the ven above or report an acceptance dequately	in Taken.*  In shut down. Proceed.*  It is true and compador file certain record C-141 repetitives and record	of and star	nding fluids of the best of my offications as no NMOCD m the contamination of the contaminati	knowledge and und perform correcarked as "Final Roon that pose a three the operator of OIL CON:	nderstan tive acti eport" d eat to gr esponsi SERV	ed that purs ons for relo oes not reli ound water bility for co	uant to NMOC! ases which may eve the operator surface water, ampliance with	D rules and v endanger r of liability
Trail Address: ACRuth@basspet.com  ate: 12/22/2015 Phone: 432-661-0571  Conditions of Approval: Remediation per O.C.D. Rules & Guidelinested Submit Remediation PROPOSAL NO  SUBMIT REMEDIATION PROPOSAL NO	Describe Cause Coupling on was repaired. Describe Area the leak affect the lea	Affected a cted 1550 file of the environment. In an or local law	em and Remarker pump faile and Cleanup / 12 of well pad are required to contract. The ave failed to a ddition, NMO was and/orregumy of Ruth	Action Tak within the ven above or report an acceptance dequately	in Taken.*  In shut down. Proceed.*  It is true and compador file certain record C-141 repetitives and record	olete to the release no on by the emediate report do	nding fluids on the best of my polifications at NMOCD me contamination on the contamination of the contamination o	knowledge and und perform correctarked as "Final R on that pose a three the operator of the operator operat	nderstan tive acti epont d eat to gr responsi SERV	ed that pursons for releases not reliate ound water billity for control of the co	uant to NMOC! cases which may eve the operator , surface water, ampliance with	D rules and v endanger r of liability

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-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	CHARLEST NO. 1
District RP	2RP-3464
Facility ID	
Application ID	Total Malus Muli

### **Release Notification**

### **Responsible Party**

Responsible Party: XTO Energy, Inc				OGRID: 5380		
Contact Name: Kyle Littrell				Contact Telephone: (432)-221-7331		
Contact email: Kyle_Littrell@xtoenergy.com				Incident	#: 2RP-3464	
Contact mailing address 522 W. Mermod, Suite 704 Carlsbad NM 88220						
			Location of	Release	Source	
atitude 32.3	35560		(NAD 83 in decimal	Longitude degrees to 5 de	: -103.827584	
Site Name Ja	mes Ranch	Unit #10 Battery	A CONTRACTOR	Site Type	Exploration and Production	
Date Release	Discovered	12/14/15		API# (if a	pplicable) 30-015-23075	
Unit Letter	Section	Township	Range	Co	inty	
Н	1	23S	30E		ldy	
urface Owner	: State	⊠ Federal □ Tri	ibal Private (Nam  Nature and V		Release	)
	Materia	l(s) Released (Select all	Nature and V	olume of	ic justification for the volumes provided be	low)
Crude Oil	Materia	l(s) Released (Select all Volume Released	Nature and V	olume of	Volume Recovered (bbls)	low)
☐ Crude Oil	Materia	l(s) Released (Select all Volume Released Volume Released	Nature and V that apply and attach calculated to (bbls) (bbls) 81	olume of	Volume Recovered (bbls)  Volume Recovered (bbls)	low)
Crude Oil	Materia	Volume Released  Volume Released  Volume Released	Nature and V that apply and attach calculated (bbls) i (bbls) 81 on of dissolved chloric	olume of	Volume Recovered (bbls)	low)
Crude Oil	Materia Water	l(s) Released (Select all Volume Released Volume Released	Nature and V that apply and attach calculated (bbls) (bbls) (bbls) 81 on of dissolved chloridated (bbls) (10,000 mg/l?	olume of	Volume Recovered (bbls)  Volume Recovered (bbls)	low)
☐ Crude Oil ☑ Produced	Materia Water	Volume Released Volume Released Volume Released Is the concentrati produced water >	Nature and V that apply and attach calculated to (bbls) the (bbls) 81 on of dissolved chloridation (bbls) 10,000 mg/1?	olume of	Volume Recovered (bbls)  Volume Recovered (bbls)  Volume Recovered (bbls) 40  Yes No	low)
☐ Crude Oil ☑ Produced ☐ Condensa	Materia Water te as	l(s) Released (Select all Volume Released Volume Released Is the concentrati produced water > Volume Released Volume Released	Nature and V that apply and attach calculated to (bbls) the (bbls) 81 on of dissolved chloridation (bbls) 10,000 mg/1?	olume of	Volume Recovered (bbls)  Volume Recovered (bbls)  Volume Recovered (bbls) 40  Yes No  Volume Recovered (bbls)	
☐ Crude Oil ☑ Produced ☐ Condensa ☐ Natural G	Materia Water te as scribe)	l(s) Released (Select all Volume Released Volume Released Is the concentrati produced water > Volume Released Volume Released	Nature and V that apply and attach calculi (bbls) if (bbls) 81 on of dissolved chlorid (bbls) if (bbls) if (bbls) if (bbls)	olume of	Volume Recovered (bbls)  Volume Recovered (bbls) 40  Yes No  Volume Recovered (bbls)  Volume Recovered (bbls)  Volume Recovered (bbls)  Volume Recovered (bbls)	

Form C-141 Page 2

### State of New Mexico Oil Conservation Division

Incident ID	Empero Navi
District RP	2RP-3464
Facility ID	
Application ID	

Was this a major release as defined by	If YES, for what reason(s) does the responsible party consider this a major release?
19.15.29.7(A) NMAC?	The release was greater than 25 bbls.
⊠ Yes □ No	
If YES, was immediate n Yes, immediate notice was	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? as given by Amy Ruth to Mike Bratcher/ Heather Patterson (NMOCD), and Jim Amos (BLM) on 12/14/15.
	Initial Response
The responsible	party must undertake the following actions immediately unless they could create a safety hazard that would result in injury
☐ The source of the rela	ease has been stopped.
The impacted area ha	s been secured to protect human health and the environment.
	we been contained via the use of berms or dikes, absorbent pads, or other containment devices.
	d above have not been undertaken, explain why:
has begun, please attach within a lined containmen	AC the responsible party may commence remediation immediately after discovery of a release. If remediation a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred at area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
regulations all operators are public health or the environm failed to adequately investigated	rmation given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and required to report and/or file certain release notifications and perform corrective actions for releases which may endanger nent. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have ate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws
Printed Name: Kyle	Littrell Title: SH&E Coordinator
Signature:	Date: 4/12/2019
email: Kyle Littrell@xtoo	Telephone:432-221-7331
OCD Only	
Received by:	Date:

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Incident ID		
District RP	2RP-3464	
Facility ID		
Application ID		

### Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
What is the shallowest depth to groundwater beneath the area affected by the release?	>150 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ⊠ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ⊠ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ⊠ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ⊠ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ⊠ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ⊠ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ⊠ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ⊠ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ⊠ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes 🛛 No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ⊠ No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	☐ Yes ⊠ No
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and ver contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.	tical extents of soil
Characterization Report Checklist: Each of the following items must be included in the report.	
Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring well Field data	ls.

Characterization Report Checklist: Each of the following items must be included in the report.
Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
Field data
Data table of soil contaminant concentration data
Depth to water determination
Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
□ Boring or excavation logs
☐ Topographic/Aerial maps
☐ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Received by OCD: 10/30/2019 5:53:58 PM Form C-141 State of New Mexico Page 4 Oil Conservation Division

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Incident ID	
District RP	2RP-3464
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.				
Printed Name: Kyle Littrell_	Title:SH&E Supervisor			
Signature: Ma Facet	Date: _10/30/2019			
email:Kyle_Littrell@xtoenergy.com	Telephone:(432)-221-7331			
OCD Only				
Received by:	Date:			

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Incident ID	
District RP	2RP-3464
Facility ID	
Application ID	

### **Remediation Plan**

Remediation Plan Checklist: Each of the following items must be included in the plan.
<ul> <li>☑ Detailed description of proposed remediation technique</li> <li>☑ Scaled sitemap with GPS coordinates showing delineation points</li> <li>☑ Estimated volume of material to be remediated</li> <li>☑ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC</li> <li>☑ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)</li> </ul>
<u>Deferral Requests Only</u> : Each of the following items must be confirmed as part of any request for deferral of remediation.
Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
Extents of contamination must be fully delineated.
Contamination does not cause an imminent risk to human health, the environment, or groundwater.
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.
Printed Name: Kyle Littrell Title: SH&E Supervisor
Signature: Date:10/30/2019
email:Kyle_Littrell@xtoenergy.com Telephone:(432)-221-7331
OCD Only
Received by: Date:
Approved Deferral Approved Deferral Approved
Signature: Date:

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 Fc, 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-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	NAB1904653072
District RP	2RP-5243
Facility ID	
Application ID	pAB1904652533

### **Release Notification**

### **Responsible Party**

Contact Nam	Responsible Party: XTO Energy, Inc		OGRID	OGRID: 5380	
Contact Name: Kyle Littrell			STATE OF BUILDING	Contact	Telephone: (432)-221-7331
Contact email: Kyle_Littrell@xtoenergy.com			om	Incident	#: 2RP-5243
Contact mail NM 88220	ing address	522 W. Mermod, S	Suite 704 Carlsbad		
atitude 32,3	35540		Location	of Release	<b>Source</b> -103.827513
2 2 2	1 -110		(NAD 83 in deci	imal degrees to 5 de	
Site Name Ja	mes Ranch	Unit #10 Battery		Site Typ	e Bulk Storage and Separation Facility
Date Release	Discovered	01/29/19		API# (if a	applicable) 30-015-23075
Unit Letter	Section	Township	Range	Co	unty
Н	1	238	30E		ddy
	_			ame: BLM	
			Nature and	Volume of	Release
☑ Crude Oil	Material	(s) Released (Select all Volume Released	that apply and attach clickly 1 (bbls) 9.8	alculations or specif	Volume Recovered (bbls) 7
Crude Oil		Volume Released  Volume Released	l (bbls) 9.8	alculations or speci	fic justification for the volumes provided below)
		Volume Released Volume Released Is the concentrati	l (bbls) 9.8 l (bbls) on of dissolved ch		Volume Recovered (bbls) 7
	Water	Volume Released	i (bbls) 9.8 i (bbls) on of dissolved ch 10,000 mg/l?		Volume Recovered (bbls)  Volume Recovered (bbls)
Produced	Water	Volume Released  Volume Released  Is the concentration produced water >	d (bbls) 9.8 d (bbls) on of dissolved ch d (bbls)		Volume Recovered (bbls)  Volume Recovered (bbls)  Volume Recovered (bbls)  Volume Recovered (bbls)
☐ Condensa	Water te	Volume Released  Is the concentrati produced water > Volume Released  Volume Released	d (bbls) 9.8 d (bbls) on of dissolved ch d (bbls)	loride in the	Volume Recovered (bbls)
Produced Condensa Natural G Other (des	Water  te as scribe)  case nloading the	Volume Released Is the concentratiproduced water > Volume Released Volume Released Volume/Weight Is etanks by oil haule	d (bbls) 9.8 d (bbls) on of dissolved chello,000 mg/l? d (bbls) d (Mcf) Released (provide ters, an overload of	loride in the units)	Volume Recovered (bbls)  Volume Recovered (Mcf)

Form C-141 Page 2

### State of New Mexico Oil Conservation Division

Incident ID	
District RP	2RP-5243
Facility ID	SAGrammatica per esta
Application ID	

Was this a major release as defined by	If YES, for what reason(s) of	does the responsible party consider this a major release?
19.15.29.7(A) NMAC?		
☐ Yes ⊠ No		
If YES, was immediate n	Lotice given to the OCD? By v	whom? To whom? When and by what means (phone, email, etc)?
		Initial Response
The responsible	party must undertake the following ac	ctions immediately unless they could create a safety hazard that would result in injury
The source of the rele	ease has been stopped.	
		nan health and the environment.
Released materials ha	ve been contained via the use	of berms or dikes, absorbent pads, or other containment devices.
		n removed and managed appropriately.
If all the actions described	l above have not been underta	aken, explain why:
D 10 15 20 8 D (4) 3 D (	101	
has begun, please attach a	a narrative of actions to date.	of commence remediation immediately after discovery of a release. If remediation If remedial efforts have been successfully completed or if the release occurred (a) NMAC), please attach all information needed for closure evaluation.
I hereby certify that the infor	mation given above is true and co	omplete to the best of my knowledge and understand that pursuant to OCD rules and
public health or the environm	nent. The acceptance of a C-141	ain release notifications and perform corrective actions for releases which may endanger report by the OCD does not relieve the operator of liability should their operations have
addition, OCD acceptance of and/or regulations.	a C-141 report does not relieve t	that pose a threat to groundwater, surface water, human health or the environment. In the operator of responsibility for compliance with any other federal, state, or local laws
Printed Name: Kyle	Littrell	Title: SH&E Coordinator
Signature:	Vilal	Date: 4/12/2019
email: Kyle Littrell@xtoe	nergy.com	Telephone:432-221-7331
OCD Only		
OCD Only		
Received by:		Date:
The second secon	A Williams I San	

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Incident ID	
District RP	2RP-5243
Facility ID	
Application ID	

### **Site Assessment/Characterization**

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>&gt;150</u> (ft bgs)		
Did this release impact groundwater or surface water?	☐ Yes ⊠ No		
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ⊠ No		
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ⊠ No		
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ⊠ No		
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ⊠ No		
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ⊠ No		
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ⊠ No		
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ⊠ No		
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ⊠ No		
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes 🛛 No		
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ⊠ No		
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	☐ Yes ⊠ No		
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.			
Characterization Report Checklist: Each of the following items must be included in the report.			
<ul> <li>         Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring well</li></ul>	ls.		
☐ Data table of soil contaminant concentration data			
Depth to water determination  Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release			
<ul> <li>✓ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release</li> <li>✓ Boring or excavation logs</li> <li>✓ Photographs including date and GIS information</li> </ul>			
Topographic/Aerial maps			

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

□ Laboratory data including chain of custody

Received by OCD: 10/30/2019 5:53:58 PM Form C-141 State of New Mexico Page 4 Oil Conservation Division

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Incident ID	
District RP	2RP-5243
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Byle\_Littrell@xtoenergy.com Date: 10/30/2019

email: Kyle\_Littrell@xtoenergy.com Telephone: (432)-221-7331

OCD Only

Received by: Date:

Page 36 of 65

Incident ID		
District RP	2RP-5243	
Facility ID		
Application ID		

### **Remediation Plan**

Remediation Plan Checklist: Each of the following items must be included in the plan.
<ul> <li>Detailed description of proposed remediation technique</li> <li>Scaled sitemap with GPS coordinates showing delineation points</li> <li>Estimated volume of material to be remediated</li> <li>Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC</li> <li>Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)</li> </ul>
Deferral Requests Only: Each of the following items must be confirmed as part of any request for deferral of remediation.
Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
Extents of contamination must be fully delineated.
Contamination does not cause an imminent risk to human health, the environment, or groundwater.
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.
Printed Name: Kyle Littrell Title: SH&E Supervisor
Signature: Date:10/30/2019
email:Kyle_Littrell@xtoenergy.com Telephone:(432)-221-7331
OCD Only
Received by: Date:
Approved
Signature: Date:



	P			T Envi	ronmenta	d Inc.			Identifier:		Date: 9 118/19
	t 2" one-right No.			508 Wes	st Stevens	Street	,		SVE - PTO1 Project Name:		RP Number: 2/1-7421/,
2	5				New Mexic Engineering				JRU10		JRP-3179,
		LITHO	LOGIC	/ SOI	L SAMPI	LING LO	)G		Logged By: WM		Method: 5.4.2
Lat/Long	g:				Field Scree	ning: CHLC	ORIDES, P	D.	Hole Diameter: 6"		Total Depth: 45
Commer	ts: D'SC	MI	, see	d to	1' ab	ی مد	creni.	5 , Be-	trate chips by	doral)	to surface.
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type		Litho	ology/Rem	arks
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1					24	Ŧ					
Service of the servic		1125-				1					
V	592	7263	V		25	Ц	<u></u>				

LITHO at/Long:	508 Wes Carlsbad, N Compliance · E	ronmental, Inc. t Stevens Street lew Mexico 882 ngineering · Remo SAMPLING 1 Field Screening: Cl	20 ediation LOG	Identifier:  SVE-P7016 A. B.  Project Name:  TRU10  Logged By: IMA  Hole Diameter: 6"	Date: 9 / 18/19  RP Number: 2R1-3104  2R1-3179, 2R1-3104  Method: Sonte  Total Depth: 45'	
Moisture Content Chloride (ppm) Vapor (ppm)	Staining Sample #	Depth Sampl (ft. bgs.) Depth		Lithology/l	11	1/
352 5,000 352 5,000 (128 5,000 (128 5,000)		26	SP-S -	Clusts size mercese	from Som Zem.  The som - Zem.  The planting non- in, wy odor, well	Rempled To The Total Tot

U Engrey	LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220  Compliance · Engineering · Remediation								Identifier:  SVE - PTOZ  Project Name:  SRV 10	Date RP 2R1	9 18/19 Number 288-3404 P-3179, 288-3401,	
		LITHO			L SAMP				Logged By: WM		hod: Son't	1
LavLong	ţ.				Field Scree			ID.	Hole Diameter:		d Depth: 30	1
Commen	11S: 7º	PIN	0' **		Canal I		. /	7-	to Sertine		0	$\parallel$
		1		1	Ina 1	ones		34 46	to serve		-	$\parallel$
Moisture	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth			Litholo	gy/Remark	5	
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		1387			3		SW	25-5	SAND, brown- grant + cobbi well staded,	ten dry	f-c some	
					4		02		grand + cobbi	12,005	tain, wy odor	
	2492	101.8			5	-		4-6	well graded,			
	7.				6	-	CCHE	2-8	CACICHE WY SAM	ed + tobs	ble, ton, day, ac	
									Stan, no odo	or, well	emsolidated.	
		13.1			7 -			, ,				
					8 -		2.93	8-25	SANDSTONE,	- הממק	red, dry, med- dos, well	
			-		9		31-3		time, no sten	1,000	dos well	
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RY			San Care		23			J	nighty forchard,	lov pl	estaity, non-	
					24				columne, no st	in , 10	odor, well	
4 K	128	3.7	1		25				Cerented			

25]		Ca	508 We rlsbad,	ironment st Stevens New Mexi Engineering	Street co 88220			Identifier: SVE - Project Name: JRV 1		Date: 8 /18 /19  RP Number: 228 - 3404, 240-3179, 288-3164
	LITHO	LOGIC	: /SOI	L SAMP	LING LO	OG		Logged By:	WM	Method: Sep., c
at Long:				Field Scree	ning: CHU	ORIDES, P		lole Diameter		Total Depth: To
omments:										
Moisture Content Chloride	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type			Lithology/l	Remarks
day		that		26	4	a-s			···	
				27						
	2,517			28			27'-	odor, b	rolan del	I pipe.
				29	-					
1 /128	20.2	4		30						
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I Emire			Ca	508 We rlsbad,	rironment st Steven: New Mexi	Street co 88220		Identifier: SVE-CT03 Project Name:	Date: 4/8/19  RP Number:	
		TITUO		Viance · Engineering · Remediation  SRU-10  Lossed By: LIM				1 1 110	2RP-3179 Method: Seric	
avLong	:	Little	LOGIC	7501	Field Scree	ning DT	11-	Hole Diameter: 61n	Total Depth: 30f4	
ommen	u:/A					(11)	,01	01/1	NAT.	
	TUP	<del>î</del> Selec	<u>N</u>							
Moisture	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Re	marks	Cop
707			NONE		1			0-145 Fire SAND, some	State 1. Truce Clay	St
1			1		2		SU	Light Botan, dry, No	stain, No asor	1)
					3	<u> </u>		-low flostidty		
					4			- non-cohesive		1
	980	1740			5	H				1
	100	1.70			6					1
1					7			140°C 0 150 110 0		
		1747			8	FI .		- Moist, Darkencolor 7.5-14.5cobbes, incressed grad (Some lafew)	vel content	
		"			9	1		(Some to few)		
	980	1531			10	1				
1	.00	اوما			11	1				
					12	Ð				
		3247			13					
					14		V	HS-17		
	120	3783			15		ZP	-Fine Sand, red/Brown, dr	1, No slain, a odor	K
					16		1	15-17 inscending coulded of g	lavel (some to leas)	
					17		V			K
		188,3			18		4.5	175-30 Claysione, highly fra	tured, block, Rd/Or	
					19		1	dry, No stain, Odor		K
	120	5,000			20			-10W Plasficity		
	120	טייקט			21			- Non-cohesive		1-
					22					1.
		4.178			23					
1,					1					1.
//	22		1		24		(1)			17:
	29 19	,ox)	1/		25		V			1

17	E W		C	LT Env	ironment st Stevens New Mexi	al, Inc.		Identifier: SVE-PT03	Date: V13/19		
2	5				ivew iviexi Engineering			Project Name;	RP Number:		
		LITHO			L SAMPI			JRV-10	2RP-3179		
avlong:		Lilli	i.ogic	7301	Field Scree	ning: OT	1 1	Hole Diameter: / /	Method Sonic Total Depth: 30 F4		
Comment	is:				<u> </u>	TLI	1,01	Hole Diameter: Lin	30 <sub>F4</sub>		
Moisture	Chloride (ppm) Vapor (ppm) Staining				Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology	/Remarks		
OCY			None		26						
1		3832			27						
1.					28	H					
A		2000	11		29	1	12-5				
	(128	3872	A		30	<u> </u>					
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					49	1					
					50	+					

Control Chloride Chloride Chloride	LITHO	Complia	08 West sbad, No ance · En / SOIL	SAMPL Field Screen PID	Street to 88220 Remedia ING LO	ation  G  We S		well
Dry C12	8 170.4	Done		1		SW	0-41 Hand agger, not lossed  4-19 Fine to median sandpointh gravel, some rabbles, light brown, dry, no shin, odor	Stick
83	5,000 K 5,000	Shin None		7 8 9 10 11 12		Six	-6" of skin at 8.5"  - Skin from 15'-19'  19-25 Chycy fine to notion strived sand with smell some rubbles, dark brown, must, non cohesive, low plasticity, odor, no strin  -Dry at 22.5	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
23	4387			14 15 16 17 18				**** 111111111111111111111111111111111
100 t 27		None		20 21 22 23 24 25	+ + + + + + + + + + + + + + + + + + +	SW		Charles Agreed to

LT. 25	ment he			08 We	ironmenta st Stevens New Mexic	Stroot	)	Identifier: SUE-FTC4 Project Name:	Dute: 9/12/13 RP Number:	
	<u> </u>		Comp	liance ·	Engineering	Remed	iation	JR4 #10	2RP-3179	
Lat/Long:		LITHO	LOGIC	/SOI	LSAMPI			Logged By: JE	Method: Same	
Comments					Field Scree	Chlorid	e Strin	Hole Diameter:	Total Depth: 301	4
										_
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology	Remarks	Well Completion
200		3200	Note		27 28		ccs	25-30 Claystone, blocky, red/brown non ruheive	highly fractured, if day, low plasticity	
4	7128	300	1		30					13.2
					31					7/1/11
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					49	#				
					50	<u>tl</u>				

# SOIL VAPOR EXTRACTION PILOT TEST FIELD MEASUREMENTS XTO ENERGY REMEDIATION PROJECT JRU 10 TANK BATTERY

Site: JRU 10	Personnel:	Lynda Laumbach	Test Start Time:	9:50
	Date:	10/1/2019	Test End Time:	12:20
SVE Well DTF	/DTW Before Test:		SVE Well DTP/DTW After:	

		Test Extraction V	Vell Name: SVE-P	T-01				Monitoring Points		1
SVE	SVE	SVE	VOC			<b></b>	SVE-PT-04	SVE-PT-03	SVE-PT-02	
Vacuum	Velocity	Flowrate	Stack	Tempera	ature (°F)	Time (minutes)	Dista	nce From Test Well		
(IWC)	(fm)	(cfm)	(ppm)				18	25	40	
				Manifold	Ambient			Vacuum (IWC)		Air Sample Collected?
Static			208			0		0	0	
10	170	3.7	1506	78.9	79.1	15	0.125	0.175	0.14	
10	175	3.8	1216	78.4	78	30	0.125	0.175	0.14	
20	343	7.5	1557	78.0	78.4	55	0.18	0.22	0.14	
20	338	7.4	1412	79.6	79.8	70	0.18	0.19	0.14	
20	342	7.5	1270	81.4	81.4	85	0.175	0.19	0.14	
50	640	14.0	1009	83.2	86.7	110	0.28	0.3	0.15	
50	627	13.7	1184	83.2	83.4	125	0.28	0.3	0.16	
Post (Static) Test		155				135	0	0	0	
Maximur	n Change:									

Notes:

cfm - cubic feet per minute ppm - parts per million DTW - Depth To Water IWC - inches water column SVE - soil vapor extraction DTP - Depth to Product



### SOIL VAPOR EXTRACTION PILOT TEST FIELD MEASUREMENTS XTO ENERGY REMEDIATION PROJECT JRU 10 TANK BATTERY

Site: JRU 10	Personnel:	Lynda Laumbach	Test Start Time:	13:00
	Date:	10/1/2019	Test End Time:	15:15
SVE Well DTF	P/DTW Before Test:		SVE Well DTP/DTW After:	

		Test Extraction W	/ell Name: SVE-P	T-04				Monitoring Points		1
SVE	SVE	SVE	VOC			Time	SVE-PT-01	SVE-PT-03	SVE-PT-02	
Vacuum	Velocity	Flowrate	Stack	Tempera	ature (°F)	(minutes)		ance From Test Well		
(IWC)	(fm)	(cfm)	(ppm)			(111114005)	18	33	56.5	
				Manifold	Ambient			Vacuum (IWC)	1	Air Sample Collected?
Static						0		0	0	
10	2733	60	1478	79.6	84.5	15	4.5	6	2.5	
10	2765	60	1556	80.2	85.9	30	4.5	6	2.5	
20	5687	124	1380	77.5	83.6	45	9	11.5	5	
20	5683	124	1321	78.7	85	60	9	11.5	5	Yes, 14:50
35	E	Е	1629	77.8	85.0	85	10.5	13	5.5	
35	Е	Е	1584	77.5	84.8	100	10.5	13	5.5	
Post (Static) Test						120	0	0	0	
	n Change:									

Notes:

cfm - cubic feet per minute

IWC - inches water column

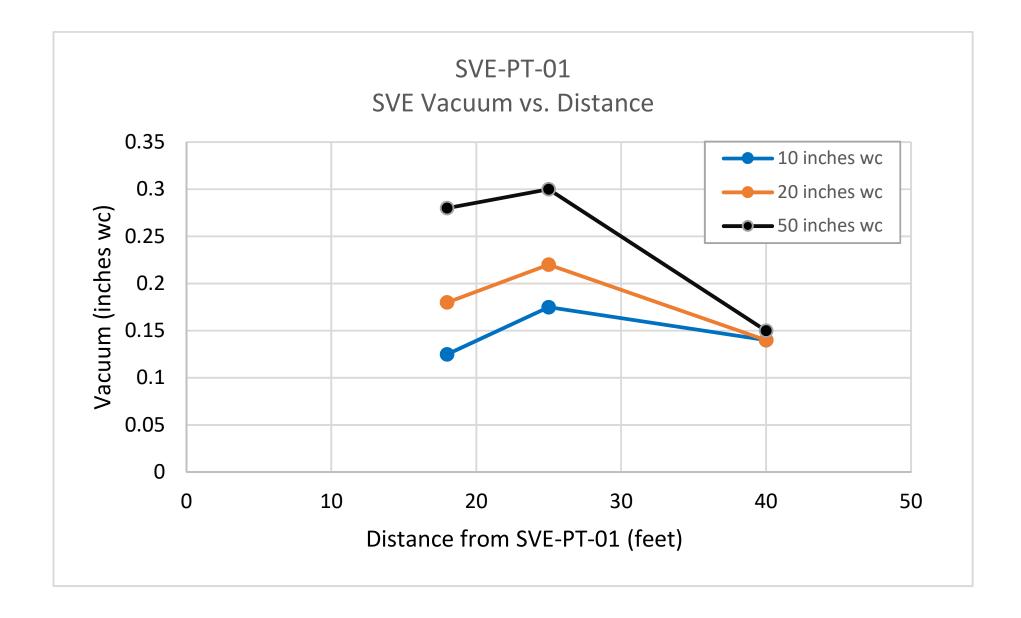
ppm - parts per million

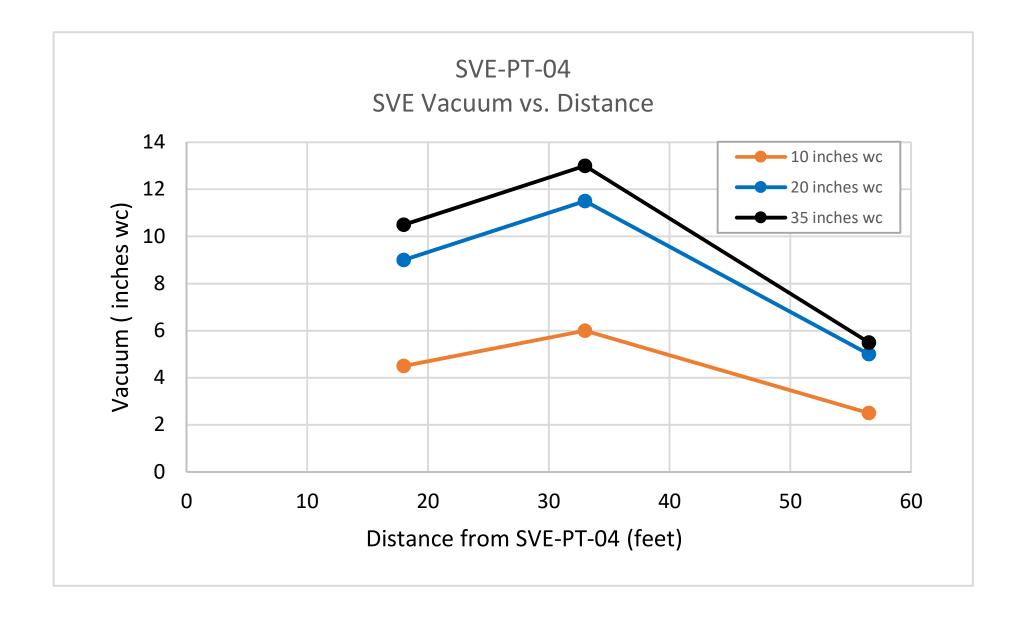
DTW - Depth To Water

SVE - soil vapor extraction DTP - Depth to Product

E - Exceeds anenomenter range: 15,000 fm







### **Analytical Report 638711**

for

LT Environmental, Inc.

Project Manager: Dan Moir
JRU 10 Tank Battery
012918003
07-OCT-19

Collected By: Client



### 1089 N Canal Street Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054) Oklahoma (2017-142), North Carolina (681)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



07-OCT-19

Project Manager: **Dan Moir LT Environmental, Inc.**4600 W. 60th Avenue
Arvada, CO 80003

Reference: XENCO Report No(s): 638711

JRU 10 Tank Battery

Project Address: Rural Eddy County

### Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 638711. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 638711 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Jessica Vramer

**Project Assistant** 

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America



### **Sample Cross Reference 638711**

### LT Environmental, Inc., Arvada, CO

JRU 10 Tank Battery

Sample Id	Matrix	<b>Date Collected</b>	Sample Depth	Lab Sample Id
SVE-PT-04	A	10-01-19 14:50		638711-001

### **CASE NARRATIVE**

Client Name: LT Environmental, Inc. Project Name: JRU 10 Tank Battery

 Project ID:
 012918003
 Report Date:
 07-OCT-19

 Work Order Number(s):
 638711
 Date Received:
 10/02/2019

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None



### Certificate of Analysis Summary 638711

LT Environmental, Inc., Arvada, CO

Project Name: JRU 10 Tank Battery

Date Received in Lab: Wed Oct-02-19 08:35 am

Report Date: 07-OCT-19 Project Manager: Jessica Kramer

**Project Id:** 012918003 **Contact:** Dan Moir

**Project Location:** Rural Eddy County

	Lab Id:	638711-00	1			
	Field Id:	SVE-PT-04	4			
Analysis Requested	Depth:					
	Matrix:	AIR				
	Sampled:	Oct-01-19 14	:50			
BTEX by EPA 8021B	Extracted:	Oct-04-19 11	:00			
SUB: T104704295-19-22	Analyzed:	Oct-04-19 14	:00			
	Units/RL:	ppmv	RL			
Benzene		22.6 +	3.13			
Toluene		98.3 +	2.65			
Ethylbenzene		4.79 +	2.30			
m,p-Xylenes		98.2 +	4.61			
o-Xylene		15.6 +	2.30			
Total Xylenes		114 +	2.30			
Total BTEX		239 +	2.30			
TPH GRO by EPA 8015 Mod.	Extracted:	Oct-04-19 11	:00			
SUB: T104704295-19-22	Analyzed:	Oct-04-19 14	:00			
	Units/RL:	ppmv	RL			
TPH-GRO		5170 +	128			

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer Project Assistant



### **Certificate of Analytical Results 638711**

### LT Environmental, Inc., Arvada, CO

JRU 10 Tank Battery

Sample Id: SVE-PT-04 Matrix:

Air

Date Received:10.02.19 08.35

Lab Sample Id: 638711-001

Date Collected:

10.01.19 14.50

Prep Method:

SW5030B

Analytical Method:

BTEX by EPA 8021B

% Moisture:

Tech:

Analyst: Seq Number: AKC

AKC

3103365

Date Prep:

10.04.19 11.00

SUB: T104704295-19-22

Parameter	Cas Number	Result mg/m3	RL mg/m3	Result ppmv	RL ppmv		Analysis Date	Flag	Dil
Benzene	71-43-2	72.2	10.0	22.6	3.13		10.04.19 14.00	+	10
Toluene	108-88-3	370	9.98	98.3	2.65		10.04.19 14.00	+	10
Ethylbenzene	100-41-4	20.8	9.98	4.79	2.30		10.04.19 14.00	+	10
m,p-Xylenes	179601-23-1	426	20.0	98.2	4.61		10.04.19 14.00	+	10
o-Xylene	95-47-6	67.7	9.98	15.6	2.30		10.04.19 14.00	+	10
Total Xylenes	1330-20-7	494	9.98	114	2.30		10.04.19 14.00	+	10
Total BTEX		957	9.98	239	2.30		10.04.19 14.00	+	10
				%					
Surrogate				Recovery	Units	Limits	Analysis Date Fla	g	
4. Duom of luonah angan	_			05	0/	70 125	10.04.10.14.00		

4-Bromofluorobenzene 70-135 10.04.19 14.00 95

Analytical Method:

TPH GRO by EPA 8015 Mod.

Prep Method: % Moisture:

SW5030B

Tech:

AKC

Analyst:

AKC

Date Prep:

10.04.19 11.00

Seq Number:

3103363

SUB: T104704295-19-22

Parameter	Cas Number	Result mg/m3	RL mg/m3	Result ppmv	RL ppmv		Analysis	Date	Flag	Dil
TPH-GRO	8006-61-9	20200	501	5170	128		10.04.19	14.00	+	10
				%						
Surrogate				Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene				95	%	60-140	10.04.19 14.00			



### Flagging Criteria

- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- **B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- **D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F RPD exceeded lab control limits.
- J The target analyte was positively identified below the quantitation limit and above the detection limit.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- **H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- **K** Sample analyzed outside of recommended hold time.
- **JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit SDL Sample Detection Limit LOD Limit of Detection

PQL Practical Quantitation Limit MQL Method Quantitation Limit LOQ Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample BLK Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample BKSD/LCSD Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate MS Matrix Spike MSD: Matrix Spike Duplicate

- + NELAC certification not offered for this compound.
- \* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

<sup>\*\*</sup> Surrogate recovered outside laboratory control limit.



### QC Summary 638711

### LT Environmental, Inc.

JRU 10 Tank Battery

Analytical Method:BTEX by EPA 8021BPrep Method:SW5030BSeq Number:3103365Matrix: AirDate Prep:10.04.19

MB Sample Id: 7687502-1-BLK LCS Sample Id: 7687502-1-BKS

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec		Limits		Units	Analysis Date	Flag
Benzene	< 0.313	31.3	29.2	93		70-125		ppmv	10.04.19 11:57	
Toluene	< 0.133	26.5	22.8	86		70-125		ppmv	10.04.19 11:57	
Ethylbenzene	< 0.115	23.0	19.7	86		70-125		ppmv	10.04.19 11:57	
m,p-Xylenes	< 0.230	46.1	40.4	88		70-125		ppmv	10.04.19 11:57	
o-Xylene	< 0.115	23.0	19.2	83		70-125		ppmv	10.04.19 11:57	
Surrogate	MB %Rec	MB Flag		CS Rec	LCS Flag		Limits	Units	Analysis Date	
4-Bromofluorobenzene	100		1	04			70-135	%	10.04.19 11:57	

Analytical Method: BTEX by EPA 8021B
Seg Number: 3103365 Matrix: Air Date Prep: 10.04.19

 Seq Number:
 3103365
 Matrix:
 Air
 Date Prep:
 10.04.19

 Parent Sample Id:
 638711-001
 MD Sample Id:
 638711-001 D

Parameter	Parent Result	MD Result	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	22.6	27.2	18	35	ppmv	10.04.19 14:13	
Toluene	98.3	117	17	35	ppmv	10.04.19 14:13	
Ethylbenzene	4.79	5.37	11	35	ppmv	10.04.19 14:13	
m,p-Xylenes	98.2	119	19	35	ppmv	10.04.19 14:13	
o-Xylene	15.6	19.5	22	35	ppmv	10.04.19 14:13	
Total Xylenes	114	139	NC	35	ppmv	10.04.19 14:13	
Total BTEX	239	288	NC	35	ppmv	10.04.19 14:13	

Analytical Method:TPH GRO by EPA 8015 Mod.Prep Method:SW5030BSeq Number:3103363Matrix: AirDate Prep:10.04.19

MB Sample Id: 7687498-1-BLK LCS Sample Id: 7687498-1-BKS

MB LCS LCS Units Spike Limits Analysis Flag **Parameter** Result Amount Result %Rec Date TPH-GRO 179 168 65-115 10.04.19 11:57 < 6.39 ppmv LCS MB LCS Limits MB Units Analysis **Surrogate** %Rec Flag %Rec Flag Date 10.04.19 11:57 100 104 60-140 4-Bromofluorobenzene %

Analytical Method:TPH GRO by EPA 8015 Mod.Prep Method:SW 5030BSeq Number:3103363Matrix: AirDate Prep:10.04.19

 Seq Number:
 3103363
 Matrix:
 Air
 D

 Parent Sample Id:
 638711-001
 MD Sample Id:
 638711-001 D

Parameter Parent MD %RPD RPD Limit Units Analysis Flag
Result Result To the Control of the Contr

TPH-GRO 5170 5570 7 35 ppmv 10.04.19 14:13

MS/MSD Percent Recovery [D] = 100\*(C-A)/B LCS = Laboratory Control Sample MS = Matrix Spike Relative Percent Difference RPD = 200\*(C-E)/(C+E) A = Parent Result B = Spike Added LCS/LCSD Recovery [D] = 100\*(C)/[B] C = MS/LCS Result D = MSD/LCSD % Rec Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample) E = MSD/LCSD Result



# AIR SAMPLING CHAIN OF CUSTODY

Stafford,Texas (281-240-4200)
Dallas, Texas (214-902-0300)

San Antonio, Texas (210-509-3334) Lubbock, TX (806-794-1296) Midlan

Midland, TX (432-704-5251)

Phoenix, Arizona (480-355-0900)

438710

El Paso, TX (915-585-3443)

(4) Relinquished By: (3)30 elinquished By: (2) 3:58 PM (2) 3:58 PM (2) 2) 3:58 PM (2) 3:58 PM Received by Sampler(s): Lynda Laumbach P.O. No.: Task#002 Site Location: Rural Eddy County, NM Project Name & No.: JRU 10 Tank Battery , 012918003 Email: dmoir@ltenv.com Project Contact: Dan Moir Company Name: XTO Energy SVE-PT-64 Field ID/Point of Collection ient/Project Information Date/Time Date/Time Date/Time Date/Tim 10/2/219 Contact: Kyle Littrell Company: LT Environmental, Inc 10/01/2019 Start Date 14:40 Start Time Ph.No.: (432) 238-4292 Email: klittrell@xtoenergy.com (4) Received By: (3) Received By: (2) Received By: (1) Received By 10/01/21/01 Stop Date Stop -05:41 Time I = Indoor SV = Soil Vapor AIR TYPE A = Ambient Special Requests/Instructions: 7 Day 5 Day Contract TAT Sampling Equipment Information Canister ID Flow Regulator ID Requested TAT Canister Pressure in field 3 Day 2 Day 1 Day "Hg) Start Canister Pressure in field ("Hg) Stop Need By: Incoming Canister Same Day Pressure ("Hg) Lab BTEX **Analysis Requested** LSO UPS FedEx Page ipping Information Tracking No. Other: 9 Remarks

Final 1.000

### **Inter-Office Shipment**

Page 1 of 1

IOS Number 49169

Date/Time: 10/02/19 11:52

Created by: Elizabeth Mcclellan

Please send report to: Jessica Kramer

Lab# From: Carlsbad

Delivery Priority:

Address: 1089 N Canal Street

Lab# To: Dallas

Air Bill No.:

E-Mail: jessica.kramer@xenco.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
638711-001	A	SVE-PT-04	10/01/19 14:50	SW8015GRO	TPH GRO by EPA 8015 Mod.	10/08/19	10/04/19 14:50	JKR	PHCG	
638711-001	A	SVE-PT-04	10/01/19 14:50	SW8021B	BTEX by EPA 8021B	10/08/19	10/15/19	JKR	BR4FBZ BZ BZME EBZ X	

### **Inter Office Shipment or Sample Comments:**

Relinquished By:

Elizabeth McClellan

Date Relinquished: 10/02/2019

Received By:

Whitney Capps

Date Received: <u>10/03/2019 09:23</u>

Cooler Temperature: 22.8



### **XENCO Laboratories**

### **Inter Office Report- Sample Receipt Checklist**

Sent To: Dallas IOS #: 49169

Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used: XDA

Elizabeth McClellan **Date Sent:** 10/02/2019 11:52 AM Sent By:

Received By: Whitney Capps	<b>Date Received:</b> 10/03/2019	09:23 AM	
	Sample Receipt Check	klist	Comments
#1 *Temperature of cooler(s)?		22.8	
#2 *Shipping container in good conditi	on?	Yes	
#3 *Samples received with appropriate	e temperature?	Yes	
#4 *Custody Seals intact on shipping of	container/ cooler?	No	
#5 *Custody Seals Signed and dated f	or Containers/coolers	N/A	
#6 *IOS present?		Yes	
#7 Any missing/extra samples?		No	
#8 IOS agrees with sample label(s)/ma	atrix?	Yes	
#9 Sample matrix/ properties agree wi	th IOS?	Yes	
#10 Samples in proper container/ bottl	e?	Yes	
#11 Samples properly preserved?		Yes	
#12 Sample container(s) intact?		Yes	
#13 Sufficient sample amount for indic	ated test(s)?	Yes	
#14 All samples received within hold to	me?	Yes	
* Must be completed for after-hours d NonConformance:	elivery of samples prior to pla	acing in the refrigerator	
Corrective Action Taken:			
	Nonconformance Docu	ımentation	
Contact:	Contacted by :	Date:	
Checklist reviewed by:	Whitney Capps	Date: 10/03/2019	



## XENCO Laboratories Prelogin/Nonconformance Report- Sample Log-In



Client: LT Environmental, Inc.

Date/ Time Received: 10/02/2019 08:35:00 AM

Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient

Work Order #: 638711 Temperature Measuring device used : T-NM-007

	Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?		20	
#2 *Shipping container in good condition?		Yes	
#3 *Samples received on ice?		Yes	
#4 *Custody Seals intact on shipping conta	iner/ cooler?	Yes	
#5 Custody Seals intact on sample bottles?		Yes	
#6*Custody Seals Signed and dated?		Yes	
#7 *Chain of Custody present?		Yes	
#8 Any missing/extra samples?		No	
#9 Chain of Custody signed when relinquis	hed/ received?	Yes	
#10 Chain of Custody agrees with sample I	abels/matrix?	Yes	
#11 Container label(s) legible and intact?		Yes	
#12 Samples in proper container/ bottle?		Yes	
#13 Samples properly preserved?		Yes	
#14 Sample container(s) intact?		Yes	
#15 Sufficient sample amount for indicated	test(s)?	Yes	
#16 All samples received within hold time?		Yes	
#17 Subcontract of sample(s)?		Yes	Subbed to Dallas
#18 Water VOC samples have zero headsp	pace?	N/A	

* Must be	completed for after-hours de	elivery of samples prior to placi	ng in the refrigerator
Analyst:		PH Device/Lot#:	
	Checklist completed by:	Elizabeth McClellan	Date: 10/02/2019
	Checklist reviewed by:	Jessica Vramer  Jessica Kramer	Date: 10/04/2019

Page 64 of 65

Incident ID	nAPP2108523564
District RP	
Facility ID	
Application ID	

### Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: Each of the following items must be included in the closure report.

☐ A scaled site and sampling diagram as described in 19.15.29.11 N	NMAC
Photographs of the remediated site prior to backfill or photos of must be notified 2 days prior to liner inspection)	the liner integrity if applicable (Note: appropriate OCD District office
Laboratory analyses of final sampling (Note: appropriate ODC D	vistrict office must be notified 2 days prior to final sampling)
Description of remediation activities	
I hereby certify that the information given above is true and complete the and regulations all operators are required to report and/or file certain remay endanger public health or the environment. The acceptance of a Coshould their operations have failed to adequately investigate and remediate human health or the environment. In addition, OCD acceptance of a Compliance with any other federal, state, or local laws and/or regulation restore, reclaim, and re-vegetate the impacted surface area to the conditated accordance with 19.15.29.13 NMAC including notification to the OCD	C-141 report by the OCD does not relieve the operator of liability liate contamination that pose a threat to groundwater, surface water, c-141 report does not relieve the operator of responsibility for ns. The responsible party acknowledges they must substantially tions that existed prior to the release or their final land use in
Printed Name: Melodie Sanjari	Title: Environmental Professional
Signature: Melodie Sanjari	Date: 5/5/2021
email:msanjari@marathonoil.com	Telephone: <u>575-988-8753</u>
OCD Only  Received by: Ramona Marcus	Date: _ 5/12/2021
	liability should their operations have failed to adequately investigate and ter, human health, or the environment nor does not relieve the responsible regulations.
Closure Approved by: Robert Hamlet	Date: 6/23/2021
Printed Name: Robert Hamlet	Title: Environmental Specialist - Advanced

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505** 

CONDITIONS

Action 2174

### **CONDITIONS**

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	2174
	Action Type:
	[C-141] Release Corrective Action (C-141)

### CONDITIONS

Created	Condition	Condition Date
rhamlet	We have received your closure report and final C-141 for Incident #NAB1521257588 James Ranch Unit #10, thank you. This closure is approved.	6/23/2021