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District 1 1625 N. French District II				St Energy Mi		New Mex and Natura		F	REC	EIVE	Đ		Form C-141 tober 10, 2003
1220 Sou		) South	vation Division n St. Francis Dr. NMOCD ARTESIA		2 Copies to appropriate rict Office in accordance with Rule 116 on back side of form								
30-015	Station in fearmer whereas we		-			e, NM 875							side of form
mw 10			Reit	ease Notifi	cation	OPERA		ve A	ction		al Repo	ert 🗖	Final Repo
Name of Co	ompany BC	OPCO, L.P.		260737		Contact Tor					ai repe		r mai repe
				ad, N.M. 88220		Telephone 1		56-87	30			1810	
Facility Nat	me: Golder	n 8 Federal I	Battery #	l		Facility Typ	be E&P						
Surface Ow	ner Federa	ıl		Mineral (	Owner F	ederal				Lease N	No.		
				LOCA	ATION	OF RE	LEASE						
Unit Letter	Section 8	Township 21S	Range 29E	Feet from the	North/	South Line	Feet from	m the	East/V	Vest Line	Count Eddy	у	
			I	atitude_N 32.4	491438_	Longitu	ide W 10	4.0081	47		1		
				NAT	ΓURE	OF REL							
Гуре of Rele	ase: Crude	oil				Volume of Crude oil	Release:	90 Bbls	of	Volume l	Recover	ed: 80 bbls o	of crude oil
			ion on the	back of a 500 bb	I. tank	Date and I Unknown		currenc	e	Date and 6/14/10		Discovery	
Was Immedi	ate Notice (		Yes [	No 🗌 Not R	equired	If YES, To Whom? Randy NMOCD on call operator							
By Whom?	Tony Savoie					Date and Hour 6/14/10 9:24 a.m.							
Was a Water	course Read		Yes 🗵	No		If YES, V	olume Imp	acting	the Wate	ercourse.			
oil in the tan Describe Arc around the ta	a Affected nks. The free	and Cleanup A	was cleane Action Tal	n Taken.* The dr d, inspected and cen.*The released removed. The hea	repaired d fluid aff avily satu	by replacing fected an are trated soil is	the connect a of approx	ctions a ximatel ess of t	y 2,000 being rer	ing the tank sq. ft insid noved and	e the ear placed of	lly. then contair on plastic. T	nment he area
The Site rem hereby cert egulations a bublic health hould their or the enviro	ediation for ify that the i Il operators or the envir operations h nment. In a	the crude oil information g are required t ronment. The ave failed to	spill will i iven above o report and acceptance adequately OCD accept	etermine vertical follow the NMOO e is true and comp nd/or file certain the of a C-141 rep v investigate and phance of a C-141	CD guide plete to the release no ort by the remediate	lines for leak he best of my otifications a e NMOCD m e contaminat	s and spill knowledg nd perform arked as " ion that po	s. c and u n correct Final R ose a thr	inderstan ctive act eport" d reat to gr	nd that pur ions for rel loes not rel round wate	suant to eases whieve the r, surfac	NMOCD ru hich may en operator of e water, hur	lles and danger liability nan health
							OIL	CON	SERV	ATION	DIVI	SION	
D			Approved by District Supervisor: Signed By Mily Benerica										
Printed Nam		emediation Sp	ecialist			Approval Da	-	2/11		Expiration			
E-mail Addro	ess: TASavo	bic@BassPet.				Conditions o	f Approval					ched 🗌	
Date: 6/22/10 Attach Addi		ets If Necess	sary	Phone:432-556-	8730	Guideline PROPOS		AIT RE	MEDIA	TION-	RP	521	





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-521
Facility ID	
Application ID	

# **Release Notification**

## **Responsible Party**

Responsible Party XTO Energy	OGRID 5380
Contact Name Kyle Littrell	Contact Telephone 432-221-7331
Contact email Kyle_Littrell@xtoenergy.com	Incident # (assigned by OCD)
Contact mailing address 522 W. Mermod, Carlsbad, NM 88220	

## **Location of Release Source**

Latitude 32.491438\_

Longitude -104.008147\_ (NAD 83 in decimal degrees to 5 decimal places)

Site Name Golden 8 Federal Battery #1	Site Type Exploration and Production
Date Release Discovered 06/14/2010	API# (if applicable) 30-015-26931

Unit Let	ter Section	Township	Range	County
K	8	21S	29E	Eddy

Surface Owner: State Federal Tribal Private (Name: BLM\_\_\_\_\_\_

## Nature and Volume of Release

	tial(s) Released (Select all that apply and attach calculations or specifi	c justification for the volumes provided below)
Crude Oil	Volume Released (bbls) 90	Volume Recovered (bbls) 80
Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	Yes No
Condensate	Volume Released (bbls)	Volume Recovered (bbls)
Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
Cause of Release		

Cause of Release

The fire tube on the heater-treater developed a leak, the production was switched out of the vessel, a vacuum truck was dispatched to the site to recover the free product. The spill impacted approximately 900 sq. ft. of the tank battery earthen containment area. The spill impacted an area that had been cleaned up as far as practical in the area around the vessels and lines during a remediation at the facility in August of 2011, reference spill report date d2/6/2011. The area will be re-addressed, cleaned up as required, and a new closure report will be submitted including data from the previous spill.

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Form C-141 Page 2		State of New Mexico	Incident ID		
		Oil Conservation Division	District RP	2RP-0521	
			Facility ID		
			Application ID		
	Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible par Volume of release is greater than 25 bbls.			
		otice given to the OCD? By whom? To whom? Whatten acted the on-call NMOCD operator (Randy) on 06/14		mail, etc)?	

### **Initial Response**

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

 $\square$  The source of the release has been stopped.

 $\boxtimes$  The impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have  $\underline{not}$  been undertaken, explain why: N/A

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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:12/31/2019
email:Kyle_Littrell@xtoenergy.com	Telephone:432-221-7331
OCD Only	
Received by:	Date:

Received/by (OCD:11/3/2020 31:12:49 PM

Form C-141 Page 3 State of New Mexico Oil Conservation Division

Incident ID	
District RP	2RP-0521
Facility ID	
Application ID	

Page 5 of 86

# 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;100</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.

Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.

- Field data
- Data table of soil contaminant concentration data
- $\overline{\boxtimes}$  Depth to water determination
- Determination of water sources and significant watercourses within <sup>1</sup>/<sub>2</sub>-mile of the lateral extents of the release
- Boring or excavation logs
- 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:173720	1208 31: 12: 49 PM			Page 6 of 8
Form C-141 State of New Mexic			Incident ID	
Page 4	Oil Conservation Division	1	District RP	2RP-0521
			Facility ID	
			Application ID	
public health or the envi         failed to adequately inve         addition, OCD acceptan         and/or regulations.         Printed Name:         Signature:         email:         Kyle_Lit	are required to report and/or file certain release no ironment. The acceptance of a C-141 report by the estigate and remediate contamination that pose a the ce of a C-141 report does not relieve the operator of _Kyle Littrell	e OCD does not relieve the nreat to groundwater, surfa of responsibility for compl Title:SH&E St Date:12/31/2019	e operator of liability sh nee water, human health liance with any other fe upervisor	ould their operations have or the environment. In
OCD Only Received by:		_ Date:		

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Form C-141 Page 5 State of New Mexico Oil Conservation Division

Incident ID	
District RP	2RP-0521
Facility ID	
Application ID	

# **Remediation Plan**

<b>Remediation Plan Checklist:</b> 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 con	ifirmed as part of any request for deferral of remediation.					
$\bigcirc$ Contamination must be in areas immediately under or around predeconstruction.	oduction equipment where remediation could cause a major facility					
Extents of contamination must be fully delineated.						
Contamination does not cause an imminent risk to human health	n, the environment, or groundwater.					
rules and regulations all operators are required to report and/or file of which may endanger public health or the environment. The accepta liability should their operations have failed to adequately investigate surface water, human health or the environment. In addition, OCD	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:12/31/2019					
email:Kyle_Littrell@xtoenergy.com	Telephone:432-221-7331					
OCD Only						
Received by:	Date:					
Approved Approved with Attached Conditions of	Approval Denied Deferral Approved					
Signature:	Date:					

•.

District I 1625 N. French District II						New Mex and Natura	ico l Resources			Re	Form C-141 vised October 10, 2003
1301 W. Grand District III 1000 Rio Brazos District IV 1220 S. St. Fran	s Road, Azte	c, NM 87410	Oil Conservation D 1220 South St. Fran		St. Franc	is Dr.	Subm Dis		Submit 2 C District	bmit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form	
30-015-3	26931		Rele	ease Notific				ction			<u>,,,,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>
KMW	Holda	29393				OPERA'	FOR		🛛 Initia	al Report	Final Report
Name of Co	mpany BO	OPCO, L.P.		260737		Contact Tor					
				ad, N.M. 88220			No. 432-556-87	30			
Facility Nar	ne: Golder	n 8 Federal I	Battery #	1		Facility Typ	be E&P				
Surface Ow	ner Federa	al		Mineral (	Owner F	ederal			Lease N	No.	]
				LOCA	TION	OF RE	LEASE				
Unit Letter K	Section 8	Township 21S	Range 29E	Feet from the	North/	South Line	Feet from the	East/V	West Line	County Eddy	
	L		ı	atitude_N 32.4	91352	Longitu	de W 104.0082	223			
				NAT	URE	OF REL					
Type of Relea	ase: Crude	Oil .				Volume of Crude oil	Release: 310 Bb	ls	Volume F	Recovered: 2	290
Source of Re	lease: 500 t	bl tank overf	low				Hour of Occurren	ce	Date and	Hour of Dis	covery
							ur not known		2/16/11 1	0:00 a.m.	
Was Immedia	ate Notice (		Yes [	No 🗌 Not R	equired	If YES, To	Whom? NMOC	D emerg	gency repor	ting. Left m	essage with details.
By Whom?	Fony Savoi					Date and I	Hour 2/16/11 1:30	nm			
Was a Water		ched?	Yes 🗵	No			olume Impacting		ercourse.	CEN	2011
was repaired Describe Are pasture land reported to th of crude oil v The Site remu- l hereby certi regulations al public health should their of or the envirous federal, state, Signature:	and put bac a Affected outside the ne NMOCD vas recover ediation for fy that the ll operators or the envi operations h mment. In a or local la	ck in service. and Cleanup containment r o on 10/6/10. T ed from inside the crude oil information g are required to ronment. The nave failed to addition, NMC ws and/or reg	Action Tal measuring The oil sat te the conta spill will iven above to report a acceptane adequately OCD accep	ken.*An area insi approximately 40 urated soil outside inment. The area follow the NMOO e is true and comp nd/or file certain ce of a C-141 rep	de the ea 00 sq. ft. e the con inside th CD guide blete to the release no ort by the remediate report de	rthen tank co The area out tainment was the containme lines for leak the best of my otifications a the NMOCD m the contaminat toes not reliev	ontainment measu side the containm s removed by Bas nt was covered w as and spills. knowledge and u nd perform corre marked as "Final F ion that pose a the	ring app ent had in Env. ith soil t understa ctive act Report" of reat to g respons	er-treater m proximately been affect using a hyd to absorb sr nd that purs- tions for rel does not rel round wate ibility for c	ADCD A alfunction. 14,100 sq. ed by a prev tro-vac. App nall areas of suant to NM eases which ieve the ope r, surface way ompliance v	The heater-treater ft. and an area of rious flow line spill proximately 290 bbls free product. OCD rules and may endanger rator of liability ater, human health with any other
Printed Name		voie emediation Sp	ecialist			Approval Da			Expiration	Date:	-
		oie@BassPet.	com	Phone:432-556-87	30	Conditions o Reme	f Approval: diation per OC	D Rule	es &	Attached	
Attach Addi	tional She	ets If Necess				Guideline	S. SUBMIT REM L NOT LATER 4/7/11	AEDIA	TION	L	2 R.P. 633

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-0633
Facility ID	
Application ID	

# **Release Notification**

## **Responsible Party**

Responsible Party XTO Energy	OGRID 5380
Contact Name Kyle Littrell	Contact Telephone 432-221-7331
Contact email Kyle_Littrell@xtoenergy.com	Incident # (assigned by OCD)
Contact mailing address 522 W. Mermod, Carlsbad, NM 88220	

## **Location of Release Source**

Latitude 32.491352\_

(NAD 83 in decimal degrees to 5 decimal places)

Site Name Golden 8 Federal Battery #1	Site Type Exploration and Production
Date Release Discovered 02/16/2011	API# (if applicable) 30-015-26931

Unit Let	ter Section	Township	Range	County
K	8	21S	29E	Eddy

Surface Owner: State Federal Tribal Private (Name: BLM\_\_\_\_\_

## Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)					
Crude Oil	Volume Released (bbls) 310	Volume Recovered (bbls) 290			
Produced Water	Volume Released (bbls)	Volume Recovered (bbls)			
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	Yes No			
Condensate	Volume Released (bbls)	Volume Recovered (bbls)			
Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)			
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)			
Cause of Release					

Cause of Release

A 500 bbl oil tank overflowed due to a heater-treater malfunction. The heater treater was repaired and put back into service. An area inside the earthen tank containment measuring approximately 14,100 sq. ft. and an area of pasture land outside the containment measuring approximately 400 sq. ft. was affected. The area outside the containment had been affected by a previous flow line spill reported to the NMOCD on 10/06/2010. The oil saturated soil outside the containment was removed by Basin Env. Using a hydro-vac. Approximately 290 bbls of crude oil was recovered from inside the containment.

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orm C-141	State of New Mexico	Le si de ret ID	
age 2	Oil Conservation Division	Incident ID District RP	2RP-0633
		Facility ID	2KF-0055
		Application ID	
		Application ID	
Was this a major release as defined by 19.15.29.7(A) NMAC? Yes No	If YES, for what reason(s) does the responsible party Release volume was greater than 25 bbls.	y consider this a major release	?
	otice given to the OCD? By whom? To whom? Whe ted the NMOCD on 2/16/2011 via telephone (NMOCI		email, etc)?
The responsible	Initial Response party must undertake the following actions immediately unless they		ıld result in injury
The source of the rele	ease has been stopped.		
The impacted area ha	s been secured to protect human health and the enviro	nment.	
Released materials ha	ave been contained via the use of berms or dikes, absor	rbent pads, or other containme	ent devices.
	ecoverable materials have been removed and managed	▲ ·	
	d above have <u>not</u> been undertaken, explain why:		
has begun, please attach within a lined containmer	AC the responsible party may commence remediation a narrative of actions to date. If remedial efforts hav nt area (see 19.15.29.11(A)(5)(a) NMAC), please attac rmation given above is true and complete to the best of my k	ve been successfully complete ch all information needed for c	d or if the release occurre losure evaluation.

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:12/31/2019
email:Kyle_Littrell@xtoenergy.com	Telephone:432-221-7331
OCD Only	
Received by:	Date:

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Form C-141 Page 3 State of New Mexico Oil Conservation Division

Incident ID	
District RP	2RP-0633
Facility ID	
Application ID	

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# 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;100</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.

Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.

- Field data
- Data table of soil contaminant concentration data
- $\overline{\boxtimes}$  Depth to water determination
- Determination of water sources and significant watercourses within <sup>1</sup>/<sub>2</sub>-mile of the lateral extents of the release
- Boring or excavation logs
- 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.

eceived/by@CD:11/3/20	20 3:12:49 PM			Page 12 of 80
Form C-141 State of New Mexic			Incident ID	
Page 4	Oil Conservation Divisio	on	District RP	2RP-0633
			Facility ID	
public health or the envir failed to adequately inve addition, OCD acceptanc and/or regulations.         Printed Name:         Signature:	are required to report and/or file certain release is ronment. The acceptance of a C-141 report by the stigate and remediate contamination that pose a se of a C-141 report does not relieve the operator _Kyle Littrell	he OCD does not relieve the threat to groundwater, surfa r of responsibility for comp Title:SH&E S Date:12/31/2019	e operator of liability sh ace water, human health liance with any other fe upervisor	ould their operations have or the environment. In
OCD Only Received by:		Date:		

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Form C-141 Page 5 State of New Mexico Oil Conservation Division

Incident ID	
District RP	2RP-0633
Facility ID	
Application ID	

# **Remediation Plan**

<u>Remediation Plan Checklist</u> : 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>					
<b>Deferral Requests Only:</b> Each of the following items must be con	firmed as part of any request for deferral of remediation.				
$\square$ Contamination must be in areas immediately under or around pr deconstruction.	roduction equipment where remediation could cause a major facility				
Extents of contamination must be fully delineated.					
Contamination does not cause an imminent risk to human health	n, 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:12/31/2019				
email:Kyle_Littrell@xtoenergy.com	Telephone:432-221-7331				
OCD Only					
Received by:	Date:				
Approved Approved with Attached Conditions of	Approval Denied Deferral Approved				
Signature:	Date:				

histrict I 625 N. French Dr., Hobbs, NM 88240 RECEIVED State of histrict II U.S. French St. Advertise NM 88210	s and Natura	I Resources		Form C-141 Revised August 8, 2011
NOV 26 2013 Oil Cons	ervation Div	vision	Submit 1 Copy	to appropriate District Office in coordance with 19.15.29 NMAC.
histrict IV	th St. Franc	is Dr.		containee with 19,19,29 NM/NO.
T.I. Release Notification	on and Co	orrective A	ction	
1 MW 1333053660	OPERA'		🛛 Initi	al Report 🔲 Final Report
Name of Company: BOPCO, L.P. 266737 Address: 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220	Contact: To	ny Savoie No. 575-887-732	29	
Facility Name: Golden 8 Federal Battery #1, the Well #1 was P&A 2011		e: Exploration a		
Surface Owner: Federal Mineral Owne	r: Federal		API No	0. 30-015-26931
LOCATI	ON OF RE	FASE		
	th/South Line	Feet from the 2180	East/West Line West	County Eddy
Latitude <u>N</u> 32.491	141 Longitud	e W 104.007775	5	
NATUR	E OF REL	EASE		
Type of Release: Crude oil and produced water	Volume of	Release: 6 Bbls of		Recovered: 3 Bbls oil and 2 Bbls
Source of Release: Heater-treater fire tube		nd 15 Bbls water four of Occurrence		Hour of Discovery: Date
	Date 11/25	/13 Time unknow		Time approximately 9:00 a.m.
Was Immediate Notice Given?	d If YES, To	Whom?		
By Whom?	Date and I	lour		
Was a Watercourse Reached?	If YES, Ve	olume Impacting t	the Watercourse.	
If a Watercourse was Impacted, Describe Fully.*				
Describe Cause of Problem and Remedial Action Taken.* The fire tube on the heater-treater developed a leak, the production was free product.	switched out o	f the vessel, a vac	uum truck was dis	patched to the site to recover the
Describe Area Affected and Cleanup Action Taken.*				
The spill impacted approximately 900 sq. ft. of the tank battery earthen practicable in the area around the vessels and lines during a remediation be re-addressed, cleaned up as required and a new closure report will be	at the facility i	n August of 2011	, reference spill re	
I hereby certify that the information given above is true and complete to	o the best of my	knowledge and u	inderstand that pur	suant to NMOCD rules and
regulations all operators are required to report and/or file certain release public health or the environment. The acceptance of a C-141 report by should their operations have failed to adequately investigate and remed	the NMOCD m iate contaminat	arked as "Final R ion that pose a thr	eport" does not rel reat to ground wate	lieve the operator of liability r, surface water, human health
or the environment. In addition, NMOCD acceptance of a C-141 report	1	OIL CON	SERVATION	DIVISION
or the environment. In addition, NMOCD acceptance of a C-141 report		F		
or the environment. In addition, NMOCD acceptance of a C-141 repor federal, state, or local laws and/or regulations.	Approved by	Environmental S	Signed By	Rile Branson
or the environment. In addition, NMOCD acceptance of a C-141 repor federal, state, or local laws and/or regulations.		Environmental S	Signed By	
or the environment. In addition, NMOCD acceptance of a C-141 repor federal, state, or local laws and/or regulations. Signature: jour Detunic Printed Name: Tony Savoie Title: Waste Management and Remediation Specialist E-mail Address: tasavoic@basspet.com	Approval Da	IQV 2 6 201	3 Expiration	

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•.







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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-2082
Facility ID	
Application ID	

# **Release Notification**

## **Responsible Party**

Responsible Party XTO Energy	OGRID 5380
Contact Name Kyle Littrell	Contact Telephone 432-221-7331
Contact email Kyle_Littrell@xtoenergy.com	Incident # (assigned by OCD)
Contact mailing address 522 W. Mermod, Carlsbad, NM 88220	

## **Location of Release Source**

Latitude 32.491141\_

Longitude -104.007775\_ (NAD 83 in decimal degrees to 5 decimal places)

Site Name Golden 8 Federal Battery #1	Site Type Exploration and Production
Date Release Discovered 11/25/2013	API# (if applicable) 30-015-26931

Unit Let	ter Section	Township	Range	County
K	8	21S	29E	Eddy

Surface Owner: State Federal Tribal Private (Name: BLM\_\_\_\_\_\_

## Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)				
Crude Oil	Volume Released (bbls) 6	Volume Recovered (bbls) 3		
Produced Water	Volume Released (bbls) 15	Volume Recovered (bbls) 2		
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	Yes No		
Condensate	Volume Released (bbls)	Volume Recovered (bbls)		
Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)		
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)		
Cause of Release				

Cause of Release

The fire tube on the heater-treater developed a leak, the production was switched out of the vessel, a vacuum truck was dispatched to the site to recover the free product. The spill impacted approximately 900 sq. ft. of the tank battery earthen containment area. The spill impacted an area that had been cleaned up as far as practical in the area around the vessels and lines during a remediation at the facility in August of 2011, reference spill report date d2/6/2011. The area will be re-addressed, cleaned up as required, and a new closure report will be submitted including data from the previous spill.

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Form C-141	State of New Mexico Oil Conservation Division	Incident ID		
Page 2		District RP	2RP-2082	
		Facility ID		
		Application ID		
Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ⊠ No	If YES, for what reason(s) does the responsible pa	rty consider this a major release?	?	
If YES, was immediate n N/A	otice given to the OCD? By whom? To whom? W	hen and by what means (phone, o	email, etc)?	
	Initial Respons	se		

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

 $\boxtimes$  The source of the release has been stopped.

The impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have  $\underline{not}$  been undertaken, explain why: N/A

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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:12/31/2019
email:Kyle_Littrell@xtoenergy.com	Telephone:432-221-7331
OCD Only	
Received by:	Date:

Received/by (OCD:11/3/2020 31:12:49 PM

Form C-141 Page 3 State of New Mexico Oil Conservation Division

Incident ID	
District RP	2RP-2082
Facility ID	
Application ID	

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# 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;100</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.

Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.

- Field data
- Data table of soil contaminant concentration data
- $\overline{\boxtimes}$  Depth to water determination
- Determination of water sources and significant watercourses within <sup>1</sup>/<sub>2</sub>-mile of the lateral extents of the release
- Boring or excavation logs
- 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.

eceived/by@CD:11/3/20	20 3: 12:49 PM			<b>Page 22</b> of 80
Form C-141 State of New Mexico			Incident ID	
Page 4	Oil Conservation Division	on	District RP	2RP-2082
			Facility ID	
			Application ID	
public health or the envir         failed to adequately invest         addition, OCD acceptance         and/or regulations.         Printed Name:         Signature:         email:         Kyle_Litt	are required to report and/or file certain release ronment. The acceptance of a C-141 report by the stigate and remediate contamination that pose a se of a C-141 report does not relieve the operato Kyle Littrell	he OCD does not relieve the threat to groundwater, surfa r of responsibility for comp Title:SH&E S Date:12/31/2019	e operator of liability sh ace water, human health liance with any other fe upervisor	ould their operations have or the environment. In
OCD Only Received by:		Date:		

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Form C-141 Page 5 State of New Mexico Oil Conservation Division

Incident ID	nJMW1333053660
District RP	2RP-2082
Facility ID	
Application ID	

# **Remediation Plan**

Remediation Plan Checklist: Each of the following items must be included in the plan. Detailed description of proposed remediation technique Scaled sitemap with GPS coordinates showing delineation points Estimated volume of material to be remediated Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required) 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: 12/31/2019 email: \_\_\_\_Kyle\_Littrell@xtoenergy.com\_\_\_\_\_ Telephone: \_\_\_432-221-7331\_\_\_\_\_ **OCD Only** Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Approved with Attached Conditions of Approval Denied Approved X Deferral Approved Signature: Bradford Billings Date: 07/23/2021

District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

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

ARTESIA DISTRICT

AUG 1 3 2014

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Form C-141 Revised August 8, 2011

Sub**RECEPYED**ppropriate District Office in accordance with 19.15.29 NMAC.

111119	12243	21710				OPERAT	FOR		🛛 Initi	al Report	Γ	Final Repor
Name of C	ompany: B	OPCO, L.P.	4	340737		Contact: To						
Address: 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220				Telephone No. 575-887-7329								
Facility Na P&A 2011	me: Golder	n 8 Federal I	Battery #1	I, the Well #1 wa	as	Facility Typ	e: Exploration	and Pro	oduction			
Surface Ov	ner: Feder	al		Mineral O	wner	Federal			API No	o. 30-015-2	26931	
				LOCA	TIO	N OF REI	LEASE					
Unit Letter K	Section 8	Township 21S	Range 29E	Feet from the 1650	North South	n/South Line	Feet from the 2180	East/V West	West Line	County Eddy		
				Latitude <u>N 32.</u>		Ū.		5				
Type of Rel	ease: Crude	oil and produ	ced water	NAT	URF	Volume of	EASE Release: 3 Bbls	of	Volume	Recovered:	1 Bbl.	oil and 17
				ution hander		crude oil a	nd 38 Bbls water		Bbls wat			
		aulic fitting or	i me produ	iction neader.		Date 8/12/	14 Time unknow					ly 10:30 a.m.
Was Immed	iate Notice (		Yes 🗌	No 🗌 Not Rc	quired	If YES, To NMOCD E	Whom? Emergency #104					
By Whom?						Date and H	lour: 8/12/14 at 1	2:10 p.r	n.			
Was a Wate	rcourse Read	ched?	] Yes 🖂	1 No		If YES, Volume Impacting the Watercourse.						
If a Watercourse was Impacted, Describe Fully.*		NM OIL CONSERVATION										
If a Waterco	urse was Im	nacted. Descr	ibe Fully.	*								
								AR	tesia dis UG <b>1 3</b>	TRICT		
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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-2439
Facility ID	
Application ID	

# **Release Notification**

### **Responsible Party**

Responsible Party XTO Energy	OGRID 5380
Contact Name Kyle Littrell	Contact Telephone 432-221-7331
Contact email Kyle_Littrell@xtoenergy.com	Incident # (assigned by OCD)
Contact mailing address 522 W. Mermod, Carlsbad, NM 88220	

## **Location of Release Source**

Latitude 32.491141\_

Longitude -104.007775\_ (NAD 83 in decimal degrees to 5 decimal places)

Site Name Golden 8 Federal Battery #1	Site Type Exploration and Production
Date Release Discovered 08/12/2014	API# ( <i>if applicable</i> ) 30-015-26931

Unit Let	ter Section	Township	Range	County
K	8	21S	29E	Eddy

Surface Owner: State Federal Tribal Private (Name: BLM\_\_\_\_\_\_

## Nature and Volume of Release

Mater	ial(s) Released (Select all that apply and attach calculations or specific	c justification for the volumes provided below)
Crude Oil	Volume Released (bbls) 3	Volume Recovered (bbls) 1
Produced Water	Volume Released (bbls) 27	Volume Recovered (bbls) 17
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	Yes No
Condensate	Volume Released (bbls)	Volume Recovered (bbls)
Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
Cause of Release		

Cause of Release

A Victaulic gasket failed on the production header due to a normally open valve was shut causing pressure to build up and blow out the gasket. The gasket was replaced and the valve was returned to normal. The spill impacted approximately 1500 sq. ft. of the tank battery earthen containment area. The spill impacted an area that had been cleaned up as far as practical in the area around the vessels and lines during a remediation at the facility in August of 2011, reference 2RP-0633 and the same areas impacted by spill reference 2RP-2082. The area will be re-addressed, cleaned up as required, and a new closure report will be submitted including data from the previous two spills.

Re

orm C-141	State of New Mexico	Incident ID	
age 2	Oil Conservation Division	District RP	2RP-2439
-		Facility ID	2101 2 137
		Application ID	
Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible part Volume of release is greater than 25 bbls.	y consider this a major release	?
Xes No			
	otice given to the OCD? By whom? To whom? Whe acted the NMOCD emergency operator #104 on 08/12		email, etc)?
		2,201 i ut 12.10 pm.	
	Initial Response	е	
The responsible	party must undertake the following actions immediately unless they		dd result in iniury
$\square$ The source of the rele	ease has been stopped.		
The impacted area ha	as been secured to protect human health and the enviro	onment.	
Released materials ha	ave been contained via the use of berms or dikes, abso	orbent pads, or other containme	ent devices.
All free liquids and r	ecoverable materials have been removed and managed	appropriately.	
If all the actions describe	d above have <u>not</u> been undertaken, explain why:		
N/A			

within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation. 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

Printed Name:Kyle Littrell	Title:SH&E Supervisor
Signature:	Date:12/31/2019
email:Kyle_Littrell@xtoenergy.com	Telephone:432-221-7331
OCD Only	
Received by:	Date:

and/or regulations.

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Form C-141 Page 3 State of New Mexico Oil Conservation Division

Incident ID	
District RP	2RP-2439
Facility ID	
Application ID	

Page 27 of 86

# 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;100</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.

Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.

- Field data
- Data table of soil contaminant concentration data
- $\overline{\boxtimes}$  Depth to water determination
- Determination of water sources and significant watercourses within <sup>1</sup>/<sub>2</sub>-mile of the lateral extents of the release
- Boring or excavation logs
- 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.

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Form C-141 State of New Mex		0	Incident ID	
Page 4	Oil Conservation Division	n	District RP	2RP-2439
			Facility ID	
			Application ID	
public health or the envir         failed to adequately invest         addition, OCD acceptance         and/or regulations.         Printed Name:         Signature:	are required to report and/or file certain release n onment. The acceptance of a C-141 report by th stigate and remediate contamination that pose a t e of a C-141 report does not relieve the operator Kyle Littrell	e OCD does not relieve the hreat to groundwater, surfa of responsibility for comp Title:SH&E S Date:12/31/2019	e operator of liability sh ace water, human health liance with any other fe upervisor	ould their operations have or the environment. In
OCD Only Received by:		Date:		

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Form C-141 Page 5 State of New Mexico Oil Conservation Division

Incident ID	
District RP	2RP-2439
Facility ID	
Application ID	

# **Remediation Plan**

<b><u>Remediation Plan Checklist</u></b> : 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 car	afirmed as part of any request for deferral of remediation				
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 release 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 Date:12/31/2019 email:Kyle_Littrell@xtoenergy.com Telephone:432-221-7331					
OCD Only					
Received by:	Date:				
Approved Approved with Attached Conditions of	Approval Denied Deferral Approved				
Signature:	Date:				

#### LT Environmental, Inc.

3300 North "A" Street Building 1, Unit 222 Midland, Texas 79705 432,704,5178



January 2, 2020

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

#### RE: Deferral Request – Addendum to Original Closure Request Golden 8 Federal Battery #1 Remediation Permit Numbers 2RP-521, 2RP-633, 2RP-2082, and 2RP-2439 Eddy County, New Mexico

Dear Mr. Bratcher:

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), presents the following Deferral Request as an addendum to a previously submitted Closure Request detailing site assessment and soil sampling activities at the Golden 8 Federal Battery #1 (Site) in Unit K, Section 8, Township 21 South, Range 29 East, in Eddy County, New Mexico (Figure 1). The original Closure Request addressed seven historical releases that occurred at the same well pad location. The New Mexico Oil Conservation Division (NMOCD) approved closure of three of the historical releases, but requested additional information for deferral consideration of four releases that occurred around production equipment. The purpose of the site assessment and soil sampling activities documented in this report was to delineate previously identified impacted soil associated with those four historical releases. Based on field observations, field screening, and laboratory analytical results from soil sampling activities, XTO is submitting this Deferral Request, requesting deferral of final remediation for these release events.

#### **RELEASE BACKGROUND**

#### 2RP-521

On June 14, 2010 a drain line connection on a tank failed due to internal corrosion releasing 90 barrels (bbls) of crude oil into the lined earthen tank battery containment. The remaining oil in the tank was removed, the tank was cleaned, inspected and repaired. A vacuum truck was dispatched to the Site to recover freestanding fluids; approximately 80 bbls of crude oil were recovered. The heavily saturated soils were removed. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Form C-141 on June 22, 2010, and the NMOCD subsequently issued RP Number 2RP-521.





#### 2RP-633

On February 12, 2011 a heater-treater malfunction caused an oil product tank to overflow releasing 310 bbls of crude oil to the lined earthen containment and pasture outside the containment. A vacuum truck was dispatched to the Site to recover freestanding fluids; approximately 290 bbls of crude oil were recovered.

#### 2RP-2082

On November 25, 2013 a fire tube on the heater-treater developed a leak resulting in a release of 6 bbls of crude oil and 15 bbls of produced water to the lined earthen containment. A vacuum truck was dispatched to the Site to recover freestanding fluids; approximately 3 bbls of crude oil and 2 bbls of produced water were recovered.

#### 2RP-2439

On August 12, 2014 a Victaulic gasket failed on the production header due to a blow out on the gasket resulting in a release of 3 bbls of crude oil and 38 bbls of produced water. A vacuum truck was dispatched to the Site to recover freestanding fluids; approximately 1 bbl of crude oil and 17 bbls of water were recovered. The gasket was replaced.

XTO submitted a Closure Request dated May 25, 2018, for this site addressing seven separate historical releases. The NMOCD approved closure of 2RP-3612, 2RP-4017, and 2RP-4601 via email dated June 6, 2018. In consideration of the other historical releases, which were inside the tank battery, NMOCD responded with a recommendation to attempt a delineation, remediate as much as possible, and defer anything left until final plugging and abandonment.

#### SITE CLOSURE STANDARDS

The original site work and subsequent sampling occurred prior to promulgation of new spill response requirements listed in Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). As described and approved in the original Closure Request, closure standards were established as follows: 10 milligrams per kilogram (mg/kg) benzene; 50 mg/kg benzene, toluene, ethylbenzene, and total xylenes (BTEX); and 5,000 mg/kg total petroleum hydrocarbons (TPH). Based on standard practice in this region at the time of sampling and previous reporting, LTE applied a site-specific chloride action level of 600 mg/kg.

#### SITE ASSESSMENT AND SOIL SAMPLING ACTIVITIES

On June 7, 2018 LTE evaluated the release extent based on information provided on the Form C-141 and visual observations. LTE personnel collected six preliminary soil samples (SS06-SS11) within the lined earthen containment. Soil from the soil sample location was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photo-ionization detector (PID)





and Hach<sup>®</sup> chloride QuanTab<sup>®</sup> test strips, respectively. The preliminary soil sample locations are depicted on Figure 2. Photographic documentation was conducted during the Site visit. Photographs are included in Attachment 2.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were shipped at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Xenco Laboratories (Xenco) in Midland, Texas, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Based on laboratory analytical results for chloride in preliminary soil sample SS09, additional vertical delineation was conducted at that location.

On June 13, 2018 LTE personnel advanced a borehole via hand-auger at one location within the lined tank battery containment on the northeastern side of the caliche well pad. The borehole was advanced at SS09 to delineate the impacted soils. Three soil samples were collected at depths ranging from 7 feet and 12.5 feet bgs (BH01A through BH01C). Soil from the soil sample location was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photo-ionization detector (PID) and Hach<sup>®</sup> chloride QuanTab<sup>®</sup> test strips, respectively. Field screening results and observations for each sample were documented on a lithologic/soil sampling log and are included as Attachment 1. The borehole was backfilled with the soil removed and LTE personnel repaired the liner. The borehole and vertical delineation soil sample location is depicted on Figure 2.

#### ANALYTICAL RESULTS

Laboratory analytical results for delineation soil samples SS09 and BH01A, collected at depths ranging from 0.5 feet to 7 feet bgs, indicated that chloride concentrations exceeded 600 mg/kg. Laboratory analytical results indicated benzene, BTEX, TPH, and chloride concentrations were compliant with the documented closure standards in all other soil samples. Laboratory analytical results are presented on Figure 2 and summarized in Table 1. The complete laboratory analytical reports are included as Attachment 3.

#### **DEFERRAL REQUEST**

LTE personnel advanced one borehole in the location of the SS09 in the lined earthen containment. Delineation soil samples BH01A through BH01C were collected from within the lined tank battery containment from depths ranging from 0.5 foot to 12.5 feet bgs to assess for the presence or absence of soil impacts as a result of the four releases in the lined earthen containment. Laboratory analytical results indicated that chloride concentrations exceeded the the previously documented closure standards in soil samples SS09 and BH01A, collected at





depths ranging from 0.5 feet to 7 feet bgs. Laboratory analytical results indicated benzene, BTEX, TPH, and chloride concentrations were compliant with the previously documented closure standards in soil samples SS06 through SS08, SS10, SS11 and BH01B through BH01C at depths of approximately 0.5 feet and 12.5 feet bgs, respectively.

Residual impacted soil in the area of delineation borehole BH01 was left in place under the lined containment in which active operating equipment exists. Vertical delineation was achieved at approximately 10 feet bgs. The lateral extent of impacted soil remaining in place is defined by the other samples documented in this report and the numerous samples collected outside the containment and documented in the original Closure Request. An estimated 555 cubic yards of impacted soil remains in place surrounding borehole BH01 and beneath the lined tank battery containment, assuming a maximum 10-foot depth based on soil sample BH01B collected at a depth of 10 feet bgs.

Because depth to groundwater is estimated to be greater than 200 feet bgs, there no nearby surface features, and the impacted soil exists above and beneath a liner, LTE and XTO do not believe deferment will result in imminent risk to human health, the environment, or groundwater. The lined containment was repaired by XTO and will restrict potential vertical migration of residual impacts. XTO requests deferral of final remediation for this release event until final reclamation of the well pad or major construction, whichever comes first. An updated Form C-141 is attached.

If you have any questions or comments, please do not hesitate to contact Ms. Ashley Ager at (970) 385-1096.

Sincerely,

LT ENVIRONMENTAL, INC.

Monissey

Tacoma Morrissey Staff Geologist

Ashley L. Ager

Ashley L. Ager, P.G. Senior Geologist

cc: Kyle Littrell, XTO United States Bureau of Land Management – New Mexico Robert Hamlet, NMOCD Victoria Venegas, NMOCD





#### Appendices:

Figure 1 Site Receptor Map

Figure 2 Delineation Soil Sample Locations

Table 1Soil Analytical Results

Attachment 1 Lithologic/Soil Sampling Logs

Attachment 2 Photographic Log

Attachment 3 Laboratory Analytical Reports



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# FIGURES

LT?



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TABLE



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### TABLE 1 SOIL ANALYTICAL RESULTS

### GOLDEN 8 FEDERAL CENTRAL TANK BATTERY #1 REMEDIATION PERMIT NUMBER 2RP-521, 2RP-633, 2RP-2082, AND 2RP-2439 EDDY COUNTY, NEW MEXICO XTO ENERGY, INC.

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl- benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria		10	NE	NE	NE	50	NE	NE	NE	NE	5,000	600	
SSO6 @ 6" bgs	0.5	06/07/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	46.8	<15.0	46.8	46.8	44.0
SS07	0.5	06/07/2018	<0.00198	<0.00198	<0.00198	<0.00198	<0.00198	<15.0	203	21.3	203	224	42.4
SS08	0.5	06/07/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<14.9	172	20.3	172	192	<4.94
SS09	0.5	06/07/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	659	3,900	129	4,550	4,690	1,220
SS10	0.5	06/07/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<14.9	<14.9	<14.9	<14.9	<14.9	325
SS11	0.5	06/07/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	210	19.2	210	229	164
BH01 A	7	06/13/2018	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	331	24.0	331	355	1,290
BH01 B	10.5	06/13/2018	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	126	<15.0	126	126	212
BH01 C	12.5	06/13/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	258	17.1	258	275	107

### Notes:

- bgs below ground surface
- BTEX benzene, toluene, ethylbenzene, and total xylenes
- DRO diesel range organics
- GRO gasoline range organics
- mg/kg milligrams per kilogram

- MRO motor oil range organics NMAC - New Mexico Administrative Code NMOCD - New Mexico Oil Conservation Division NE - not established
- TPH total petroleum hydrocarbons

- Bold indicates result exceeds the applicable regulatory standard
- < indicates result is below laboratory reporting limits
- Table 1 closure criteria for soils impacted by a release per NMAC 19.15.29 August 2018





LT Environm	LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remedi LITHOLOGIC / SOIL SAMPLING LC Lat/Long: Field Screening:					s Street co 88220 g · Remedi	iation	Identifier:BH01Date:6/13/2019Project Name:RP Number:Golden 8 Federal #12RP-521, 2RP-633, 2RP-2082, and 2RP-2439
T		LITHO	LOGIC				)G	Logged By: L. Laumbach Method: Hand Auger
Lat/Long: 32.491438	8, -104.00	8147			rield Scree	:ning:		Hole Diameter: 3" Total Depth: 12.5'
Comments					<u> </u>			
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.) 0	Sample Depth	Soil/Rock Type	Lithology/Remarks
	985	352			1 2 3 4 5 6	4'	S	Caliche/sand light brown- hydrocarbon odor detected
	1160	215		BH01	7	7'	S	sand/ clay brown
	-			A	8			·
	462	95.4			9	9.5'	S	sand/clay brown- no staining or hydrocarbon odor detected
	156.4	492		BH01B	10	10.5'		sand/clay brown- no staining or hydrocarbon odor detected
	50.1	630			11	11.5'		caliche/sand- no staining or hydrocarbon odor detected
	65.1	115		BH01C	12	12.5'		caliche/sand- no staining or hydrocarbon odor detected; auguer refusal









# Analytical Report 588640

for

LT Environmental, Inc.

**Project Manager: Adrian Baker** 

Golden 8 Federal #1

# 11-JUN-18

Collected By: Client





1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-18-26), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054) Oklahoma (2017-142)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-17-16), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-17-12) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-17-16) Xenco-Odessa (EPA Lab Code: TX00158): Texas (T104704400-18-14) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3) Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757) Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757) Xenco-Atlanta (LELAP Lab ID #04176) Xenco-Tampa: Florida (E87429) Xenco-Lakeland: Florida (E84098)





Project Manager: Adrian Baker LT Environmental, Inc. 4600 W. 60th Avenue Arvada, CO 80003

Reference: XENCO Report No(s): **588640** Golden 8 Federal #1 Project Address: NM 2RP-2439

### Adrian Baker:

11-JUN-18

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) 588640. 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. 588640 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,

fession knomer

Jessica Kramer 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 588640



# LT Environmental, Inc., Arvada, CO

Golden 8 Federal #1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS06 @ 6"bgs.	S	06-07-18 10:00	6 In	588640-001
SS07	S	06-07-18 10:15	6 In	588640-002
SS08	S	06-07-18 10:35	6 In	588640-003
SS09	S	06-07-18 10:50	6 In	588640-004
SS10	S	06-07-18 11:00	6 In	588640-005
SS11	S	06-07-18 10:20	6 In	588640-006

۰,



# CASE NARRATIVE

Client Name: LT Environmental, Inc. Project Name: Golden 8 Federal #1

Project ID: Work Order Number(s): 588640 Report Date: 11-JUN-18 Date Received: 06/08/2018

### Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments: Batch: LBA-3052932 BTEX by EPA 8021B Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3052970 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



Project Id:Contact:Adrian BakerProject Location:NM 2RP-2439

# Certificate of Analysis Summary 588640

LT Environmental, Inc., Arvada, CO Project Name: Golden 8 Federal #1



Date Received in Lab:Fri Jun-08-18 10:09 amReport Date:11-JUN-18Project Manager:Jessica Kramer

	Lab Id:	588640-0	001	588640-0	002	588640-0	003	588640-	004	588640-005		588640-	006
Analysis Progressed	Field Id:	SS06@6	"bgs.	SS07		SS08		SS09		SS10		SS11	
Analysis Requested	Depth:	6- In		6- In		6- In		6- In		6- In		6- In	
	Matrix:	SOIL		SOIL	,	SOIL		SOIL		SOIL		SOIL	
	Sampled:	Jun-07-18	10:00	Jun-07-18	10:15	Jun-07-18	10:35	Jun-07-18	10:50	Jun-07-18	11:00	Jun-07-18	10:20
BTEX by EPA 8021B	Extracted:	Jun-09-18	07:55	Jun-09-18	07:55	Jun-09-18	07:55	Jun-10-18	08:30	Jun-09-18	07:55	Jun-09-18	07:55
	Analyzed:	Jun-10-18	00:43	Jun-10-18	01:01	Jun-10-18	01:19	Jun-10-18	21:34	Jun-10-18	01:55	Jun-10-18	02:13
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		< 0.00199	0.00199	< 0.00198	0.00198	< 0.00201	0.00201	< 0.00200	0.00200	< 0.00200	0.00200	< 0.00199	0.00199
Toluene		< 0.00199	0.00199	< 0.00198	0.00198	< 0.00201	0.00201	< 0.00200	0.00200	< 0.00200	0.00200	< 0.00199	0.00199
Ethylbenzene		< 0.00199	0.00199	< 0.00198	0.00198	< 0.00201	0.00201	< 0.00200	0.00200	< 0.00200	0.00200	< 0.00199	0.00199
m,p-Xylenes		< 0.00398	0.00398	< 0.00397	0.00397	< 0.00402	0.00402	< 0.00399	0.00399	< 0.00401	0.00401	< 0.00398	0.00398
o-Xylene		< 0.00199	0.00199	< 0.00198	0.00198	< 0.00201	0.00201	< 0.00200	0.00200	< 0.00200	0.00200	< 0.00199	0.00199
Total Xylenes		< 0.00199	0.00199	< 0.00198	0.00198	< 0.00201	0.00201	< 0.00200	0.00200	< 0.00200	0.00200	< 0.00199	0.00199
Total BTEX		< 0.00199	0.00199	< 0.00198	0.00198	< 0.00201	0.00201	< 0.00200	0.00200	< 0.00200	0.00200	< 0.00199	0.00199
Inorganic Anions by EPA 300	Extracted:	Jun-08-18	15:15	Jun-08-18	15:15	Jun-08-18	15:15	Jun-08-18	15:15	Jun-08-18	15:15	Jun-08-18	15:15
	Analyzed:	Jun-09-18	01:09	Jun-09-18	01:15	Jun-09-18	01:20	Jun-09-18	01:26	Jun-09-18	01:31	Jun-09-18	01:47
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		44.0	4.93	42.4	4.99	<4.94	4.94	1220	24.7	325	4.96	164	4.98
TPH by SW8015 Mod	Extracted:	Jun-08-18	14:00	Jun-08-18	14:00	Jun-08-18	14:00	Jun-08-18	14:00	Jun-08-18	14:00	Jun-08-18	14:00
	Analyzed:	Jun-09-18	01:03	Jun-09-18	01:23	Jun-09-18	01:44	Jun-09-18	02:04	Jun-09-18	02:25	Jun-09-18	02:45
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<14.9	14.9	659	74.8	<14.9	14.9	<15.0	15.0
Diesel Range Organics (DRO)		46.8	15.0	203	15.0	172	14.9	3900	74.8	<14.9	14.9	210	15.0
Oil Range Hydrocarbons (ORO)		<15.0	15.0	21.3	15.0	20.3	14.9	129	74.8	<14.9	14.9	19.2	15.0
Total TPH		46.8	15.0	224	15.0	192	14.9	4690	74.8	<14.9	14.9	229	15.0

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.

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Jessica Kramer Project Assistant

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# Certificate of Analytical Results 588640



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

Golden 8 Federal #1

8	Matrix: Date Colle	Soil ected: 06.07.18 10.00							
ganic Anions by EPA 300	Date Prep	: 06.08.18 15.15		% Moisture:					
Cas Number	Result	RL	Units	Analysis Date	Flag	Dil			
16887-00-6	44.0	4.93	mg/kg	06.09.18 01.09		1			
		001 Date Colle ganic Anions by EPA 300 Date Prep Cas Number Result	001       Date Collected: 06.07.18 10.00         ganic Anions by EPA 300       Date Prep: 06.08.18 15.15         Cas Number         Result         RL	Date Collected: 06.07.18 10.00 ganic Anions by EPA 300 Date Prep: 06.08.18 15.15 Cas Number Result RL Units	001       Date Collected: 06.07.18 10.00       Sample Depth: 6 In         ganic Anions by EPA 300       Prep Method: E30         Date Prep:       06.08.18 15.15       Basis: We         Cas Number       Result       RL       Units       Analysis Date	Date Collected: 06.07.18 10.00       Sample Depth: 6 In         ganic Anions by EPA 300       Prep Method: E300P         bate Prep:       06.08.18 15.15         Basis:       Wet Weight         Cas Number       RL       Units       Analysis Date       Flag			

Analytical Method: TPH by SW801 Tech: ARM Analyst: ARM Seq Number: 3052902	5 Mod	Date Prep	o: 06.08	18 14.00	9	Prep Method: TX 6 Moisture: Basis: We			
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil	
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0		mg/kg	06.09.18 01.03	U	1	
Diesel Range Organics (DRO)	C10C28DRO	46.8	15.0		mg/kg	06.09.18 01.03		1	
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0		mg/kg	06.09.18 01.03	U	1	
Total TPH	PHC635	46.8	15.0		mg/kg	06.09.18 01.03		1	
Surrogate		<b>Cas Number</b> 111-85-3	% <b>Recovery</b> 91	Units %	<b>Limits</b> 70-135	<b>Analysis Date</b> 06.09.18 01.03	Flag		
o-Terphenyl		84-15-1	91 96	% %	70-135	06.09.18 01.03			

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# Certificate of Analytical Results 588640



# LT Environmental, Inc., Arvada, CO

Golden 8 Federal #1

Sample Id: <b>SS06 @ 6''bgs.</b> Lab Sample Id: 588640-001		Matrix: Date Colle	Soil ected: 06.07.18 10.00		Date Received:06.08.18 10.09 Sample Depth: 6 In			
Analytical Method: BTEX by EPA 8 Tech: ALJ	0021B				Prep Method: SV % Moisture:	V5030B		
Analyst: ALJ Seq Number: 3052932		Date Prep:	06.09.18 07.55		Basis: W	et Weight		
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil	
Benzene	71-43-2	< 0.00199	0.00199	mg/kg	06.10.18 00.43	U	1	

1,4-Difluorobenzene		540-36-3	99	%	70-130	06.10.18 00.43			
4-Bromofluorobenzene		460-00-4	104	%	70-130	06.10.18 00.43			
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
Total BTEX		< 0.00199	0.00199		mg/kg	06.10.18 00.43	U	1	
Total Xylenes	1330-20-7	< 0.00199	0.00199		mg/kg	06.10.18 00.43	U	1	
o-Xylene	95-47-6	< 0.00199	0.00199		mg/kg	06.10.18 00.43	U	1	
m,p-Xylenes	179601-23-1	< 0.00398	0.00398		mg/kg	06.10.18 00.43	U	1	
Ethylbenzene	100-41-4	< 0.00199	0.00199		mg/kg	06.10.18 00.43	U	1	
Toluene	108-88-3	< 0.00199	0.00199		mg/kg	06.10.18 00.43	U	1	
Benzene	71-43-2	<0.00199	0.00199		mg/kg	06.10.18 00.43	U	1	

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# Certificate of Analytical Results 588640



# LT Environmental, Inc., Arvada, CO

Golden 8 Federal #1

Sample Id: Lab Sample I	<b>SS07</b> d: 588640-002		Matrix: Date Colle	Soil ected: 06.07.18 10.15		Date Received:06.08.18 10.09 Sample Depth: 6 In			
Analytical M Tech:	ethod: Inorganic Anion OJS	s by EPA 300				Prep Method: E30 % Moisture:	)0P		
Analyst: Seq Number:	SCM 3052933		Date Prep	: 06.08.18 15.15		Basis: We	t Weight		
Parameter	3032733	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil	
Chloride		16887-00-6	42.4	4.99	mg/kg	06.09.18 01.15		1	

Analytical Method: TPH by SW801	5 Mod				F	Prep Method: TX	1005P	
Tech: ARM					9	6 Moisture:		
Analyst: ARM		Date Prep	p: 06.08.	18 14.00	E	Basis: We	t Weight	
Seq Number: 3052902								
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0		mg/kg	06.09.18 01.23	U	1
Diesel Range Organics (DRO)	C10C28DRO	203	15.0		mg/kg	06.09.18 01.23		1
Oil Range Hydrocarbons (ORO)	PHCG2835	21.3	15.0		mg/kg	06.09.18 01.23		1
Total TPH	PHC635	224	15.0		mg/kg	06.09.18 01.23		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	92	%	70-135	06.09.18 01.23		
o-Terphenyl		84-15-1	95	%	70-135	06.09.18 01.23		

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# Certificate of Analytical Results 588640



# LT Environmental, Inc., Arvada, CO

Golden 8 Federal #1

Sample Id: <b>SS07</b> Lab Sample Id: 588640-002		Matrix: Date Collec	Soil cted: 06.07.18 10.15		Date Received:06.08.18 10.09 Sample Depth: 6 In				
Analytical Method:BTEX by EPATech:ALJAnalyst:ALJSeq Number:3052932	8021B	Date Prep:	06.09.18 07.55		Prep Method: S % Moisture: Basis: V	W5030B Vet Weight			
Parameter	Cas Number	Result	RL	Units	Analysis Date	8	Dil		
Benzene	71-43-2	< 0.00198	0.00198	mg/kg	06.10.18 01.01	U	1		

Benzene	71-43-2	< 0.00198	0.00198		mg/kg	06.10.18 01.01	U	1
Toluene	108-88-3	< 0.00198	0.00198		mg/kg	06.10.18 01.01	U	1
Ethylbenzene	100-41-4	< 0.00198	0.00198		mg/kg	06.10.18 01.01	U	1
m,p-Xylenes	179601-23-1	< 0.00397	0.00397		mg/kg	06.10.18 01.01	U	1
o-Xylene	95-47-6	< 0.00198	0.00198		mg/kg	06.10.18 01.01	U	1
Total Xylenes	1330-20-7	< 0.00198	0.00198		mg/kg	06.10.18 01.01	U	1
Total BTEX		< 0.00198	0.00198		mg/kg	06.10.18 01.01	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	104	%	70-130	06.10.18 01.01		
1,4-Difluorobenzene		540-36-3	95	%	70-130	06.10.18 01.01		

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# Certificate of Analytical Results 588640



# LT Environmental, Inc., Arvada, CO

Golden 8 Federal #1

Sample Id: Lab Sample Id	<b>SS08</b> 1: 588640-003		Matrix: Date Colle	Soil cted: 06.07.18 10.35		Date Received:06 Sample Depth: 6 I		)
Analytical Me Tech: Analyst: Seq Number:	ethod: Inorganic Anions OJS SCM 3052933	by EPA 300	Date Prep:	06.08.18 15.15		Prep Method: E3 % Moisture: Basis: W	800P et Weight	
Parameter		Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride		16887-00-6	<4.94	4.94	mg/kg	06.09.18 01.20	U	1

Analytical Method: TPH by SW801	5 Mod				Р	Prep Method: TX1	1005P	
Tech: ARM					%	6 Moisture:		
Analyst: ARM		Date Prep	o: 06.08.	18 14.00	E	Basis: Wet	Weight	
Seq Number: 3052902								
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9		mg/kg	06.09.18 01.44	U	1
Diesel Range Organics (DRO)	C10C28DRO	172	14.9		mg/kg	06.09.18 01.44		1
Oil Range Hydrocarbons (ORO)	PHCG2835	20.3	14.9		mg/kg	06.09.18 01.44		1
Total TPH	PHC635	192	14.9		mg/kg	06.09.18 01.44		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	91	%	70-135	06.09.18 01.44		
o-Terphenyl		84-15-1	93	%	70-135	06.09.18 01.44		

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# Certificate of Analytical Results 588640



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

Golden 8 Federal #1

Sample Id: <b>SS08</b> Lab Sample Id: 588640-003		Matrix: Date Col	Soil lected: 06.07.18 10.35		kg 06.10.18 01.19 U	19	
Analytical Method: BTEX by Tech: ALJ Analyst: ALJ Seq Number: 3052932	EPA 8021B	Date Pre	p: 06.09.18 07.55		% Moisture:		
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00201	0.00201	mg/kg	06.10.18 01.19	U	1
Toluene	108-88-3	<0.00201	0.00201	mø/kø	06 10 18 01 19	U	1

D		/1-43-2	<0.00201	0.00201		mg/kg	00.10.10 01.17	U	1	
To	bluene	108-88-3	< 0.00201	0.00201		mg/kg	06.10.18 01.19	U	1	
Et	hylbenzene	100-41-4	< 0.00201	0.00201		mg/kg	06.10.18 01.19	U	1	
m	,p-Xylenes	179601-23-1	< 0.00402	0.00402		mg/kg	06.10.18 01.19	U	1	
0-	Xylene	95-47-6	< 0.00201	0.00201		mg/kg	06.10.18 01.19	U	1	
To	otal Xylenes	1330-20-7	< 0.00201	0.00201		mg/kg	06.10.18 01.19	U	1	
To	otal BTEX		< 0.00201	0.00201		mg/kg	06.10.18 01.19	U	1	
	Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
	1,4-Difluorobenzene		540-36-3	97	%	70-130	06.10.18 01.19			
	4-Bromofluorobenzene		460-00-4	110	%	70-130	06.10.18 01.19			

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# Certificate of Analytical Results 588640



# LT Environmental, Inc., Arvada, CO

Golden 8 Federal #1

Sample Id: SSC Lab Sample Id: 588			Matrix: Date Collec	Soil cted: 06.07.18 10.50		Date Received:06.08.18 10.0 Sample Depth: 6 In	9
Analytical Method:	e	oy EPA 300				Prep Method: E300P % Moisture:	
Tech: OJS Analyst: SCM			Date Prep:	06.08.18 15.15		Basis: Wet Weight	
Seq Number: 3052	2933						
Parameter		Cas Number	Result	RL	Units	Analysis Date Flag	Dil
Chloride		16887-00-6	1220	24.7	mg/kg	06.09.18 01.26	5
Analytical Method:	TPH by SW8015 1	Mod				Prep Method: TX1005P	
Tash. ADA	M.					0/ Moistures	

Tech: ARM					9	6 Moisture:		
Analyst: ARM		Date Pre	p: 06.08	.18 14.00	E	Basis: We	t Weight	
Seq Number: 3052902								
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	659	74.8		mg/kg	06.09.18 02.04		5
Diesel Range Organics (DRO)	C10C28DRO	3900	74.8		mg/kg	06.09.18 02.04		5
Oil Range Hydrocarbons (ORO)	PHCG2835	129	74.8		mg/kg	06.09.18 02.04		5
Total TPH	PHC635	4690	74.8		mg/kg	06.09.18 02.04		5
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	121	%	70-135	06.09.18 02.04		
o-Terphenyl		84-15-1	117	%	70-135	06.09.18 02.04		

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# Certificate of Analytical Results 588640



# LT Environmental, Inc., Arvada, CO

Golden 8 Federal #1

Sample Id: <b>SS09</b> Lab Sample Id: 588640-004		Matrix: Date Collect	Soil ed: 06.07.18 10.50		Date Received:0 Sample Depth: 6		9
Analytical Method: BTEX by EPA	x 8021B				Prep Method: S	W5030B	
Tech: ALJ					% Moisture:		
Analyst: ALJ		Date Prep:	06.10.18 08.30		Basis: V	Vet Weight	
Seq Number: 3052970							
Parameter	Cas Number	<b>Result</b>	RL	Units	Analysis Date	e Flag	Dil
Panzana	71 43 2	<0.00200 0	00200	ma/ka	06 10 18 21 34	I	1

							8	
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	06.10.18 21.34	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	06.10.18 21.34	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	06.10.18 21.34	U	1
m,p-Xylenes	179601-23-1	< 0.00399	0.00399		mg/kg	06.10.18 21.34	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	06.10.18 21.34	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	06.10.18 21.34	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	06.10.18 21.34	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	94	%	70-130	06.10.18 21.34		
4-Bromofluorobenzene		460-00-4	100	%	70-130	06.10.18 21.34		

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# Certificate of Analytical Results 588640



# LT Environmental, Inc., Arvada, CO

Golden 8 Federal #1

Sample Id: Lab Sample Id	<b>SS10</b> d: 588640-005		Matrix: Date Colle	Soil ected: 06.07.18 11.00		Date Received: Sample Depth: 6		)
Analytical Me Tech: Analyst: Seq Number:	ethod: Inorganic Anions OJS SCM 3052933	s by EPA 300	Date Prep	: 06.08.18 15.15		Prep Method: E % Moisture: Basis: V	E300P Wet Weight	
Parameter		Cas Number	Result	RL	Units	Analysis Date	e Flag	Dil
Chloride		16887-00-6	325	4.96	mg/kg	06.09.18 01.31	1	1

Analytical Method: TPH by SW801	5 Mod				F	Prep Method: TX	1005P	
Tech: ARM					9	6 Moisture:		
Analyst: ARM		Date Pre	p: 06.08	.18 14.00	E	Basis: We	t Weight	
Seq Number: 3052902								
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9		mg/kg	06.09.18 02.25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9		mg/kg	06.09.18 02.25	U	1
Oil Range Hydrocarbons (ORO)	PHCG2835	<14.9	14.9		mg/kg	06.09.18 02.25	U	1
Total TPH	PHC635	<14.9	14.9		mg/kg	06.09.18 02.25	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	95	%	70-135	06.09.18 02.25		
o-Terphenyl		84-15-1	98	%	70-135	06.09.18 02.25		

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# Certificate of Analytical Results 588640



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

Golden 8 Federal #1

Democra	71.42.0	-0.00200	00200		06 10 18 01 5	8	
Parameter	Cas Number	Result	RL	Units	Analysis Dat	te Flag	Dil
Seq Number: 3052932							
Analyst: ALJ		Date Prep:	06.09.18 07.55		Basis:	Wet Weight	
Tech: ALJ					% Moisture:		
Analytical Method: BTEX by EP.	A 8021B				Prep Method:	SW5030B	
Lab Sample Id: 588640-005		Date Collec	ted: 06.07.18 11.00		Sample Depth:	6 In	
Sample Id: SS10		Matrix:	Soil		Date Received:	06.08.18 10.0	)9

					onno	That you but	1 100	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	06.10.18 01.55	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	06.10.18 01.55	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	06.10.18 01.55	U	1
m,p-Xylenes	179601-23-1	< 0.00401	0.00401		mg/kg	06.10.18 01.55	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	06.10.18 01.55	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	06.10.18 01.55	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	06.10.18 01.55	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	95	%	70-130	06.10.18 01.55		
4-Bromofluorobenzene		460-00-4	113	%	70-130	06.10.18 01.55		

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# Certificate of Analytical Results 588640



# LT Environmental, Inc., Arvada, CO

Golden 8 Federal #1

Sample Id: SS11 Lab Sample Id: 588640-006		Matrix: Date Collect	Soil ed: 06.07.18 10.20		Date Received Sample Depth:	:06.08.18 10.09 :6 In	
Analytical Method:Inorganic AniorTech:OJSAnalyst:SCMSeq Number:3052933	as by EPA 300	Date Prep:	06.08.18 15.15	Ģ	Prep Method: % Moisture: Basis:	E300P Wet Weight	
Parameter	Cas Number	Result	RL	Units	Analysis Da	ite Flag	Dil
Chloride	16887-00-6	164	4.98	mg/kg	06.09.18 01.4	47	1

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0		mg/kg	06.09.18 02.45	U	1
Diesel Range Organics (DRO)	C10C28DRO	210	15.0		mg/kg	06.09.18 02.45		1
Oil Range Hydrocarbons (ORO)	PHCG2835	19.2	15.0		mg/kg	06.09.18 02.45		1
Total TPH	PHC635	229	15.0		mg/kg	06.09.18 02.45		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	101	%	70-135	06.09.18 02.45		
o-Terphenyl		84-15-1	105	%	70-135	06.09.18 02.45		

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# Certificate of Analytical Results 588640



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

Golden 8 Federal #1

Sample Id: SS11		Matrix:	Soil		Date Received:06.		9
Lab Sample Id: 588640-006 Analytical Method: BTEX by EPA	.8021B	Date Col	lected: 06.07.18 10.20		Sample Depth: 6 In Prep Method: SW		
Tech: ALJ					% Moisture:		
Analyst: ALJ		Date Pre	p: 06.09.18 07.55	]	Basis: We	t Weight	
Seq Number: 3052932							
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00199	0.00199	mg/kg	06.10.18 02.13	U	1
Toluene	108-88-3	< 0.00199	0.00199	mg/kg	06.10.18 02.13	U	1

						00				
Tol	uene	108-88-3	< 0.00199	0.00199		mg/kg	06.10.18 02.13	U	1	
Eth	ylbenzene	100-41-4	< 0.00199	0.00199		mg/kg	06.10.18 02.13	U	1	
m,p	-Xylenes	179601-23-1	< 0.00398	0.00398		mg/kg	06.10.18 02.13	U	1	
o-X	ylene	95-47-6	< 0.00199	0.00199		mg/kg	06.10.18 02.13	U	1	
Tot	al Xylenes	1330-20-7	< 0.00199	0.00199		mg/kg	06.10.18 02.13	U	1	
Tot	al BTEX		< 0.00199	0.00199		mg/kg	06.10.18 02.13	U	1	
	Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
	1,4-Difluorobenzene		540-36-3	87	%	70-130	06.10.18 02.13			
	4-Bromofluorobenzene		460-00-4	98	%	70-130	06.10.18 02.13			

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# **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.
- The target analyte was positively identified below the quantitation limit and above the detection limit. J
- Analyte was not detected. U
- The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and L 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.
- \*\* Surrogate recovered outside laboratory control limit.
- BRL Below Reporting Limit.
- RL Reporting Limit
- LOD Limit of Detection **MDL** Method Detection Limit SDL Sample Detection Limit
- **PQL** Practical Quantitation Limit **MQL** Method Quantitation Limit LOQ Limit of Quantitation
- DL Method Detection Limit
- Non-Calculable NC

SMP Clie	ent Sample	BLK	Method Blank	
BKS/LCS	Blank Spike/Laboratory Control Sample	BKSD/LCSD	Blank Spike Duplicate/Labo	ratory 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



### LT Environmental, Inc.

Golden 8 Federal #1

Analytical Method:	Inorganic Anions b	y EPA 300						Pr	ep Metho	d: E30	0P	
Seq Number:	3052933			Matrix:	Solid				Date Pre	ep: 06.0	8.18	
MB Sample Id:	7656302-1-BLK		LCS Sar	nple Id:	7656302-2	I-BKS		LCSI	O Sample	Id: 7656	6302-1-BSD	
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD ]	RPD Limi	t Units	Analysis Date	Flag
Chloride	< 5.00	250	270	108	267	107	90-110	1	20	mg/kg	06.09.18 00:05	

Analytical Method:	Inorganic Anions b	y EPA 300						Pı	ep Metho	od: E30	0P	
Seq Number:	3052933			Matrix:	Soil				Date Pr	ep: 06.0	8.18	
Parent Sample Id:	588639-001		MS Sar	nple Id:	588639-00	01 S		MS	D Sample	e Id: 588	539-001 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Lim	it Units	Analysis Date	Flag
Chloride	47.6	247	345	120	337	117	90-110	2	20	mg/kg	06.09.18 00:21	Х

Analytical Method:	Inorganic Anions b	y EPA 300						Pr	ep Metho	d: E30	0P	
Seq Number:	3052933			Matrix:	Soil				Date Pre	p: 06.0	8.18	
Parent Sample Id:	588640-005		MS Sar	nple Id:	588640-00	)5 S		MS	D Sample	Id: 588	540-005 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limi	t Units	Analysis Date	Flag
Chloride	325	248	583	104	584	104	90-110	0	20	mg/kg	06.09.18 01:36	

Analytical Method: Seq Number: MB Sample Id:	<b>TPH by S</b> 3052902 7656356-2		od	LCS Sar	Matrix: nple Id:		1-BKS			Prep Methoc Date Prep SD Sample	o: 06.0	1005P )8.18 6356-1-BSD	
Parameter		MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocar	bons (GRO)	<15.0	1000	943	94	954	95	70-135	1	20	mg/kg	06.08.18 19:37	
Diesel Range Organics	(DRO)	<15.0	1000	993	99	1000	100	70-135	1	20	mg/kg	06.08.18 19:37	
Surrogate		MB %Rec	MB Flag		CS Rec	LCS Flag	LCSI %Ree		-	Limits	Units	Analysis Date	
1-Chlorooctane		101		1	22		125		7	0-135	%	06.08.18 19:37	
o-Terphenyl		106		1	08		107		7	0-135	%	06.08.18 19:37	

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

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Golden 8 Federal #1

Analytical Method:TPH by SSeq Number:3052902Parent Sample Id:588620-00	lod	Matrix: Soil MS Sample Id: 588620-001 S					Prep Method:TX1005PDate Prep:06.08.18MSD Sample Id:588620-001 SD					
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD R	PD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	998	890	89	903	90	70-135	1	20	mg/kg	06.08.18 20:38	
Diesel Range Organics (DRO)	<15.0	998	924	93	942	94	70-135	2	20	mg/kg	06.08.18 20:38	
Surrogate				1S Rec	MS Flag	MSD %Ree			nits	Units	Analysis Date	
1-Chlorooctane			1	22		124		70-1	135	%	06.08.18 20:38	
o-Terphenyl			1	07		107		70-1	35	%	06.08.18 20:38	

<b>Analytical Method:</b> Seq Number: MB Sample Id:	<b>BTEX by EPA 802</b> 3052932 7656352-1-BLK	1B	Prep Method: Matrix: Solid Date Prep: Sample Id: 7656352-1-BKS LCSD Sample Id CS LCS LCSD LCSD Limits %RPD RPD Limit					ep: 06.0	: 06.09.18			
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPI	) RPD Limi	t Units	Analysis Date	Flag
Benzene	< 0.00202	0.101	0.0866	86	0.0847	85	70-130	2	35	mg/kg	06.09.18 18:38	
Toluene	< 0.00202	0.101	0.0902	89	0.0897	90	70-130	1	35	mg/kg	06.09.18 18:38	
Ethylbenzene	< 0.00202	0.101	0.0922	91	0.0914	91	70-130	1	35	mg/kg	06.09.18 18:38	
m,p-Xylenes	< 0.00403	0.202	0.192	95	0.187	94	70-130	3	35	mg/kg	06.09.18 18:38	
o-Xylene	< 0.00202	0.101	0.0929	92	0.0977	98	70-130	5	35	mg/kg	06.09.18 18:38	
Surrogate	MB %Rec	MB Flag			LCS Flag	LCSE %Rec			Limits	Units	Analysis Date	
1,4-Difluorobenzene	89		ç	95		94			70-130	%	06.09.18 18:38	
4-Bromofluorobenzene	93		ç	95		99			70-130	%	06.09.18 18:38	

Analytical Method: Seq Number: MB Sample Id:	<b>BTEX by EPA 802</b> 3052970 7656395-1-BLK	1B	LCS Sar	Matrix: nple Id:	Solid 7656395-	1-BKS			Prep Metho Date Pre SD Sample	p: 06.1	5030B 0.18 6395-1-BSD	
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPE	) RPD Limi	t Units	Analysis Date	Flag
Benzene	< 0.00200	0.100	0.0879	88	0.0862	85	70-130	2	35	mg/kg	06.10.18 19:28	
Toluene	< 0.00200	0.100	0.0934	93	0.0907	90	70-130	3	35	mg/kg	06.10.18 19:28	
Ethylbenzene	< 0.00200	0.100	0.0917	92	0.0893	88	70-130	3	35	mg/kg	06.10.18 19:28	
m,p-Xylenes	< 0.00401	0.200	0.189	95	0.185	92	70-130	2	35	mg/kg	06.10.18 19:28	
o-Xylene	< 0.00200	0.100	0.0921	92	0.0897	89	70-130	3	35	mg/kg	06.10.18 19:28	
Surrogate	MB %Rec	MB Flag			LCS Flag	LCSI %Re			Limits	Units	Analysis Date	
1,4-Difluorobenzene	93		Ģ	99		94		7	70-130	%	06.10.18 19:28	
4-Bromofluorobenzene	87		ç	98		94		2	70-130	%	06.10.18 19:28	

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

Final 1.000

MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec

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### LT Environmental, Inc.

Golden 8 Federal #1

<b>Analytical Method:</b> Seq Number: Parent Sample Id:	BTEX by EPA 802 3052932 588112-021	lB		Matrix: nple Id:	Soil 588112-02	21 S			Prep Metho Date Pre SD Sample	p: 06.0	5030B )9.18 112-021 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limi	t Units	Analysis Date	Flag
Benzene	< 0.00200	0.100	0.0473	47	0.0544	55	70-130	14	35	mg/kg	06.09.18 19:16	Х
Toluene	< 0.00200	0.100	0.0502	50	0.0567	57	70-130	12	35	mg/kg	06.09.18 19:16	Х
Ethylbenzene	< 0.00200	0.100	0.0468	47	0.0537	54	70-130	14	35	mg/kg	06.09.18 19:16	Х
m,p-Xylenes	< 0.00401	0.200	0.0968	48	0.111	56	70-130	14	35	mg/kg	06.09.18 19:16	Х
o-Xylene	< 0.00200	0.100	0.0465	47	0.0653	66	70-130	34	35	mg/kg	06.09.18 19:16	Х
Surrogate				AS Rec	MS Flag	MSD %Red		_	limits	Units	Analysis Date	
1,4-Difluorobenzene			:	88		106		7	0-130	%	06.09.18 19:16	
4-Bromofluorobenzene			9	95		104		7	0-130	%	06.09.18 19:16	

Analytical Method:	BTEX by EPA 802	IB						1	Prep Method	i: SW:	5030B	
Seq Number:	3052970		l	Matrix:	Soil				Date Prep	o: 06.1	0.18	
Parent Sample Id:	588647-004		MS San	ple Id:	588647-00	04 S		M	SD Sample	ld: 588	647-004 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	< 0.00202	0.101	0.0756	75	0.0760	75	70-130	1	35	mg/kg	06.10.18 20:04	
Toluene	< 0.00202	0.101	0.0813	80	0.0797	79	70-130	2	35	mg/kg	06.10.18 20:04	
Ethylbenzene	< 0.00202	0.101	0.0814	81	0.0819	81	70-130	1	35	mg/kg	06.10.18 20:04	
m,p-Xylenes	< 0.00404	0.202	0.167	83	0.171	85	70-130	2	35	mg/kg	06.10.18 20:04	
o-Xylene	< 0.00202	0.101	0.0767	76	0.0782	77	70-130	2	35	mg/kg	06.10.18 20:04	
Surrogate				IS Rec	MS Flag	MSD %Ree			Limits	Units	Analysis Date	
1,4-Difluorobenzene			9	8		98		7	0-130	%	06.10.18 20:04	
4-Bromofluorobenzene			10	04		106		7	0-130	%	06.10.18 20:04	

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

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San Antonio, Texas (210	(as (281-240-4200)
	Standard since 1990
	LABORATORIES
	XENCO

# CHAIN OF CUSTODY

Stafford, Texas (281-240-4200)	San Anto	San Antonio, Texas (210-509-3334)	Phoen	Phoenix, Arizona (480-355-0900)	
Dallas Texas (214-902-0300)	Midland,	Midland, Texas (432-704-5251) www.xenco.com	Xenco Quote #		Xenco Job # Store (OU)
				Analytical Information	Matrix Codes
Client / Reporting Information		Project Information			
Company Name / Branch: LT Environmental, Inc Permian Office	Project Name/Number:	reiNumber: Golden & Federa	1#1	015	W = Water S = Soil/Sed/Solid
Company Address: 3300 North "A" Street Building 1 Unit #103 Midland TX 79705	Project Location: 79705	NM JRP	RTEX	0)8	GW =Ground Water DW = Droduct P = Product
Email: Phone No:		Invoice To: XTO Energy - Kyle Littrell	ly.	DR	SW = Surface water SL = Sludge
Abaker@LTEnv.com (432) 704-5178			(on	200.	OW =Ocean/Sea Water
Adrian Baker	PO Number:		211	6	O = Oil
Samplers's Name your la waylow ch		-	302	RC	WW= Waste Water
c	Collection		Number of preserved bottles	Mide	A = Air
No. Field ID / Point of Collection	Sample		NO3 2SO4 aOH aHSO4 EOH ONE STEX	Chlor	Field Comparis
1 SSO6 @ 6" bas.	81/2/90 11 9	1		XX	ETR-S
Co SS		10:15 S 1	XX	XX	
3 508		10:35 S 1	XX	XX	W-mid TB
4 5509		10:50 S 1	XX	XX	SW-midTB
			XX	XX	NW -WTS
6 SS 11	V V	11:20 \$ 1	XX	XX	SW-WTB
8					
ω					
10					
Turnaround Time (Business days)		Data Deliverable Information	tion	Notes:	
🕅 Same Day TAT 📄 5 Day TAT		Level II Std QC	Level IV (Full Data Pkg /raw d	data)	
Next Day EMERGENCY		Level III Std QC+ Forms	TRRP Level IV		
2 Day EMERGENCY Contract TAT	л	Level 3 (CLP Forms)	UST / RG -411		
3 Day EMERGENCY		TRRP Checklist			
TAT Starts Day received by Lab, if received by 5:00 pm	5:00 pm				FED-EX / UPS: Tracking #
	TODY MUST BE DOCUMENT	SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY	OSSESSION, INCLUDING COURIER DELI	1	
Relinguished by Sampler 1 Junite Jan J. C. V. Relinguished by:	Date Time: 0//07/18 13:22 Date Time:	Received By: Received By: Received By:	Relinquished By: 2 2 M H	Date Time: Date Time: Date Time:	Received By: WAWA & DALA 10
3 Relinquished by:	Date Time:	3 Received By:	4 Custody Seal #	Preserved where applicable	On Ice Cooler Temp Thermo. Corr. Factor
		Ch.			5 70000

### Received/by(OCD:11/3/2020 3:12:49 PM



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



Client: LT Environmental, Inc. Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient Date/ Time Received: 06/08/2018 10:09:00 AM Temperature Measuring device used : R8 Work Order #: 588640 Sample Receipt Checklist Comments #1 \*Temperature of cooler(s)? 12

#1 Temperature of cooler(s)?	4.2	
#2 *Shipping container in good condition?	Yes	
#3 *Samples received on ice?	Yes	
#4 *Custody Seals intact on shipping container/ cooler?	N/A	
#5 Custody Seals intact on sample bottles?	N/A	
#6*Custody Seals Signed and dated?	N/A	
#7 *Chain of Custody present?	Yes	
#8 Any missing/extra samples?	No	
#9 Chain of Custody signed when relinquished/ received?	Yes	
#10 Chain of Custody agrees with sample labels/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)?	N/A	
#18 Water VOC samples have zero headspace?	N/A	
	#2 *Shipping container in good condition? #3 *Samples received on ice? #4 *Custody Seals intact on shipping container/ cooler? #5 Custody Seals intact on sample bottles? #6*Custody Seals Signed and dated? #7 *Chain of Custody present? #8 Any missing/extra samples? #9 Chain of Custody signed when relinquished/ received? #10 Chain of Custody agrees with sample labels/matrix? #11 Container label(s) legible and intact? #13 Samples in proper container/ bottle? #14 Sample container(s) intact? #15 Sufficient sample amount for indicated test(s)? #16 All samples received within hold time? #17 Subcontract of sample(s)?	#2 *Shipping container in good condition?Yes#3 *Samples received on ice?Yes#4 *Custody Seals intact on shipping container/ cooler?N/A#5 Custody Seals intact on sample bottles?N/A#6*Custody Seals Signed and dated?N/A#7 *Chain of Custody present?Yes#8 Any missing/extra samples?No#9 Chain of Custody signed when relinquished/ received?Yes#10 Chain of Custody agrees with sample labels/matrix?Yes#11 Container label(s) legible and intact?Yes#13 Samples properly preserved?Yes#14 Sample container(s) intact?Yes#15 Sufficient sample amount for indicated test(s)?Yes#17 Subcontract of sample(s)?N/A

### \* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

PH Device/Lot#:

Checklist completed by: Brianna Teel Checklist reviewed by: Jessica Krame

Date: 06/08/2018

Jessica Kramer

Date: 06/08/2018

# Analytical Report 589277

for

LT Environmental, Inc.

**Project Manager: Adrian Baker** 

**Golden 8 Federal 1** 

# 15-JUN-18

Collected By: Client





1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-18-26), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054) Oklahoma (2017-142)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-17-16), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-17-12) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-17-16) Xenco-Odessa (EPA Lab Code: TX00158): Texas (T104704400-18-15) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3) Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757) Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757) Xenco-Atlanta (LELAP Lab ID #04176) Xenco-Tampa: Florida (E87429) Xenco-Lakeland: Florida (E84098)



15-JUN-18

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

Reference: XENCO Report No(s): 589277 Golden 8 Federal 1 Project Address: NM 2RP-3612

### Adrian Baker:

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) 589277. 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. 589277 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,

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Jessica Kramer 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 589277

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

Golden 8 Federal 1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH01 A	S	06-13-18 09:50	7 ft	589277-001
BH01 B	S	06-13-18 10:30	10.5 ft	589277-002
BH01 C	S	06-13-18 11:15	12.5 ft	589277-003

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# CASE NARRATIVE

Client Name: LT Environmental, Inc. Project Name: Golden 8 Federal 1

Project ID: Work Order Number(s): 589277 Report Date:15-JUN-18Date Received:06/14/2018

### Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments: Batch: LBA-3053586 TPH by SW8015 Mod Surrogate o-Terphenyl recovered below QC limits. Matrix interferences is suspected; data confirmed by reanalysis. Samples affected are: 589277-001 S.

Batch: LBA-3053603 BTEX by EPA 8021B Soil samples were not received in Terracore kits and therefore were prepared by method 5030.


Project Id: Contact: A Project Location: N

Adrian Baker NM 2RP-3612

## Certificate of Analysis Summary 589277

LT Environmental, Inc., Arvada, CO

Project Name: Golden 8 Federal 1



Date Received in Lab:Thu Jun-14-18 02:00 pmReport Date:15-JUN-18Project Manager:Jessica Kramer

	Lab Id:	589277-0	001	589277-0	002	589277-0	003		
Anglusia Degraded	Field Id:	BH01.	А	BH01 I	в	BH01 0	С		
Analysis Requested	Depth:	7- ft		10.5- ft	t	12.5- ft	t		
	Matrix:	SOIL		SOIL		SOIL			
	Sampled:	Jun-13-18	09:50	Jun-13-18	10:30	Jun-13-18 1	11:15		
BTEX by EPA 8021B	Extracted:	Jun-14-18	16:00	Jun-14-18 1	6:00	Jun-14-18 1	6:00		
	Analyzed:	Jun-14-18	19:08	Jun-14-18 1	9:26	Jun-14-18 1	9:44		
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Benzene		< 0.00201	0.00201	< 0.00199	0.00199	< 0.00200	0.00200		
Toluene		< 0.00201	0.00201	< 0.00199	0.00199	< 0.00200	0.00200		
Ethylbenzene		< 0.00201	0.00201	< 0.00199	0.00199	< 0.00200	0.00200		
m,p-Xylenes		< 0.00402	0.00402	< 0.00398	0.00398	< 0.00400	0.00400		
o-Xylene		< 0.00201	0.00201	< 0.00199	0.00199	< 0.00200	0.00200		
Total Xylenes		< 0.00201	0.00201	< 0.00199	0.00199	< 0.00200	0.00200		
Total BTEX		< 0.00201	0.00201	< 0.00199	0.00199	< 0.00200	0.00200		
Inorganic Anions by EPA 300	Extracted:	Jun-14-18	14:30	Jun-14-18 1	4:30	Jun-14-18 1	4:30		
	Analyzed:	Jun-14-18	18:51	Jun-14-18 1	8:56	Jun-14-18 1	9:02		
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Chloride		1290	24.6	212	4.94	107	5.00		
TPH by SW8015 Mod	Extracted:	Jun-15-18	12:00	Jun-15-18 1	2:00	Jun-15-18 1	2:00		
	Analyzed:	Jun-15-18	14:06	Jun-15-18 1	5:06	Jun-15-18 1	5:27		
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0	<15.0	15.0	<15.0	15.0		
Diesel Range Organics (DRO)		331	15.0	126	15.0	258	15.0		
Oil Range Hydrocarbons (ORO)		24.0	15.0	<15.0	15.0	17.1	15.0		
Total TPH		355	15.0	126	15.0	275	15.0		

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.

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Jessica Kramer Project Assistant

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## Certificate of Analytical Results 589277



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

Golden 8 Federal 1

Sample Id: <b>BH01 A</b> Lab Sample Id: 589277-001		Matrix: Date Colle	Soil cted: 06.13	.18 09.50		Date Received:06. Sample Depth:7 f		)
Analytical Method: Inorganic Anio	ons by EPA 300				Р	Prep Method: E3	00P	
Tech: SCM					%	6 Moisture:		
Analyst: SCM		Date Prep:	06.14	.18 14.30	E	Basis: We	t Weight	
Seq Number: 3053433							U	
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1290	24.6		mg/kg	06.14.18 18.51		5
Analytical Method:TPH by SW803Tech:ARMAnalyst:JUMSeq Number:3053586		Date Prep:	06.15	.18 12.00	%	Prep Method: TX 6 Moisture: Basis: We	et Weight	
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0		mg/kg	06.15.18 14.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	331	15.0		mg/kg	06.15.18 14.06		1
Oil Range Hydrocarbons (ORO)	PHCG2835	24.0	15.0		mg/kg	06.15.18 14.06		1
Total TPH	PHC635	355	15.0		mg/kg	06.15.18 14.06		1
			0/					-
Surrogate		Cos Number -	%	Unite	Limite	Analysis Data	Flag	1
Surrogate 1-Chlorooctane		Cas Number F	% Recovery 83	Units %	<b>Limits</b> 70-135	<b>Analysis Date</b> 06.15.18 14.06	Flag	

88

%

70-135

06.15.18 14.06

84-15-1

o-Terphenyl

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## Certificate of Analytical Results 589277



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

Golden 8 Federal 1

Sample Id: <b>BH01 A</b> Lab Sample Id: 589277-001		Matrix: Date Collecter	Soil d: 06.13.18 09.50	Date Received:06.14.18 14.00 Sample Depth:7 ft			
Analytical Method: BTEX by EPA Tech: ALJ	8021B			Prep Meth % Moistur	od: SW5030B		
Analyst: ALJ Seq Number: 3053603		Date Prep:	06.14.18 16.00	Basis:	Wet Weight		
Devenueton	Cog Number D	omlt D	<b>.</b>	TT 1/ A T		D	

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00201	0.00201		mg/kg	06.14.18 19.08	U	1
Toluene	108-88-3	< 0.00201	0.00201		mg/kg	06.14.18 19.08	U	1
Ethylbenzene	100-41-4	< 0.00201	0.00201		mg/kg	06.14.18 19.08	U	1
m,p-Xylenes	179601-23-1	< 0.00402	0.00402		mg/kg	06.14.18 19.08	U	1
o-Xylene	95-47-6	< 0.00201	0.00201		mg/kg	06.14.18 19.08	U	1
Total Xylenes	1330-20-7	< 0.00201	0.00201		mg/kg	06.14.18 19.08	U	1
Total BTEX		< 0.00201	0.00201		mg/kg	06.14.18 19.08	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	101	%	70-130	06.14.18 19.08		
1,4-Difluorobenzene		540-36-3	108	%	70-130	06.14.18 19.08		



## Certificate of Analytical Results 589277



## LT Environmental, Inc., Arvada, CO

Golden 8 Federal 1

Sample Id: <b>BH01 B</b> Lab Sample Id: 589277-002		Matrix: Date Collec	Soil cted: 06.13.18 10.30		Date Received:06. Sample Depth:10.		)
Analytical Method: Inorganic Anio	ns by EPA 300				Prep Method: E30	)0P	
Tech: SCM					% Moisture:		
Analyst: SCM		Date Prep:	06.14.18 14.30		Basis: We	t Weight	
Seq Number: 3053433							
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	212	4.94	mg/kg	06.14.18 18.56		1
Analytical Method: TPH by SW801 Tech: ARM Analyst: JUM Seq Number: 3053586	5 Mod	Date Prep:	06.15.18 12.00		Prep Method: TX % Moisture: Basis: We	1005P t Weight	
Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	06.15.18 15.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	126	15.0	mg/kg	06.15.18 15.06		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	06.15.18 15.06	U	1
Total TPH	PHC635	126	15.0	mg/kg	06.15.18 15.06		1

	PHC055	120	15.0		mg/kg	00.13.18 13.00		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	75	%	70-135	06.15.18 15.06		
o-Terphenyl		84-15-1	79	%	70-135	06.15.18 15.06		



## Certificate of Analytical Results 589277



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

Golden 8 Federal 1

Sample Id: <b>BH01 B</b> Lab Sample Id: 589277-002	Matrix: Soil Date Collected: 06.13.18 10.30	Date Received:06.14.18 14.00 Sample Depth:10.5 ft
Analytical Method: BTEX by EPA 8021B Tech: ALJ		Prep Method: SW5030B % Moisture:
Analyst: ALJ Seq Number: 3053603	Date Prep: 06.14.18 16.00	Basis: Wet Weight
Seq Number. 5655665		

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00199	0.00199		mg/kg	06.14.18 19.26	U	1
Toluene	108-88-3	< 0.00199	0.00199		mg/kg	06.14.18 19.26	U	1
Ethylbenzene	100-41-4	< 0.00199	0.00199		mg/kg	06.14.18 19.26	U	1
m,p-Xylenes	179601-23-1	< 0.00398	0.00398		mg/kg	06.14.18 19.26	U	1
o-Xylene	95-47-6	< 0.00199	0.00199		mg/kg	06.14.18 19.26	U	1
Total Xylenes	1330-20-7	< 0.00199	0.00199		mg/kg	06.14.18 19.26	U	1
Total BTEX		< 0.00199	0.00199		mg/kg	06.14.18 19.26	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	93	%	70-130	06.14.18 19.26		
1,4-Difluorobenzene		540-36-3	101	%	70-130	06.14.18 19.26		



## **Certificate of Analytical Results 589277**



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

Golden 8 Federal 1

Sample Id: <b>BH01</b> C Lab Sample Id: 589277-003		Matrix: Date Colle	Soil cted: 06.13.	.18 11.15		Date Received:06. Sample Depth:12.		)
Analytical Method: Inorganic Anior	ns by EPA 300				P	Prep Method: E3	00P	
Tech: SCM					%	% Moisture:		
Analyst: SCM		Date Prep:	06.14.	.18 14.30	E	Basis: We	et Weight	
Seq Number: 3053433							U	
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	107	5.00		mg/kg	06.14.18 19.02		1
Applytical Mathad TDU by SW801	5 Mod				D	Prop Mathady TV	1005P	
Analytical Method: TPH by SW801 Tech: ARM Analyst: JUM Seq Number: 3053586	5 Mod	Date Prep:	06.15.	.18 12.00	%	Prep Method: TX 6 Moisture: Basis: We	(1005P et Weight	
Tech: ARM Analyst: JUM	5 Mod Cas Number	Date Prep: <b>Result</b>	06.15. <b>RL</b>	.18 12.00	%	6 Moisture:		Dil
Tech: ARM Analyst: JUM Seq Number: 3053586				.18 12.00	% E	Moisture: Basis: We	et Weight	<b>Dil</b>
Tech: ARM Analyst: JUM Seq Number: 3053586 Parameter	Cas Number	Result	RL	.18 12.00	% E Units	6 Moisture: Basis: We Analysis Date	et Weight Flag	
Tech: ARM Analyst: JUM Seq Number: 3053586 Parameter Gasoline Range Hydrocarbons (GRO)	Cas Number PHC610	<b>Result</b> <15.0	<b>RL</b> 15.0	.18 12.00	% E Units mg/kg	Moisture: Basis: We Analysis Date 06.15.18 15.27	et Weight Flag	
Tech: ARM Analyst: JUM Seq Number: 3053586 Parameter Gasoline Range Hydrocarbons (GRO) Diesel Range Organics (DRO)	Cas Number PHC610 C10C28DRO	Result <15.0 258	<b>RL</b> 15.0 15.0	.18 12.00	9, E Units mg/kg mg/kg	6 Moisture: Basis: We Analysis Date 06.15.18 15.27 06.15.18 15.27	et Weight Flag	1
Tech: ARM Analyst: JUM Seq Number: 3053586 Parameter Gasoline Range Hydrocarbons (GRO) Diesel Range Organics (DRO) Oil Range Hydrocarbons (ORO)	Cas Number PHC610 C10C28DRO PHCG2835	Result <15.0 258 17.1 275	<b>RL</b> 15.0 15.0 15.0	.18 12.00	9, E Units mg/kg mg/kg mg/kg	6 Moisture: Basis: We <u>Analysis Date</u> 06.15.18 15.27 06.15.18 15.27 06.15.18 15.27	et Weight Flag	1 1 1

99

%

70-135

06.15.18 15.27

84-15-1

1-Chlorooctane o-Terphenyl



## Certificate of Analytical Results 589277



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

Golden 8 Federal 1

Sample Id:BH01 CLab Sample Id:589277-003	Matrix: Soil Date Collected: 06.13.18 11.15	Date Received:06.14.18 14.00 Sample Depth:12.5 ft
Analytical Method: BTEX by EPA 8021B Tech: ALJ		Prep Method: SW5030B % Moisture:
Analyst: ALJ Seq Number: 3053603	Date Prep: 06.14.18 16.00	Basis: Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	06.14.18 19.44	U	1
Toluene	108-88-3	< 0.00200	0.00200		mg/kg	06.14.18 19.44	U	1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	06.14.18 19.44	U	1
m,p-Xylenes	179601-23-1	< 0.00400	0.00400		mg/kg	06.14.18 19.44	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	06.14.18 19.44	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	06.14.18 19.44	U	1
Total BTEX		< 0.00200	0.00200		mg/kg	06.14.18 19.44	U	1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene		460-00-4	109	%	70-130	06.14.18 19.44		
1,4-Difluorobenzene		540-36-3	103	%	70-130	06.14.18 19.44		

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# **Flagging Criteria**



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- 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.
- \*\* Surrogate recovered outside laboratory control limit.
- BRL Below Reporting Limit.
- RL Reporting Limit
- MDL Method Detection LimitSDLSample Detection LimitLOD Limit of Detection
- PQL Practical Quantitation Limit MQL Method Quantitation Limit LOQ Limit of Quantitation
- DL Method Detection Limit
- NC Non-Calculable

SMP Cli	ent Sample	BLK	Method Blank	
BKS/LCS	Blank Spike/Laboratory Control Sample	BKSD/LCSD	Blank Spike Duplicate/Labo	oratory 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



#### LT Environmental, Inc.

Golden 8 Federal 1

Analytical Method:	Inorganic Anions by	EPA 300						0P				
Seq Number:	3053433			Matrix:	Solid				Date Pre	ep: 06.1	4.18	
MB Sample Id:	7656636-1-BLK		LCS Sat	nple Id:	7656636-	1-BKS		LCSI	D Sample	Id: 7656	6636-1-BSD	
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RP D	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	257	103	257	103	90-110	0	20	mg/kg	06.14.18 12:29	

Analytical Method:	Inorganic Anions by	y EPA 300						Pı	ep Metho	od: E30	0P	
Seq Number:	3053433			Matrix:	Soil			4.18				
Parent Sample Id:	588898-002		MS Sa	mple Id:	588898-0	898-002 SD						
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RP D	RPD Limit	Units	Analysis Date	Flag
Chloride	321	250	558	95	559	95	90-110	0	20	mg/kg	06.14.18 17:57	

Analytical Method:	Inorganic Anions by	y EPA 300						Pr	0P			
Seq Number:	3053433			Matrix:	Soil				Date Pre	ep: 06.1	4.18	
Parent Sample Id:	589043-001		MS Sat	mple Id:	589043-0	01 S		MSI	D Sample	Id: 5890	043-001 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RP D	RPD Limit	Units	Analysis Date	Flag
Chloride	7.35	247	270	106	264	104	90-110	2	20	mg/kg	06.14.18 12:46	

Analytical Method:	TPH by S	W8015 M	od						Р	rep Meth	od: TX1	005P	
Seq Number:	3053586				Matrix:	Solid				Date Pr	ep: 06.1	5.18	
MB Sample Id:	7656745-	1-BLK		LCS Sat	mple Id:	7656745-	1-BKS		LCS	SD Sample	e Id: 765	6745-1-BSD	
Parameter		MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RP D	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarb	ons (GRO)	<15.0	1000	837	84	847	85	70-135	1	20	mg/kg	06.15.18 13:26	
Diesel Range Organics	(DRO)	<15.0	1000	827	83	854	85	70-135	3	20	mg/kg	06.15.18 13:26	
Surrogate		MB %Rec	MB Flag			LCS Flag	LCSE %Rec			imits	Units	Analysis Date	
1-Chlorooctane		80		1	07		109		70	0-135	%	06.15.18 13:26	
o-Terphenyl		84		:	86		83		70	0-135	%	06.15.18 13:26	

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

MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec

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Released to Imaging: 7/23/2021 11:50:21 AM



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#### Goldon & Fodoral 1

Golden 8 Federal 1

<b>Analytical Method:</b> Seq Number: Parent Sample Id:	<b>TPH by S</b> 3053586 589277-0	5 <b>W8015 M</b>	lod		Matrix:	Soil 589277-0	01 S		Prep Method:         TX1005P           Date Prep:         06.15.18           MSD Sample Id:         589277-001 SD						
Parameter	507211 0	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RP D	RPD Limit	Units	Analysis Date	Flag		
Gasoline Range Hydrocarbo	ons (GRO)	<15.0	999	820	82	871	87	70-135	6	20	mg/kg	06.15.18 14:26			
Diesel Range Organics (	(DRO)	331	999	1140	81	1160	83	70-135	2	20	mg/kg	06.15.18 14:26			
Surrogate					1S Rec	MS Flag	MSD %Rec			imits	Units	Analysis Date			
1-Chlorooctane				1	09		102		7	0-135	%	06.15.18 14:26			
o-Terphenyl				:	54	**	90		7	0-135	%	06.15.18 14:26			

Analytical Method:	BTEX by EPA 8021	lB						P	rep Meth	od: SW:	5030B	
Seq Number:	3053603			Matrix:	Solid				Date Pr	ep: 06.1	4.18	
MB Sample Id:	7656667-1-BLK		LCS Sat	mple Id:	7656667-	1-BKS		LCS	SD Sample	e Id: 765	6667-1-BSD	
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RP D	RPD Limit	Units	Analysis Date	Flag
Benzene	< 0.00200	0.100	0.0941	94	0.0871	87	70-130	8	35	mg/kg	06.14.18 17:19	
Toluene	< 0.00200	0.100	0.101	101	0.0930	93	70-130	8	35	mg/kg	06.14.18 17:19	
Ethylbenzene	< 0.00200	0.100	0.0993	99	0.0925	93	70-130	7	35	mg/kg	06.14.18 17:19	
m,p-Xylenes	< 0.00401	0.200	0.208	104	0.194	97	70-130	7	35	mg/kg	06.14.18 17:19	
o-Xylene	< 0.00200	0.100	0.106	106	0.0910	91	70-130	15	35	mg/kg	06.14.18 17:19	
Surrogate	MB %Rec	MB Flag			LCS Flag	LCSD %Rec			imits	Units	Analysis Date	
1,4-Difluorobenzene	98		9	92		99		7	0-130	%	06.14.18 17:19	
4-Bromofluorobenzene	89		1	00		122		7	0-130	%	06.14.18 17:19	

<b>Analytical Method:</b> Seq Number: Parent Sample Id:	<b>BTEX by EPA 802</b> 3053603 588822-002	1B		Matrix: nple Id:	Soil 588822-0	02 S		Prep Method:         SW5030B           Date Prep:         06.14.18           MSD Sample Id:         588822-002 SD							
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RP D	RPD Limit	Units	Analysis Date	Flag			
Benzene	< 0.00201	0.100	0.0578	58	0.0661	65	70-130	13	35	mg/kg	06.14.18 17:55	Х			
Toluene	< 0.00201	0.100	0.0592	59	0.0663	66	70-130	11	35	mg/kg	06.14.18 17:55	Х			
Ethylbenzene	< 0.00201	0.100	0.0519	52	0.0592	59	70-130	13	35	mg/kg	06.14.18 17:55	Х			
m,p-Xylenes	< 0.00402	0.201	0.107	53	0.120	60	70-130	11	35	mg/kg	06.14.18 17:55	Х			
o-Xylene	< 0.00201	0.100	0.0520	52	0.0572	57	70-130	10	35	mg/kg	06.14.18 17:55	Х			
Surrogate				IS Rec	MS Flag	MSD %Rec			imits	Units	Analysis Date				
1,4-Difluorobenzene			1	06		97		70	0-130	%	06.14.18 17:55				
4-Bromofluorobenzene			1	06		123		70	0-130	%	06.14.18 17:55				

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

MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec

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# CHAIN OF CUSTODY Page 1 of 1

Kelinquisned by:	Dellasticitation	Belinguished by:	Relinquished by Sampler.	TAT Starts Day received by Lab, if received by 5:00 pm	3 Day EMERGENCY	2 Day EMERGENCY	Next Day EMERGENCY	Same Day TAT	Turnaround Time ( Business days)	10	9	8	7	<b>σ</b> σ	4	3 8HOIC	2 BHORE	BHOLA	No. Field ID / Point of Collection	C	Samplers's Name Lynda Lana	Adrian Baker	Abaker@LTEnv.com	3300 North "A" Street, Building 1, Unit #103, Midland, TX 79705 Email: Phone No:	Company Address:	Company Name / Branch: LT Environmental, Inc Permian Office	Client / Reporting Information	
	0	10/ D		Lab, if received by 5:00		Contract TAT	7 Day TAT	5 Day TAT	iys)							1					bach		(432) 704-5178	Phone No:		ffice	_	
ate Time:	6-14-18/14:00	Date Time:	Date/Time:													12.5' V	10.51	31/2 00/2/18	Sample Depth Date	Collection		PO Number:	XTO Energ	15 Invoice To:	Project Location:	Project Nar	-	
Received By:	-	Received By:	Repeived By:	ED RELOW EACH TIM	TRRP Checklist	Level 3 (CLP Forms)	Level III St	Level II Std QC								S 51:11	10:30 5	- 9:50 S	Time Matrix				XTO Energy - Kyle Littrell		>	Project Name/Number: 6.0/den	Project Information	
,	liller	- Hard	P C C C		cklist	_P Forms)	Level III Std QC+ Forms		Data Deliverable Information							-	_	_	HCI NaOH/Zn Acetate	Numbe				CRU	J	hen & Federa	rmation	
Custody Seal #	4	& AWWW VU	Date/Time: Reperved By: C M Relinquisted BM ///			UST / RG -411	TRRP Level IV	Level IV (Full Data Pkg /raw	on										HNO3 H2SO4 NaOH NaHSO4 MEOH	Number of preserved bottles				3616		11		
Preserve		in in le	LIVERY					Pkg /raw data)								XXXX	XXXX	XXXX	BTE)	m	80 RC	2	RO,	VR	2)8	TE 01.	$\Lambda$	)
Preserved where applicable		13/10/15:30	_	FED-EX / U				-	Notes:							- \			Chlo			_(	30	0,0	<u></u>			Analytical Information
On lee	A	2	Received By:	FED-EX / UPS: Tracking #					-																			on
Cooler Temp.									-							4	1	1509										
Thermo. Corr. Factor																			Field Comments	A = Air	WW= Waste Water	WI = Wipe	SL = Sludge OW =Ocean/Sea Water	P = Product SW = Surface water	GW =Ground Water DW = Drinking Water	W = Water S = Soil/Sed/Solid		Matrix Codes

## Received/by OCD:11/3/2020 3:12:49 PM

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ABORATORIES

Dallas Texas (214-902-0300) Stafford, Texas (281-240-4200) Setting the Standard since 1990

Midland, Texas (432-704-5251) San Antonio, Texas (210-509-3334)

Phoenix, Arizona (480-355-0900)



#### After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.

2. Fold the printed page along the horizontal line.

3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.



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



Client: LT Environmental, Inc. Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient Date/ Time Received: 06/14/2018 02:00:00 PM Temperature Measuring device used : R8 Work Order #: 589277 Sample Receipt Checklist Comments

#1 *Temperature of cooler(s)?	3.5
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6*Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/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)?	N/A
#18 Water VOC samples have zero headspace?	N/A

#### \* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

PH Device/Lot#:

Checklist completed by: Brianna Teel Checklist reviewed by: Jessica Krame

Date: 06/14/2018

Jessica Kramer

Date: 06/14/2018

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

District IV 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

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	3173
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS		
Created By	Condition	Condition Date
bbillings	Deferral for nJMW1333053660 approved until P&A or major modification of site	7/23/2021

CONDITIONS

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Action 3173