	IRP-0	9-09-2286	RE	CF	WEn	ì					
District I 1625 N. French Dr., Hobbs, NM 88240	e of N	New Mexi		li di o		!	Fo	rm C-141			
District II 1301 W. Grand Avenue, Artesia, NM 88210	erais a	nd Natura	r Kesources 3E	P 3U	2009	Revi	sed Octo	ber 10, 2003			
District III Oil Co	onserv	vation Div	vision HO	38 \$(ocd	District O	ffice in	appropriate			
District IV 1220 S 1220 S. St. Francis Dr., Santa Fe, NM 87505 San	south	St. Franci NIM 875	IS Dr. 05			wit	h Rule 1 s	16 on back ide of form			
Dolooso Notifico	tion	and Co	rrootivo A	otion			·	·			
	PERA	ANU CU ATOR	A TECHVE A	ction	X Initia	l Report	ПБ	inal Report			
Name of Company: XTO Energy Permian Division-SE New Mexico		Contact: Ric	k Wilson/Productio	n Forem	an IIIII			ша кероп			
Address: P.O. Box 700, Eunice, New Mexico 88231	1	elephone N	lo.: (575) 394-208	39							
Facility Name: EMSU-Central Battery Tank 2	1	acility Typ	e: Tank Battery-N	earest W	ell is EMSU	Well #626 (Al	PI #30-02	25-31465)			
Surface Owner: State of New Mexico Mineral Ow	vner				Lease N	lo.:					
LOCAT	ΓΙΟΝ	OF REI	LEASE								
Unit LetterSectionTownshipRangeFeet from theIUnit E421S36E	North/S	South Line	Feet from the	East/V	Vest Line	County	Lea				
Latitude: 32° 30' 27.92	3" N	Longitu	de: 103° 16' 33	3.28" W	1						
		OF RELI	TASE								
Type of Release: Crude Oil & Produced Water		Volume of	Release: Unknow	'n	Volume R	lecovered: N	one				
Source of Release: Below Grade Tank		Date & Hour Unknown	of Occurrence:		Date and H 8/26/09/8:0	our of Discove 0 am MST	ery:				
Was Immediate Notice Given?	uired	If YES, To	Whom?								
By Whom?		Date and H	our								
Was a Watercourse Reached?		If YES, Vo	lume Impacting t	he Wate	rcourse.						
∐ Yes ⊠ No											
If a Watercourse was Impacted, Describe Fully.*											
					L L	NATERAN	501				
Describe Cause of Problem and Remedial Action Taken.: Below Guincidentally released to adjacent soil when discharge line was discord	rade Ta	ink removed for below g	per OCD approver rade tank. A flan	ed closu ge blind	re plan. Of cover was	il & produced installed to d	l water v lischarge	was e line			
flange to prevent further leakage of fluid. Initial composite sample	(5-spo	t) from soils	directly beneath t	the tank	and leak de	etection syste	m show	ed			
evidence of release. Discreet sample from stained area indicates rel	ease of	hydrocarboi	is & chlorides to	adjacent	t soil.						
Describe Area Affected and Cleanup Action Taken.: *Impact limite	ed to ex	posed soil o	n excavation nort	h wall a	nd adjacent	t to discharge	line pip	ing. No			
delineate the TPH and Chlorides by field methods and collect a com	posite	(27,900 mg/ sample for la	lboratory confirm	ation w	hen field ol	oservations in	dicate tl	hat the			
extent of contamination has been obtained.											
I hereby certify that the information given above is true and complet	te to th	e best of my	knowledge and u	nderstar	nd that purs	uant to NMC	CD rule	s and			
public health or the environment. The acceptance of a C-141 report	ease no by the	NMOCD m	id perform correc arked as "Final R	tive acti eport" d	ons for rele oes not reli	eases which n eve the operation	nay enda tor of lia	anger ability			
should their operations have failed to adequately investigate and ren	nediate	contaminati	on that pose a three the operator of the opera	eat to gr	ound water	, surface wat	er, huma	an health			
federal, state, or local laws and/or regulations.											
0/1			OIL CON	SERV	ATION	DIVISIO	<u>N</u>				
Signature:		:	ENV ENGINEE	R:							
Printed Name: John Fergerson, Larson & Associates, Inc. (Consultar	nt)	approved by	District Supervis	er: A	erffice	John.					
Title: Hydrogeologist	A	Approval Dat	e: 09/30/09		Expiration 1	Date: 1113	50/00	\ \			
E-mail Address: john@laenvironmental.com	C	Conditions of	Approval:			Attached					
Date: 9/16/09 Phone: (432) 687-09	01					IRP-69	09-29	186			
* Attach Additional Sheets If Necessary						<u></u>	- 64	~ 00			



September 23, 2009

RECEIVED

VIA: Certified Mail (Return Receipt Requested) VIA EMAIL: GeoffreyR.Leking@state.nm.us SEP 3 0 2009 HOBBSOCD

Mr. Geoffrey Leking New Mexico Oil Conservation Division 1625 N. French Drive Hobbs, New Mexico 88240

Re: 1RP-09-09-2286

Below Grade Tank Removal Documentation and Soil Sample Results XTO Energy, Inc., Eunice Monument South Unit – Central Battery Tank 2 Unit E (SW/4, NW/4), Section 4, Township 21 South, Range 36 East Lea County, New Mexico

Dear Mr. Leking,

Pursuant to 19.15.17.13E(4) NMAC, this letter is submitted to the New Mexico Oil Conservation Division (OCD) on behalf of XTO Energy, Inc. (XTO) by Larson & Associates, Inc. (LAI), its consultant, to document removal of a below grade tank (Tank 2) and transmit the laboratory results for composite and discreet soil samples collected beneath the tank located at the Eunice Monument South Unit (EMSU), Central Battery (Facility) located in Unit E (SW/4, NW/4), Section 4, Township 21 South, Range 36 East in Lea County, New Mexico. On February 4, 2009, the OCD Environmental Bureau in Santa Fe, New Mexico, approved a closure plan for the below grade tank in accordance with an Agreed Scheduling Order (ASO-008) between XTO and OCD for below-grade tanks and permanent pits in southeast and northwest New Mexico. The global position system (GPS) coordinate for the Facility is latitude 32° 30' 27.93" north and longitude 103° 16' 33.28" west (Figure 1). The below grade tank is constructed of fiberglass with an approximate capacity of 90 barrels (3,780 gallons). The nearest producing well is the XTO EMSU Well #626 with API #30-025-31465. The New Mexico State Land Office (SLO) is the surface owner of record. Groundwater occurs at approximately 150 feet below ground surface and no well, including municipal or private wells used by less than five households for domestic or stock purposes, is located within 500 feet of the Facility. No surface water features, including lakes, rivers, ponds, arroyos, irrigation ditch, lakebed, sinkhole, or playa lake is located within 200 horizontal feet of the Facility. Contact information for XTO is as follows:

XTO Energy Inc. Permian Division-SE New Mexico P.O. Box 700 Eunice, New Mexico 88231

Contact Person:Rick WilsonPhone Number:(575) 394-2089

Mr. Geoffrey Leking September 23, 2009 Page 2

XTO Energy Inc. Midland Office 200 N. Loraine Street, Suite 800 Midland, Texas 79701

Contact Person:Guy HaykusPhone Number:(432) 682-8873

On August 19, 2009, XTO sent certified letters, with return receipt requested, to the OCD District 1 office, located in Hobbs, New Mexico and the New Mexico State Land Office, as surface owner of record, at its Santa Fe and Hobbs, New Mexico offices, to notify these entities of pending closure of the below grade tank (Appendix A). The closure was scheduled to commence on August 26, 2009.

On August 26, 2009, XTO removed ancillary equipment (metal barricade) for salvage or scrap metal. A Hydro-Vac truck was used to excavate soil from around the tank. Excavated soil was placed on the ground within the facility fencing pending disposal at an NMOCD permitted facility. On August 26, 2009, LAI personnel conducted a site visit to collect confirmation samples and to photo document the Tank 2 removal and excavation (Attachment B). LAI field personnel collected a 5-spot composite soil sample (Tank-2 Bottom) from soils directly beneath the tank and leak detection system. A discreet soil sample was collected from an area of stained soil located on the north wall of the excavation (Tank -2 North Wall). The composite and discreet soil samples were placed in clean glass sample containers, labeled, chilled in an ice chest and shipped via overnight courier under chain of custody control and preservation to DHL Analytical located in Round Rock, Texas. The laboratory analyzed the samples for benzene, toluene, ethylbenzene, xylenes (BTEX) by method 8021B, total petroleum hydrocarbons (TPH) by method 418.1 and chloride by method 300.1. An aerial map and site map of Central Battery with Tank 2 location depicted are presented in Figures 2 and 3, respectfully.

No benzene was reported in the samples at concentrations above the OCD reporting limits of 0.2 milligrams per kilogram (mg/Kg). BTEX (91.75 mg/Kg) was reported above the OCD reporting limit of 50 mg/Kg in the north wall discreet sample (Tank-2 North Wall). TPH was reported in the composite samples at concentrations between 65.0 mg/Kg (Tank-2 Bottom) and 27,900 mg/Kg in the discreet sample (Tank-2 North Wall). Chloride was reported in the composite sample at 5.58 mg/Kg (Tank-2 Bottom). Chloride was reported in the discreet sample at 11.3 mg/Kg (Tank-2 North Wall). A composite sample from the soil pile reported TPH and chloride at 628 mg/Kg and 11.3 mg/Kg, respectively. Table 1 presents a summary of the laboratory analysis. Attachment C presents the laboratory report. Figure 1 presents a topographic map. Figure 2 and Figure 3 present a Google® image and site drawing, respectively.

XTO proposes to excavate soil on the north side of the excavation to reduce the TPH (27,900 mg/Kg) below the OCD recommended remediation action level of 5,000 mg/Kg. Chlorides will be determined by field methods and final samples will be collected for laboratory confirmation when field observations indicate that the extent of contamination has been obtained. Appendix D presents the initial C-141. Please contact either Mark Larson or myself at (432) 687-0901 (office) or email: <u>mark@laenvironmental.com</u> or john@laenvironmental.com if you have questions.

Mr. Geoffery Leking September 23, 2009 Page 3

Sincerely, Larson & Associates, Inc.

John Fergerson, P.G Hydrogeologist

Attachments: Tables

 Table 1: Soil Analytical Data Summary for TPH & Chloride Impacted Soil Samples

 Figures

Figure 1: Topographic Map

Figure 2: Aerial Drawing of Central Battery

Figure 3: Site Drawing of Central Battery

Appendix A: Notification Letters

Appendix B: Photo Documentation

Appendix C: Laboratory Report

Appendix D: Initial C-141

Cc: Dudley McMinn/XTO Energy, Inc – Midland. Rick Wilson/XTO Energy Inc/Production Foreman – EMSU Tables

Soil Analytical Data Summary

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Table 1 Soil Analytical Data Summary EMSU - Central Battery Tank 2 XTO Energy, Inc. Lea County, New Mexico Project No.: 8-0137

Sample ID	Date	Benzene	Ethyl benzene	Toluene	Total Xylenes	TRPH	Chlorides
RRAL:							250
Tank-2 Bottom	8/26/2009	<0.00274	<0.00456	<0.00456	<0.00456	65.0	5.58
Tank-2 North Wall	8/26/2009	<0.0295	19.2	6.15	66.4	27,900	334
Tank-2 Soil Pile	8/26/2009	<0.00303	0.0940	<0.00506	0.0716	628	11.3

Notes

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RRAL - Recommended Remediation Action Level

Total Petroleum Hydrocarbons analyzed via Method 418.1.

Chlorides analyzed via EPA Method 300.

All values reported in Milligrams per Kilogram - dry (mg/kg, parts per million).

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Bold and blue indicates the value exceeds NMOCD requirements.

Figures

Figure 1: Topographic Map

Figure 2: Aerial Drawing of Central Battery

Figure 3: Site Drawing of Central Battery



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Figure 2 Aerial

SSOCIATCES, INC Environmental Consultants

Y \PROJECTS\XTO ENERGY\8-01\8-0137 EMSU CENTRAL BATTERY dwg, 9/23/2009 4 03 39 PM

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Attachment A

Notification Letters



August 19, 2009

VIA: Certified Mail (Return Receipt Requested)

Mr. Patrick Lyons, Commissioner New Mexico State Land Office 310 Old Santa Fe Trail Santa Fe, New Mexico 87501

Re: Notice of Below-Grade Tank 2 Closure XTO Energy, Inc. Eunice Monument South Unit Central Tank Battery – Tank 2 Unit E (SW/4, NW/4), Section 4 Township 21 South, Range 36 East Lea County, New Mexico

Dear Commissioner Lyons,

Pursuant to paragraph (1) of Subsection J of 19.15.17.13 NMAC, notice is hereby given to the New Mexico State Land Office (SLO), as surface owner of record, by XTO Energy, Inc. (XTO) of its intent to close a below-grade tank (Tank #2) at the central tank battery (Facility) located in the Eunice Monument South Unit beginning August 26, 2009. The Facility is located in Unit E (SW/4, NW/4), Section 4, Township 21 South, Range 36 East in Lea County, New Mexico. The latitude and longitude is 32° 30' 27.93" north and 103° 16' 33.28" west, respectively. The closure will be performed according to a plan meeting the requirements of Paragraphs (1) through (6) of Subsection E of 19.15.17.13 NMAC that was approved by the New Mexico Oil Conservation Division (OCD) on July 17, 2009. The closure plan may be viewed at the OCD District 1 office located in Hobbs, New Mexico or with the OCD Environmental Bureau in Santa Fe, New Mexico. Please contact myself at (432) 682-8873 or Mark Larson with Larson & Associates, Inc. at (432) 687-0901, if you have questions.

Sincerely, XTO Energy, Inc.

Film

Clif Green Production Superintendent

Cc: Leon Anderson - SLO Hobbs District (w/Return Receipt) Dudley McMinn - XTO Mark Larson - Larson & Associates, Inc.



August 19, 2009

VIA: Certified Mail (Return Receipt Requested)

Mr. Larry Hill District Supervisor New Mexico Oil Conservation Division 1625 N. French Drive Hobbs, New Mexico 88240

Re: Notice of Below-Grade Tank 2 Closure XTO Energy, Inc. Eunice Monument South Unit Central Tank Battery – Tank 2 Unit E (SW/4, NW/4), Section 4 Township 21 South, Range 36 East Lea County, New Mexico

Dear Mr. Hill,

Pursuant to paragraph (2) of Subsection J of 19.15.17.13 NMAC, notice is hereby given to the New Mexico Oil Conservation Division (OCD) by XTO Energy, Inc. (XTO) of its intent to close a below-grade tank (Tank #2) at the central tank battery (Facility) located in the Eunice Monument South Unit (EMSU) beginning August 26, 2009. The Facility is located in Unit E (SW/4, NW/4), Section 4, Township 21 South, Range 36 East in Lea County, New Mexico. The latitude and longitude is 32° 30' 27.93" north and 103° 16' 33.28" west, respectively. The nearest well is the EMSU Well no. 626 with API #30-025-31465. The closure will be in accordance with a plan meeting the requirements of Paragraphs (1) through (6) of Subsection E of 19.15.17.11 NMAC that was approved by the OCD Environmental Bureau in Santa Fe, New Mexico, on July 17, 2009. Please contact myself at (432) 682-8873 or Mark Larson with Larson & Associates, Inc. at (432) 687-0901, if you have questions.

XTO Energy, Inc.

Clif Green Production Superintendent

Cc: Dudley McMinn – XTO Energy Mark Larson - Larson & Associates, Inc.

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Attachment B

Photo Documentation

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View Facing SSW: Close-up of Central Battery Sign



View Facing South: Below Grade Tank 2 Location near Southern Fence Line



View Facing Down: Tank 2 and Discharge Line Connection



View Facing Down: Soil Removed from Eastern Wall of Tank 2



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View Facing Down: Soil Removed from Northern Side of Tank 2



View Facing Down: Soil Removed from Southern Side of Tank 2



View Facing Down: Soil Removed from Western Side of Tank 2



View Facing West: Tank 2 Soil Pile



View Facing SSW: Backhoe Removing Tank 2 from Excavation



View Facing Down: Excavation West Wall



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View Facing Down: Excavation South Wall



View Facing Down: Excavation West Wall



View Facing SSE: Outer Wall of Tank 2



View Facing SW: Outer Wall of Tank 2



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View Facing West: Outer Wall of Tank 2



View Facing East: Outer Wall of Tank 2



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View Facing Down: Installing Slip Plate Cover to Discharge Line



View Facing North Inside Excavation: Stained Soil on North Wall of Excavation

Attachment C

Laboratory Report



Michelle Green Larson & Associates 507 N. Marienfeld #200 Midland, TX 79701

TEL: (432) 687-0901 FAX: (432) 687-0456 Order No: 0908283

RE: XTO EMSU - Central Battery Tank 2

Dear Michelle Green:

DHL Analytical received 3 sample(s) on 8/27/2009 for the analyses presented in the following report.

There were no problems with the analyses and all data met requirements of NELAC except where noted in the Case Narrative. All non-NELAC methods will be identified accordingly in the case narrative and all estimated uncertainties of test results are within method or EPA specifications.

If you have any questions regarding these tests results, please feel free to call. Thank you for using DHL Analytical.

Sincerely,

John Dulot

John DuPont Lab Manager

This report was performed under the accreditation of the State of Texas Laboratory Certification Number: T104704211-09-TX



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Analytical Dates Report	9
Sample Results	10
Analytical QC Summary Report	13

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Page 1 of 1

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CLIENT: Project: Lab Order:	Larson & Associates XTO EMSU - Central Battery Tank 2 0908283	CASE
Lab Order.	0700205	

CASE NARRATIVE

Sample was analyzed using the methods outlined in the following references:

Method SW8021B - Volatile Organics by GC Method E418.1 - TRPH Analysis Method E300 - Anions Analysis Method D2216 - Percent Moisture

LOG IN

Samples were received and log-in performed on 8/27/09. A total of 3 samples were received. The time of collection was Mountain Standard Time. The samples arrived in good condition and were properly packaged.

VOLATILE ORGANICS ANALYSIS

For Volatile Organics by GC analysis sample Tank-2 N. Wall was diluted prior to analysis due to the nature of the sample (concentration of hydrocarbons).

For Volatile Organics analysis performed on 9/1/09 the surrogate recovery for sample Tank-2 Soil Pile was below control limits. This is flagged accordingly. This was due to matrix effect and confirmed by reanalysis. No further corrective actions were taken.

Date: 09/03/09

08/27/09

08/26/09 08:00 AM

CLIENT: Project: Lab Order:	Larson & Associa XTO EMSU - Cer 0908283	tes ntral Battery Tank 2	Work Order Samp	ole Summary
Lab Smp ID	Client Sample ID	Tag Number	Date Collected	Date Recv'd
0908283-01	Tank-2 Bottom		08/26/09 07:50 AM	08/27/09
0908283-02	Tank-2 N. Wall		08/26/09 07:55 AM	08/27/09

0908283-03 Tank-2 Soil Pile

CLIENT: Project: Lab Order:	Larson & A XTO EMSI 0908283	ssociates J - Central Battery Tank 2			PREP DATES REP	ORT	
Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
0908283-01A	Tank-2 Bottom	08/26/09 07 50 AM	Soil	SW5030B	Purge and Trap Soils GC	09/01/09 08 37 AM	36929
0908283-01B	Tank-2 Bottom	08/26/09 07·50 AM	Soil	SW3550B	Soil Prep Sonication TRPH	09/02/09 09 [.] 30 AM	36964
	Tank-2 Bottom	08/26/09 07 50 AM	Soil	E300	Anion Prep	08/28/09 09 39 AM	36884
	Tank-2 Bottom	08/26/09 07 50 AM	Soil	D2216	Moisture Preparation	09/02/09 10 30 AM	36961
0908283-02A	Tank-2 N Wall	08/26/09 07 55 AM	Soil	SW5030B	Purge and Trap Soils GC	09/01/09 08 37 AM	36929
	Tank-2 N Wall	08/26/09 07 55 AM	Soil	SW5030B	Purge and Trap Soils GC	09/01/09 08 37 AM	36929
0908283-02B	Tank-2 N Wall	08/26/09 07 55 AM	Soil	SW3550B	Soil Prep Sonication TRPH	09/02/09 09 30 AM	36964
	Tank-2 N Wall	08/26/09 07 55 AM	Soil	E300	Anion Prep	08/28/09 09 39 AM	36884
	Tank-2 N Wall	08/26/09 07 55 AM	Soil	D2216	Moisture Preparation	09/02/09 10 30 AM	36961
0908283-03A	Tank-2 Soil Pile	08/26/09 08 00 AM	Soil	SW5030B	Purge and Trap Soils GC	09/01/09 08 37 AM	36929
0908283-03B	Tank-2 Soil Pile	08/26/09 08 00 AM	Soil	SW3550B	Soil Prep Sonication TRPH	09/02/09 09 30 AM	36964
	Tank-2 Soil Pile	08/26/09 08 00 AM	Soil	E300	Anion Prep	08/28/09 09 39 AM	36884
	Tank-2 Soil Pile	08/26/09 08 00 AM	Soil	D2216	Moisture Preparation	09/02/09 10 30 AM	36961

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CLIENT: Project: Lab Order:	Larson & 7 XTO EMS 0908283	Associates SU - Central B	attery Tank 2		ANAL	YTICAL	DATES REPO	ORT
Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
0908283-01A	Tank-2 Bottom	Soil	SW8021B	Volatile Organics by GC	36929	1	09/01/09 02 54 PM	GC4_090901A
0908283-01B	Tank-2 Bottom	Soil	E300	Anions by IC method - Soil	36884	1	08/31/09 11 43 AM	IC2_090831A
	Tank-2 Bottom	Soil	D2216	Percent Moisture	36961	1	09/02/09 04 30 PM	PMOIST_090902A
	Tank-2 Bottom	Soil	E418 1	TRPH	36964	1	09/02/09 01 30 PM	IR207_090902A
0908283-02A	Tank-2 N Wall	Soil	SW8021B	Volatile Organics by GC	36929	50	09/01/09 03 38 PM	GC4_090901A
	Tank-2 N Wall	Soil	SW8021B	Volatile Organics by GC	36929	10	09/01/09 11 39 PM	GC4_090901A
0908283-02B	Tank-2 N Wall	Soil	E300	Anions by IC method - Soil	36884	10	08/31/09 12 57 PM	IC2_090831A
	Tank-2 N. Wall	Soil	D2216	Percent Moisture	36961	1	09/02/09 04 30 PM	PMOIST_090902A
	Tank-2 N Wall	Soil	E418 1	TRPH	36964	100	09/02/09 01 30 PM	IR207_090902A
0908283-03A	Tank-2 Soil Pile	Soil	SW8021B	Volatile Organics by GC	36929	1	09/01/09 03 16 PM	GC4_090901A
0908283-03B	Tank-2 Soil Pile	Soil	E300	Anions by IC method - Soil	36884	1	08/31/09 12 13 PM	IC2_090831A
	Tank-2 Soil Pile	Soil	D2216	Percent Moisture	36961	1	09/02/09 04 30 PM	PMOIST_090902A
	Tank-2 Soil Pile	Soil	E418 1	TRPH	36964	5	09/02/09 01 30 PM	IR207 090902A

Date: 09/03/09

CLIENT:Larson & AssociatesProject:XTO EMSU - CentralProject No:8-0137Lab Order:0908283	Battery Tan	k 2		Client Sa Lab ID: Collectio Matrix:	mple ID: Tar 090 n Date: 08/2 Soi	nk-2 Bo 8283-0 26/09 0 1	ottom 01 07:50 AM
Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Volatile Organics by GC	S	W8021B					Analyst: JAW
Benzene	ND	0 00274	0 00456		mg/Kg-dry	1	09/01/09 02 54 PM
Ethylbenzene	ND	0 00456	0 0137		mg/Kg-dry	1	09/01/09 02·54 PM
Toluene	ND	0 00456	0 0137		mg/Kg-dry	1	09/01/09 02:54 PM
Xylenes, Total	ND	0 00456	0 0137		mg/Kg-dry	1	09/01/09 02 54 PM
Surr Tetrachloroethene	87 1	0	79 - 135		%REC	1	09/01/09 02.54 PM
ТПРН	E	418.1					Analyst: JBC
Petroleum Hydrocarbons, TR	65 0	5 20	10 4	Ν	mg/Kg-dry	1	09/02/09 01 30 PM
Anions by IC method - Soil	E	300					Analyst: JBC
Chloride	5 58	5 16	5 16		mg/Kg-dry	1	08/31/09 11 43 AM
Percent Moisture	D	2216					Analyst: RP
Percent Moisture	3 80	0	0		WT%	1	09/02/09 04 30 PM

Qualifiers:

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J MDL N ND RL S

Date: 09/03/09

CLIENT:Larson & AssociatesProject:XTO EMSU - CentraProject No:8-0137Lab Order:0908283	l Battery Tanl	ς 2		Client Sa Lab ID: Collectio Matrix:	mple ID: Tar 090 n Date: 08/ Soi	nk-2 N.)8283-(26/09 (1	. Wall 02 07:55 AM
Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
Volatile Organics by GC	SV	V8021B					Analyst: JAW
Benzene	ND	0 0295	0 0492		mg/Kg-dry	10	09/01/09 11 39 PM
Ethylbenzene	192	0 246	0 739		mg/Kg-dry	50	09/01/09 03 38 PM
Toluene	6 15	0 0492	0 148		mg/Kg-dry	10	09/01/09 11 39 PM
Xylenes, Total	66.4	0 246	0 739		mg/Kg-dry	50	09/01/09 03 38 PM
Surr Tetrachloroethene	108	0	79 - 135		%REC	10	09/01/09 11 39 PM
Surr Tetrachloroethene	92 1	0	79 - 135		%REC	50	09/01/09 03 38 PM
TRPH	E4	18.1					Analyst: JBC
Petroleum Hydrocarbons, TR	27900	557	1110	Ν	mg/Kg-dry	100	09/02/09 01 30 PM
Anions by IC method - Soil	E3	00					Analyst: JBC
Chloride	334	54 8	54 8		mg/Kg-dry	10	08/31/09 12 57 PM
Percent Moisture	D	2216					Analyst: RP
Percent Moisture	10 9	0	0		WT%	1	09/02/09 04 30 PM

Qualifiers:

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J MDL Ν ND RL S

Date: 09/03/09

CLIENT:Larson & AssociatesProject:XTO EMSU - Central Battery Tank 2Project No:8-0137Lab Order:0908283						Client Sample ID:Tank-2 Soil PileLab ID:0908283-03Collection Date:08/26/09 08:00 AMMatrix:Soil					
Analyses	· · · · · · · · · · · · · · · · · · ·	Result	MDL	RL	Qual	Units	DF	Date Analyzed			
Volatile Org	anics by GC	SV	W8021B					Analyst: JAW			
Benzene		ND	0 00303	0 00506		mg/Kg-dry	1	09/01/09 03 16 PM			
Ethylbenzene		0 0940	0.00506	0 0152		mg/Kg-dry	1	09/01/09 03 16 PM			
Toluene		ND	0 00506	0 0152		mg/Kg-dry	1	09/01/09 03.16 PM			
Xylenes, Tota	l	0 0716	0 00506	0 0152		mg/Kg-dry	1	09/01/09 03.16 PM			
Surr Tetra	chloroethene	62 4	0	79 - 135	S	%REC	1	09/01/09 03 16 PM			
TRPH		E4	418.1					Analyst: JBC			
Petroleum Hy	drocarbons, TR	628	27 2	54 4	Ν	mg/Kg-dry	5	09/02/09 01 30 PM			
Anions by I	C method - Soil	E3	300					Analyst: JBC			
Chloride		113	5 41	5 41		mg/Kg-dry	1	08/31/09 12 13 PM			
Percent Moisture		D	D2216					Analyst: RP			
Percent Mois	ture	8.47	0	0		WT%	1	09/02/09 04 30 PM			

Qualifiers:

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Value exceeds TCLP Maximum Concentration Level Analyte detected in the associated Method Blank Sample Result or QC discussed in the Case Narrative DF **Dilution Factor**

TPH pattern not Gas or Diesel Range Pattern

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Method Detection Limit Parameter not NELAC certified

Not Detected at the Method Detection Limit

Analyte detected between MDL and RL

Reporting Limit

S Spike Recovery outside control limits

Surr. Tetrachloroethene

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CLIENT: Larson & A Work Order: 0908283 Project: XTO EMSU			on & Associates 8283 D EMSU - Central Battery Tank 2					CAL QC	C SUMI RunII	MAR D: GC4	Y R 090	EPORT 901A
Sample ID:	LCS-36	929	Batch ID:	36929		TestNo:		SW8021B		Units:		mg/Kg
SampType:	LCS		Run ID:	GC4_0909	01 A	Analysis 1	Date:	09/01/09 10):21 AM	Prep D	Date:	09/01/09
Analyte			Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD	Limit Qual
Benzene			0 0968	0 00500	0 1000	0	96 8	65	113			
Toluene			0 102	0 0150	0 1000	0	102	73	115			
Ethylbenzene			0 104	0 0150	0.1000	0	104	74	118			
Xylenes, Tota	1		0 309	0.0150	0 3000	0	103	73	119			
Surr Tetrac	chloroethe	ne	0 214		0 2000		107	79	135			
Sample ID:	MB-369	029	Batch ID:	36929		TestNo:		SW8021B		Units:		mg/Kg
SampType:	MBLK		Run ID:	GC4_0909	01 A	Analysis 1	Date:	09/01/09 11	.39 AM	Prep I	Date:	09/01/09
Analyte			Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD	Limit Qual
Benzene			ND	0 00500								
Toluene			ND	0.0150								
Ethylbenzene			ND	0 0150								
Xylenes, Tota	ıl		ND	0 0150								
Surr Tetrac	chloroethe	ne	0 208		0 2000		104	79	135			
Sample ID:	0908302	2-15AMS	Batch ID:	36929		TestNo:		SW8021B		Units:		mg/Kg-dry
SampType:	MS		Run ID:	GC4_0909	01 A	Analysis 2	Date:	09/01/09 10):10 PM	Prep I	Date:	09/01/09
Analyte			Result	RL	SPK value	Ref Val	%REC	LowLimit	HıghLimit	%RPD	RPD	Limit Qual
Benzene			0 104	0.00579	0 1158	0	90 2	65	113			
Toluene			0 105	0 0174	0 1158	0	90 4	73	115			
Ethylbenzene			0 105	0 0174	0.1158	0	90 9	74	118			
Xylenes, Tota	ıl		0 319	0 0174	0 3473	0	917	73	119			
Surr Tetrac	chloroethe	ne	0 215		0 2316		92 8	79	135			
Sample ID:	0908302	2-15AMSD	Batch ID:	36929		TestNo:		SW8021B		Units:		mg/Kg-dry
SampType:	MSD		Run ID:	GC4_0909	01A	Analysis	Date:	09/01/09 10	0: 31 PM	Prep I	Date:	09/01/09
Analyte			Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD	Limit Qual
Benzene			0 110	0 00579	0 1158	0	94 7	65	113	4.87	30	
Toluene			0 110	0 0174	0 1158	0	94 7	73	115	4.65	30	
Ethylbenzene			0 110	0 0174	0 1158	0	94 9	74	118	4 31	30	
Xylenes, Tota	1		0 333	0 0174	0 3473	0	95 8	73	119	4 37	30	

79

135

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Qualifiers:	В	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
	DF	Dilution Factor	RL	Reporting Limit
	J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
	MDL	Method Detection Limit	J	Analyte detected between SDL and RL
	ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

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CLIENT: Work Orde Project:	Larson & A ar: 0908283 XTO EMS	Associates SU - Central B	k 2	ANAI	Y REPORT					
Sample ID:	ICV-090901	Batch ID:	R45275		TestNo:		SW8021B		Units:	mg/Kg
SampType:	ICV	Run ID:	GC4_0909	01 A	Analysis	Date:	09/01/09 0	9:58 AM	Prep D	Date:
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit Qual
Benzene		0 196	0 00500	0 2000	0	978	85	115		
Toluene		0 205	0 0150	0 2000	0	103	85	115		
Ethylbenzene	:	0 208	0 0150	0 2000	0	104	85	115		
Xylenes, Tota	al	0 619	0 0150	0 6000	0	103	85	115		
Surr Tetra	chloroethene	0 227		0 2000		114	79	135		
Sample ID:	CCV1-090901	Batch ID:	R45275		TestNo:		SW8021B		Units:	mg/Kg
SampType:	CCV	Run ID:	GC4_0909	01 A	Analysis	Date [.]	09/01/09 0	4:22 PM	Prep D	Date:
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit Qual
Benzene		0 0996	0 00500	0 1000	0	99 7	85	115		
Toluene		0 0986	0 0150	0.1000	0	98 6	85	115		
Ethylbenzene	;	0.101	0 0150	0.1000	0	101	85	115		
Xylenes, Tota	al	0 304	0 0150	0 3000	0	101	85	115		
Surr Tetra	chloroethene	0 173		0 2000		86 3	79	135		
Sample ID:	CCV2-090901	Batch ID:	R45275		TestNo:		SW8021B		Units:	mg/Kg
SampType:	CCV	Run ID:	GC4_0909	01 A	Analysis	Date:	09/01/09 0	9:04 PM	Prep D	Date:
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit Qual
Benzene		0 0974	0 00500	0 1000	0	97 4	85	115		
Toluene		0 0998	0 0150	0 1000	0	99 8	85	115		
Ethylbenzene	;	0 101	0 0150	0.1000	0	101	85	115		
Xylenes, Tot	al	0 303	0 0150	0 3000	0	101	85	115		
Surr Tetra	chloroethene	0 168		0 2000		84 0	79	135		
Sample ID:	CCV3-090901	Batch ID.	R45275		TestNo:		SW8021B		Units:	mg/Kg
SampType:	CCV	Run ID:	GC4_0909	01 A	Analysis	Date:	09/02/09 1	2:44 AM	Prep I	Date:
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit Qual
Benzene		0 101	0 00500	0 1000	0	101	85	115		
Toluene		0 0989	0 0150	0 1000	0	98 9	85	115		
Ethylbenzene	•	0 0998	0 0150	0 1000	0	99 8	85	115		
Xylenes, Tot	al	0 298	0 0150	0 3000	0	994	85	115		
Surr Tetra	chloroethene	0 169		0 2000		84.7	79	135		

Reporting Limit
Reporting Dinit
Spike Recovery outside control limits
Analyte detected between SDL and RL
Parameter not NELAC certified

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CLIENT:Larson & AssociatesWork Order:0908283Project:XTO EMSU - Central Battery Tank 2						ANALYTICAL QC SUMMARY REPORT RunID: IC2_090831A							
Sample ID:	LCS-36884	Batch ID:	36884	·	TestNo:		E300		Units:	mg/Kg			
SampType:	LCS	Run ID:	IC2 0908	31 A	Analysis 1	Date:	08/31/09 0	9:46 AM	Prep I	Date: 08/28/09			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit Qual			
Chloride		52 3	5.00	50.00	0	105	80	120					
Sample ID:	LCSD-36884	Batch ID:	36884		TestNo [.]		E300		Units:	mg/Kg			
SampType:	LCSD	Run ID:	IC2 0908	31 A	Analysis	Date:	08/31/09 1	0:01 AM	Prep I	Date: 08/28/09			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit Qual			
Chloride		52.0	5 00	50.00	0	104	80	120	0 481	20			
Sample ID:	MB-36884	Batch ID [.]	36884		TestNo:		E300		Units:	mg/Kg			
SampType:	MBLK	Run ID:	IC2_0908	31 A	Analysis	Date:	08/31/09 1	0:15 AM	Prep I	Date: 08/28/09			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit Qual			
Chloride		ND	5 00					-					
Sample ID:	0908282-01B MS	Batch ID:	36884		TestNo:		E300		Units:	mg/Kg-dry			
SampType:	MS	Run ID:	IC2_0908	31 A	Analysis	Date:	08/31/09 12	2:27 PM	Prep I	Date: 08/28/09			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit Qual			
Chloride		68 8	5 60	56 04	11 59	102	80	120					
Sample ID:	0908282-01B MSD	Batch ID:	36884		TestNo:		E300		Units:	mg/Kg-dry			
SampType:	MSD	Run ID:	IC2_0908	31A	Analysis	Date:	08/31/09 12	2:42 PM	Prep I	Date: 08/28/09			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit Qual			
Chloride		69.5	5 60	56 04	11 59	103	80	120	1.03	20			

Qualifiers:	В	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
	DF	Dilution Factor	RL	Reporting Limit
	J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
	MDL	Method Detection Limit	J	Analyte detected between SDL and RL
	ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

Chloride

CLIENT:Larson & AssociatesWork Order:0908283Project:XTO EMSU - Central Battery Tank 2					ık 2	ANAL	YTIC	CAL QO	C SUM RunII	MARY D: IC2_09	REPORT 20831A
Sample ID: SampType	ICV-09 ICV	90831	Batch ID: Run ID:	R45225 IC2_0908	31 A	TestNo: Analysis Date:		E300 08/31/09 09.23 AM		Units: Prep Dat	mg/Kg e: 08/31/09
Analyte			Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD F	PD Limit Qual
Chloride			26 9	5 00	25.00	0	108	90	110		
Sample ID:	CCVI	-090831	Batch ID:	R45225		TestNo		E300		Units:	mg/Kg
SampType:	CCV		Run ID:	IC2_0908	31 A	Analysis I	Date:	08/31/09 0	1:11 PM	Prep Dat	e: 08/31/09
Analyte			Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD F	PD Limit Qual

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Qualifiers:	В	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
-	DF	Dilution Factor	RL	Reporting Limit
	J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
	MDL	Method Detection Limit	J	Analyte detected between SDL and RL
	ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

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CLIENT: Work Orde Project:	Larson & As r: 0908283 XTO EMSU	sociates - Central B	ANALYTICAL QC SUMMARY REPOR RunID: IR207_090902A								
Sample ID:	LCS-36964	Batch ID:	36964		TestNo:		E418.1		Units:		mg/Kg
SampType:	LCS	Run ID:	IR207_09	0902A	Analysis Date: 0		09/02/09 01:30 PM		Prep Date:		09/02/09
Analyte		Result	RL	SPK value	e Ref Val %REC Lov		LowLimit	HighLimit	%RPD	RPD	Limit Qual
Petroleum Hy	drocarbons, TR	92 5	10 0	100 0	0	92 5	80	120			Ν
Sample ID:	MB-36964	Batch ID:	36964		TestNo:		E418.1		Units:		mg/Kg
SampType:	MBLK	Run ID:	IR207_09	0902A	Analysis	Date:	09/02/09 0	1:30 PM	Prep D	Date:	09/02/09
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLımıt	%RPD	RPD	Limit Qual
Petroleum Hy	drocarbons, TR	ND	10 0					·			N
Sample ID:	0908282-01B MS	Batch ID:	36964		TestNo:		E418.1		Units:		mg/Kg-dry
SampType:	MS	Run ID:	IR207_09	0902A	Analysis	Date:	09/02/09 0	1:30 PM	Prep D	Date:	09/02/09
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD	Limit Qual
Petroleum Hy	drocarbons, TR	92 2	112	111. 7	0	82 5	80	120			Ν
Sample ID:	0908282-01B MSD	Batch ID:	36964		TestNo:		E418.1		Units:		mg/Kg-dry
SampType:	MSD	Run ID:	IR207_09	0902A	Analysis	Date:	09/02/09 0	1:30 PM	Prep I	Date:	09/02/09
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD	Limit Qual
Petroleum Hy	drocarbons, TR	98 4	112	112.4	0	87 5	80	120	6 48	20	N

Qualifiers:	В	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
	DF	Dilution Factor	RL	Reporting Limit
	J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
	MDL	Method Detection Limit	J	Analyte detected between SDL and RL
	ND	Not Detected at the Method Detection Limit	Ν	Parameter not NELAC certified

CLIENT: Larson of Work Order: 0908283 Project: XTO El		son & Associates 8283 O EMSU - Central Battery Tank 2				ANALYTICAL QC SUMMARY REPORT RunID: IR207_090902A								
Sample ID: SampType:	ICV-090902 ICV	Batch ID: Run ID:	418_S-09/02/09 IR207_090902A		TestNo: Analysis Date:		E418.1 09/02/09 01:30 PM		Units: Prep D	mg/Kg Date:				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit Qual				
Petroleum Hy	drocarbons, TR	275	10 0	250.0	0	110	90	110		Ν				
Sample ID:	CCV1-090902	Batch ID.	418_S-09/02/09		TestNo:		E418.1		Units:	mg/Kg				
SampType:	CCV	Run ID:	IR207_090902A		Analysis Date: (09/02/09 01:30 PM		Prep D	Date:				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD Limit Qual				
Petroleum Hydrocarbons, TR		272	10 0	250 0	0	109	85	115		N				

Qualifiers:	В	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
	DF	Dilution Factor	RL	Reporting Limit
	J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
	MDL	Method Detection Limit	J	Analyte detected between SDL and RL
	ND	Not Detected at the Method Detection Limit	N	Parameter not NELAC certified

CLIENT:Larson & AssociatesWork Order:0908283Project:XTO EMSU - Central Battery Tank 2

ANALYTICAL QC SUMMARY REPORT

RunID: PMOIST_090902A

Sample ID:	0908302-16B-DUP	Batch ID:	36961		TestNo:		D2216		Units:		WT%	6
SampType:	DUP	Run ID:	PMOIST_09	90902A	Analysis l	Date:	09/02/09 04	:30 PM	Prep D	ate:	09/02	2/09
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPD L	imit (Qual
Percent Moisture		34 2	0	0	33 58				1 89	30		

Qualifiers:	в	Analyte detected in the associated Method Blank	R	RPD outside accepted control limits
	DF	Dilution Factor	RL	Reporting Limit
	J	Analyte detected between MDL and RL	S	Spike Recovery outside control limits
	MDL	Method Detection Limit	J	Analyte detected between SDL and RL
	ND	Not Detected at the Method Detection Limit	Ν	Parameter not NELAC certified

Attachment D

Initial C-141

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District I Stat 1625 N. French Dr., Hobbs, NM 88240 Energy Mind District II Energy Mind 1301 W. Grand Avenue, Artesia, NM 88210 Oil Co District III Oil Co 1000 Rio Brazos Road, Aztec, NM 87410 1220 S	1RP-09-09-2286 State of New Mexico Energy Minerals and Natural Resources SEP 3 0 21 Oil Conservation Division 1220 South St. Francis Dr				Form C-141 Revised October 10, 2003 Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back					
1220 S. St. Francis Dr., Santa Fe, NM 87505San	a Fe, NM 87505				side of form					
Release Notification and Corrective Action										
0	ERATOR		🗵 Initia	al Report	Final Report					
Address: P.O. Box 700 Eurice New Mexico 88231	Telephone No.:	son/Production Forema (575) 394-2089	an							
Facility Name: EMSU-Central Battery Tank 2	Facility Type: Ta	nk Battery-Nearest W	ell is EMSU	Well #626 (API #30	0-025-31465)					
Surface Owner: State of New Mexico Mineral Ov	ner		Lease N	lo.:						
LOCA	ION OF RELEA	SE								
Unit LetterSectionTownshipRangeFeet from theUnit E421S36E	orth/South Line Feet	from the East/W	Vest Line	County Lea	a					
Latitude: <u>32° 30' 27.93" N</u> Longitude: <u>103° 16' 33.28" W</u>										
NATU	RE OF RELEAS	E								
Type of Release: Crude Oil & Produced Water Source of Release: Relow Grade Tank	Volume of Relea	ise: Unknown	Volume R Date and H	lecovered: None						
Was Immediate Natice Given?	Unknown	Unknown 8/26/09/8:00 am MST								
Yes X No Not Req	red in TES, TO Who									
By Whom?	Date and Hour	Date and Hour								
Was a Watercourse Reached?	If YES, Volume	If YES, Volume Impacting the Watercourse.								
If a Watercourse was Impacted, Describe Fully.*										
				o l						
Describe Cause of Problem and Remedial Action Taken.: Below G	ade Tank removed per C	CD approved closu	whaten re plan. Oi	(G) 156 ` il & produced wat	er was					
incidentally released to adjacent soil when discharge line was disconnected for below grade tank. A flange blind cover was installed to discharge line flange to prevent further leakage of fluid. Initial composite sample (5-spot) from soils directly beneath the tank and leak detection system showed evidence of release. Discreet sample from stained area indicates release of hydrocarbons & chlorides to adjacent soil.										
Describe Area Affected and Cleanup Action Taken.: *Impact limited to exposed soil on excavation north wall and adjacent to discharge line piping. No cleanup action was taken at this time. XTO proposes to excavate the TPH (27,900 mg/Kg) and Chlorides (334 mg/Kg) at location Tank-2 North Wall to delineate the TPH and Chlorides by field methods and collect a composite sample for laboratory confirmation when field observations indicate that the extent of contamination has been obtained.										
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.										
N/1 -	Q	IL CONSERV	ATION	DIVISION						
Signature:	ENW	ENGINEER								
Printed Name: John Fergerson, Larson & Associates, Inc. (Consultat	Approved by Distri	Approved by District Supervisor: Jerffreydalsm								
Title: Hydrogeologist	Approval Date: Oc	Approval Date: 09/30/09 Expiration Date: 11/30/09			PC					
E-mail Address: john@laenvironmental.com	Conditions of Approval: Attached									
Date: 9/16/09 Phone: (432) 687-09	201									

* Attach Additional Sheets If Necessary