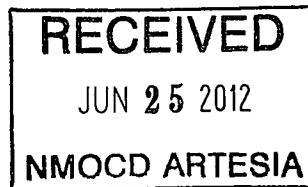




June 11, 2012



Mr. Mike Bratcher  
**NMOCD District 2**  
811 S. 1<sup>st</sup> Street  
Artesia, NM 88210

AMARILLO  
921 North Bivins  
Amarillo, Texas 79107  
Phone 806.467.0607  
Fax 806.467.0622

ARTESIA  
408 West Texas Ave.  
Artesia, New Mexico 88210  
Phone 575.746.8768  
Fax 575.746.8905

AUSTIN  
911 West Anderson Lane  
Suite 202  
Austin, Texas 78757  
Phone 512.989.3428  
Fax 512.989.3487

HOBBS  
318 East Taylor Street  
Hobbs, New Mexico 88240  
Phone 575.393.4261  
Fax 575.393.4658

MIDLAND  
2901 State Hwy 349  
Midland, Texas 79706  
Phone 432.522.2133  
Fax 432.522.2180

SAN ANTONIO  
11 Commercial Place  
Schertz, Texas 78154  
Phone 210.265.8025  
Fax 210.568.2191

TULSA  
525 South Main Street  
Suite 535  
Tulsa, Oklahoma 74103  
Phone 918.742.0871  
Fax 918.382.0232

Subject: **Soil Assessment and Remediation Work Plan**  
Devon Energy  
Strawberry 7 Federal No. 2  
API # 30-015-32375 2RP-1152

Dear Mr. Bratcher,

Devon Energy has contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the referenced Strawberry 7 Federal No. 2. The incident description, soil assessment, and proposed remediation activities consist of the following:

### **Background Information**

The Strawberry 7 Federal No. 2 is located approximately thirty-eight (38) miles southeast of Artesia, New Mexico. The legal location for the site is Section 7, Township 19 South and Range 31 East in Eddy County, New Mexico. More Specifically the latitude and longitude for the location are 32.678618 North and 103.9058936 West.

According to the soil survey provided by the United States Department of Agriculture National Resources Conservation Services, the soil in this area is made up of Potter-Simona complex with 5 to 25 percent slopes. The local surface and shallow geology, Quaternary Age sedimentary deposits, is comprised of loamy alluvium and eolian sands which includes silty soils underlain by hard caliches. Drainage courses in this area are normally dry. According to the Texaco/Chevron Eddy Co. Water Trend Data Map (2005) the depth to groundwater is approximately 150-foot deep.

The ranking for this site is 0 based on the as following:

Depth to ground water	>100'
Wellhead Protection Area	>1000'
Distance to surface water body	>1000'

ENVIRONMENTAL CONSULTING  
ENGINEERING  
DRILLING  
CONSTRUCTION  
SPILL MANAGEMENT  
GENERAL CONTRACTING

Toll Free: 866.742.0742  
[www.talonlpe.com](http://www.talonlpe.com)

## Incident Description

On May 11, 2012 a test heater vent malfunctioned causing the heater to bypass gas to the oil stock tank and the tank released oil out of the thief hatch. The pressure blew out the gasket on the waterleg and sprayed oil on the heater and the surrounding area. A total of 30 barrels of oil was also released inside the bermed area of the tank battery. A vacuum truck was immediately called to the location and recovered 26 barrels of standing fluid. A site plan illustrating the work area is attached.

## Actions Taken

On May 22, 2012 Talon/LPE mobilized personnel to begin the site assessment and soil sampling activities for the construction of a work plan. Grab soil samples were collected utilizing a hand auger to a depth of 3-feet below ground surface. Soil sample locations are illustrated on the attached site plan.

Soil samples were collected by Talon personnel wearing clean nitrile gloves. The samples were placed in laboratory provided sample containers, iced and transported to Cardinal Laboratories in Hobbs, New Mexico. The samples were tested for TPH (Total Petroleum Hydrocarbons) using EPA Method 8015M, volatile organics (BTEX) using EPA Method 8021B and analysis of Chlorides using Method SM4500CL-B. The complete laboratory report is attached as Appendix II.

## Analytical Results

Analytical results received from Cardinal Laboratories are summarized below:

May 30, 2012

<u>Sample</u>	<u>Depth</u>	<u>Location</u>	<u>Chlorides</u>	<u>BTEX</u>	<u>TPH (mg/kg)</u>
S-1	0'	Tank Battery	2,720	68.72	30,491
	1'		768	770	15,820
	2'		384	<0.150	13.1
	3'		368	101.66	4,970
S-2	0'	Heater Treater	5,440	0.188	13,500
	0.5'		2,520	<0.150	44.4
	1'		1,840	<0.150	229

For this site's ranking, New Mexico Oil Conservation District action level criterion for BTEX is 50 mg/kg, Benzene is 10 mg/kg and TPH is 5,000 mg/kg. The chloride remediation standard is considered to be 1,000 mg/kg.

## **Summary**

- Groundwater in the project vicinity is greater than 100-feet below land surface per the Texaco/Chevron Eddy Co. Water Trend Data Map (2005).
- Based on the depth to groundwater and the contamination levels detected in the soil, it is unlikely that the impacts identified from this release will pose a threat to groundwater after the proposed remediation activities are complete.

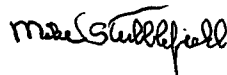
## **Proposed Remedial Actions**

- The impacted area inside the tank battery will be excavated to a depth of 3-feet deep and transported to a NMOCD approved solid waste disposal facility.
- The impacted area around the heater treater will be excavated to a depth of 1.5-feet deep and transported to a NMOCD approved solid waste disposal facility.
- Confirmation soil samples will be collected from the impacted areas. The soil samples will be submitted to the laboratory for TPH analysis using Method 8015M, BTEX analysis using Method 8021B and analysis of Chlorides using Method SM4500CL-B.
- Upon approval of the confirmation samples, the excavated areas will be backfilled to grade using new material transported from a local borrow pit. The areas will be contoured to match the existing location.
- A final report documenting all field activities and lab reports will be provided to the NMOCD Artesia Office including Form C-141.

If we can provide additional information or be of further assistance please contact our office at 575.746.8768.

Respectfully submitted,

TALON/LPE

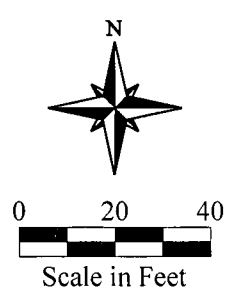
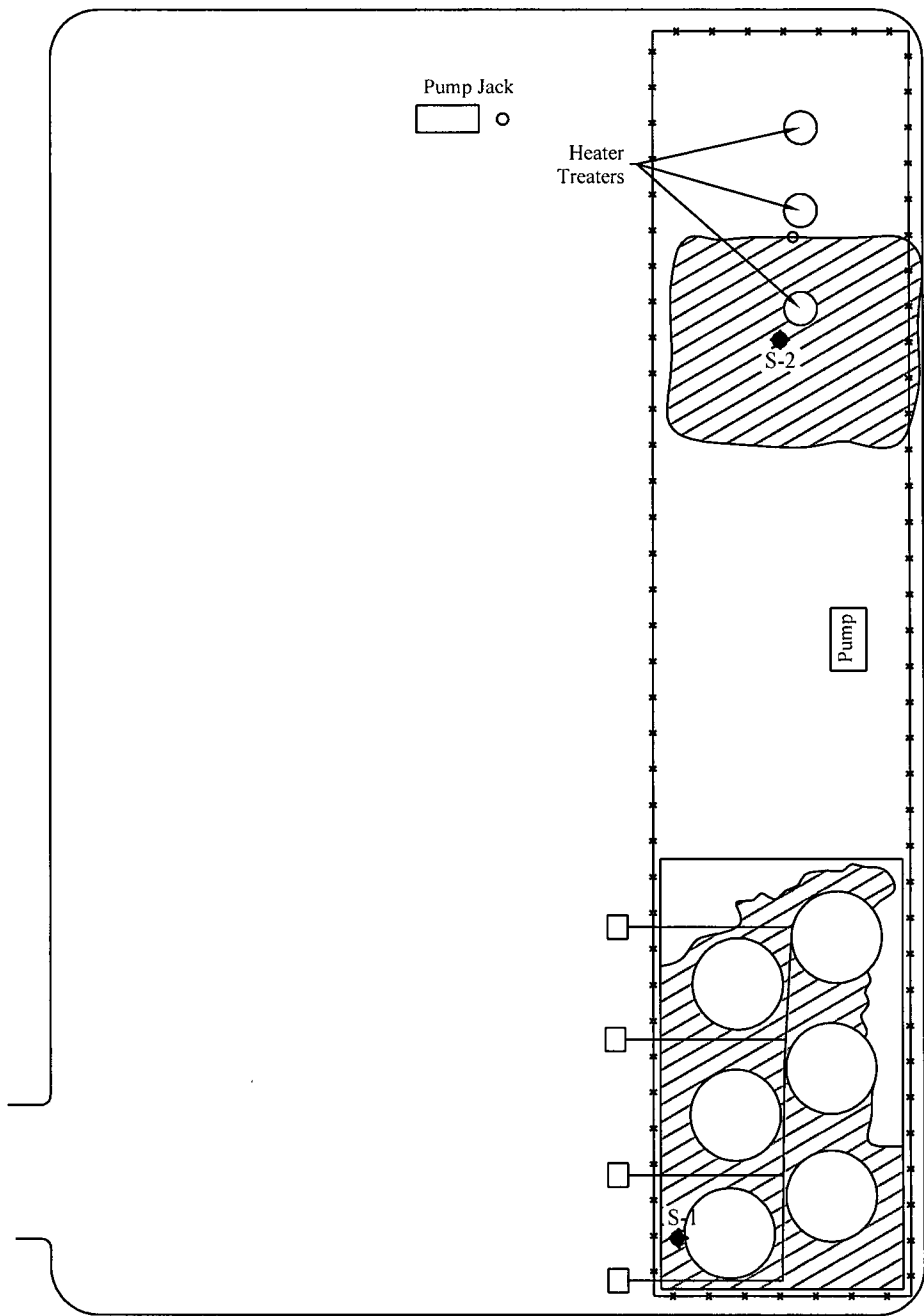


Mike Stubblefield  
Project Manager



David J. Adkins  
District Manager

## **SITE MAP**



Legend

- ◆ - Sample Locations
- x— - Fence line
- ▨ - Impacted Area



Date: 06/06/2012  
 Scale: 1" = 40'  
 Drawn By: TJS

Strawberry 7 Federal No. 2  
 Devon Energy Corporation  
 Artesia, New Mexico  
 Figure 1 - Site Plan

**APPENDIX I**  
**GROUNDWATER DATA**  
**INITIAL C-141**



# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

(A CLW##### in the  
POD suffix indicates the  
POD has been replaced  
& no longer serves a  
water right file.)

(R=POD has  
been replaced,  
O=orphaned,  
C=the file is  
closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD		Q Q Q				Rng	X	Y	Distance	Depth		
	Code	Subbasin	County	64	16	4	Sec	Tws			Well	Water	Column
CP 00829			LE	2	4	16	19S	31E	606165	3614009*	4164	120	
CP 00818			LE	1	4	26	18S	30E	599289	3620364*	5244	240	
CP 00822			LE	4	4	15	19S	30E	598148	3613516*	5528	90	
L 01978	L		LE	1	3	23	18S	30E	598469	3621964*	6995	65	44 21
Average Depth to Water:											44 feet		
Minimum Depth:											44 feet		
Maximum Depth:											44 feet		

Record Count: 4

UTMNAD83 Radius Search (in meters):

Easting (X): 602814

Northing (Y): 3616481

Radius: 7000

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

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

Form C-141  
Revised March 17, 1999

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

**Release Notification and Corrective Action**

**OPERATOR**



Initial Report



Final Report

Name of Company Devon Energy	Contact Roger Hernandez
Address P. O. Box 250 Artesia, NM 88211	Telephone No. 575-748-5238
Facility Name Strawberry 7-2	Facility Type Oil Well

Surface Owner	Mineral Owner	Lease No.
---------------	---------------	-----------

**LOCATION OF RELEASE**

Unit Letter	Section 7	Township 19S	Range 31E	Feet from the 1300	North/South Line NORTH	Feet from the 1750	East/West Line EAST	County EDDY
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**NATURE OF RELEASE**

Type of Release 30 BBLS OIL	Volume of Release 30 BBLS	Volume Recovered 26 BBLS
Source of Release TEST HEATER VENT MALFUNCTIONED	Date and Hour of Occurrence 5/11/12, 7:30AM	Date and Hour of Discovery 5/11/12, 7:30AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? OCD/MIKE BRATCHER BLM/TERRY GREGSTON	
By Whom? MERLE LEWIS	Date and Hour 5/14/12, 11:00AM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

N/A

Describe Cause of Problem and Remedial Action Taken.\*

Upon Arrival at the Strawberry 7-2 Battery, Lease Operator discovered a 30 barrel spill that was all kept within containment.

Describe Area Affected and Cleanup Action Taken.\*

Upon Arrival at the Strawberry 7-2 Battery, Lease Operator discovered a 30 barrel spill that was all kept within containment. The test heater vent valve malfunctioned in the middle of the night, causing the spill. This caused the heater to bypass gas to the oil stock tank and tank bubbled over through the thief hatch. The pressure blew out the gasket on the waterleg and sprayed the heater and ground around the area. Talon LPE was contacted to take samples & submit a clean up plan to BLM.

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.

		<b><u>OIL CONSERVATION DIVISION</u></b>	
Signature: <i>Gracie Bustamante</i>		Approved by District Supervisor:	
Printed Name: Gracie Bustamante			
Title: Field Adm. Support		Approval Date:	Expiration Date:
Date: 05/15/12 Phone: (575) 746-5561		Conditions of Approval:	Attached <input type="checkbox"/>

\* Attach Additional Sheets If Necessary



**APPENDIX II**  
**LABORATORY RESULTS**



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

---

May 30, 2012

MIKE STUBBLEFIELD  
TALON LPE  
408 W. TEXAS AVE.  
ARTESIA, NM 88210

RE: STRAWBERRY NO. 2 TANK BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 05/24/12 15:47.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene  
Lab Director/Quality Manager

**Analytical Results For:**

 TALON LPE  
 MIKE STUBBLEFIELD  
 408 W. TEXAS AVE.  
 ARTESIA NM, 88210  
 Fax To: (575) 745-8905

Received:	05/24/2012	Sampling Date:	05/22/2012
Reported:	05/30/2012	Sampling Type:	Soil
Project Name:	STRAWBERRY NO. 2 TANK BATTERY	Sampling Condition:	Cool & Intact
Project Number:	700794.022.01	Sample Received By:	Hope S. Moreno
Project Location:	SEC.7-T195-R31E		

**Sample ID: S-1 0' TANK BATTERY (H201185-01)**

BTX 8021B		mg/kg	Analyzed By: ZZZ						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>4.32</b>	0.500	05/29/2012	ND	2.14	107	2.00	2.48	
<b>Toluene*</b>	<b>21.8</b>	0.500	05/29/2012	ND	2.00	99.9	2.00	0.941	
<b>Ethylbenzene*</b>	<b>11.5</b>	0.500	05/29/2012	ND	1.91	95.4	2.00	0.131	
<b>Total Xylenes*</b>	<b>31.1</b>	1.50	05/29/2012	ND	5.74	95.7	6.00	0.535	

Surrogate 4-Bromofluorobenzene (PIC) 112 % 89.4-126

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>2720</b>	16.0	05/29/2012	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	791	100	05/25/2012	ND	188	94.0	200	3.23	
DRO >C10-C28	29700	100	05/25/2012	ND	192	95.8	200	1.94	

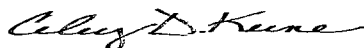
Surrogate 1-Chlorooctane 184 % 65.2-140

Surrogate 1-Chlorooctadecane 1280 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

TALON LPE  
MIKE STUBBLEFIELD  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received:	05/24/2012	Sampling Date:	05/22/2012
Reported:	05/30/2012	Sampling Type:	Soil
Project Name:	STRAWBERRY NO. 2 TANK BATTERY	Sampling Condition:	Cool & Intact
Project Number:	700794.022.01	Sample Received By:	Hope S. Moreno
Project Location:	SEC.7-T195-R31E		

**Sample ID: S-1 1' BGS TANK BATTERY (H201185-02)**

BTEX 8021B		mg/kg		Analyzed By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>146</b>	2.50	05/30/2012	ND	2.14	107	2.00	2.48	
<b>Toluene*</b>	<b>333</b>	2.50	05/30/2012	ND	2.00	99.9	2.00	0.941	
<b>Ethylbenzene*</b>	<b>103</b>	2.50	05/30/2012	ND	1.91	95.4	2.00	0.131	
<b>Total Xylenes*</b>	<b>188</b>	7.50	05/30/2012	ND	5.74	95.7	6.00	0.535	

Surrogate 4-Bromofluorobenzene (PIB) 115 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>768</b>	16.0	05/29/2012	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10</b>	<b>8150</b>	100	05/25/2012	ND	188	94.0	200	3.23		
<b>DRO &gt;C10-C28</b>	<b>7670</b>	100	05/25/2012	ND	192	95.8	200	1.94		

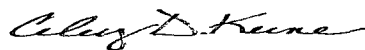
Surrogate 1-Chlorooctane 275 % 65.2-140

Surrogate 1-Chlorooctadecane 215 % 63 6-154

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

TALON LPE  
MIKE STUBBLEFIELD  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received:	05/24/2012	Sampling Date:	05/22/2012
Reported:	05/30/2012	Sampling Type:	Soil
Project Name:	STRAWBERRY NO. 2 TANK BATTERY	Sampling Condition:	Cool & Intact
Project Number:	700794.022.01	Sample Received By:	Hope S. Moreno
Project Location:	SEC.7-T195-R31E		

**Sample ID: S-1 2' BGS TANK BATTERY (H201185-03)**

BTX 8021B		mg/kg		Analyzed By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/30/2012	ND	2.14	107	2.00	2.48	
Toluene*	<0.050	0.050	05/30/2012	ND	2.00	99.9	2.00	0.941	
Ethylbenzene*	<0.050	0.050	05/30/2012	ND	1.91	95.4	2.00	0.131	
Total Xylenes*	<0.150	0.150	05/30/2012	ND	5.74	95.7	6.00	0.535	

Surrogate. 4-Bromofluorobenzene (PIC) 100 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	384	16.0	05/29/2012	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/25/2012	ND	188	94.0	200	3.23	
DRO >C10-C28	13.1	10.0	05/25/2012	ND	192	95.8	200	1.94	

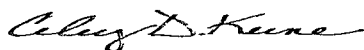
Surrogate. 1-Chlorooctane 89.6 % 65.2-140

Surrogate. 1-Chlorooctadecane 98.0 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

TALON LPE  
MIKE STUBBLEFIELD  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received:	05/24/2012	Sampling Date:	05/22/2012
Reported:	05/30/2012	Sampling Type:	Soil
Project Name:	STRAWBERRY NO. 2 TANK BATTERY	Sampling Condition:	Cool & Intact
Project Number:	700794.022.01	Sample Received By:	Hope S. Moreno
Project Location:	SEC.7-T195-R31E		

**Sample ID: S-1 3' BGS TANK BATTERY (H201185-04)**

BTX 8021B		mg/kg		Analyzed By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>5.56</b>	0.500	05/30/2012	ND	2.14	107	2.00	2.48	
<b>Toluene*</b>	<b>37.7</b>	0.500	05/30/2012	ND	2.00	99.9	2.00	0.941	
<b>Ethylbenzene*</b>	<b>15.0</b>	0.500	05/30/2012	ND	1.91	95.4	2.00	0.131	
<b>Total Xylenes*</b>	<b>43.4</b>	1.50	05/30/2012	ND	5.74	95.7	6.00	0.535	

Surrogate 4-Bromofluorobenzene (PIC) 124 % 89 4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>368</b>	16.0	05/29/2012	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10</b>	<b>1120</b>	50.0	05/25/2012	ND	188	94.0	200	3.23		
<b>DRO &gt;C10-C28</b>	<b>3850</b>	50.0	05/25/2012	ND	192	95.8	200	1.94		

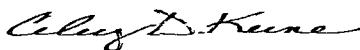
Surrogate 1-Chlorooctane 153 % 65 2-140

Surrogate 1-Chlorooctadecane 165 % 63 6-154

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

TALON LPE  
MIKE STUBBLEFIELD  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received:	05/24/2012	Sampling Date:	05/22/2012
Reported:	05/30/2012	Sampling Type:	Soil
Project Name:	STRAWBERRY NO. 2 TANK BATTERY	Sampling Condition:	Cool & Intact
Project Number:	700794.022.01	Sample Received By:	Hope S. Moreno
Project Location:	SEC.7-T195-R31E		

**Sample ID: S-2 0' HEATER TREATER (H201185-05)**

BTX 8021B		mg/kg		Analyzed By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/30/2012	ND	2.14	107	2.00	2.48	
Toluene*	<b>0.127</b>	0.050	05/30/2012	ND	2.00	99.9	2.00	0.941	
Ethylbenzene*	<b>0.061</b>	0.050	05/30/2012	ND	1.91	95.4	2.00	0.131	
Total Xylenes*	<0.150	0.150	05/30/2012	ND	5.74	95.7	6.00	0.535	

Surrogate 4-Bromofluorobenzene (PID) 99.2 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<b>5440</b>	16.0	05/29/2012	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<100	100	05/25/2012	ND	188	94.0	200	3.23		
DRO >C10-C28	<b>13500</b>	100	05/25/2012	ND	192	95.8	200	1.94		

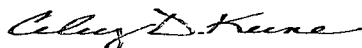
Surrogate 1-Chlorooctane 86.3 % 65.2-140

Surrogate 1-Chlorooctadecane 81.7 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

TALON LPE  
MIKE STUBBLEFIELD  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received:	05/24/2012	Sampling Date:	05/22/2012
Reported:	05/30/2012	Sampling Type:	Soil
Project Name:	STRAWBERRY NO. 2 TANK BATTERY	Sampling Condition:	Cool & Intact
Project Number:	700794.022.01	Sample Received By:	Hope S. Moreno
Project Location:	SEC.7-T195-R31E		

**Sample ID: S-2 6" HEATER TREATER (H201185-06)**

BTX 8021B		mg/kg		Analyzed By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/29/2012	ND	2.14	107	2.00	2.48	
Toluene*	<0.050	0.050	05/29/2012	ND	2.00	99.9	2.00	0.941	
Ethylbenzene*	<0.050	0.050	05/29/2012	ND	1.91	95.4	2.00	0.131	
Total Xylenes*	<0.150	0.150	05/29/2012	ND	5.74	95.7	6.00	0.535	

Surrogate: 4-Bromofluorobenzene (PIE) 99.4 % 89 4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2520	16.0	05/29/2012	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/25/2012	ND	188	94.0	200	3.23	
DRO >C10-C28	44.4	10.0	05/25/2012	ND	192	95.8	200	1.94	

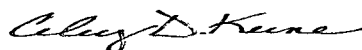
Surrogate: 1-Chlorooctane 88 0 % 65.2-140

Surrogate: 1-Chlorooctadecane 100 % 63 6-154

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

TALON LPE  
MIKE STUBBLEFIELD  
408 W. TEXAS AVE.  
ARTESIA NM, 88210  
Fax To: (575) 745-8905

Received:	05/24/2012	Sampling Date:	05/22/2012
Reported:	05/30/2012	Sampling Type:	Soil
Project Name:	STRAWBERRY NO. 2 TANK BATTERY	Sampling Condition:	Cool & Intact
Project Number:	700794.022.01	Sample Received By:	Hope S. Moreno
Project Location:	SEC.7-T195-R31E		

**Sample ID: S-2 1' HEATER TREATER (H201185-07)**

BTEX 8021B		mg/kg	Analyzed By: ZZZ						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/29/2012	ND	2.14	107	2.00	2.48	
Toluene*	<0.050	0.050	05/29/2012	ND	2.00	99.9	2.00	0.941	
Ethylbenzene*	<0.050	0.050	05/29/2012	ND	1.91	95.4	2.00	0.131	
Total Xylenes*	<0.150	0.150	05/29/2012	ND	5.74	95.7	6.00	0.535	

Surrogate 4-Bromofluorobenzene (PIE) 99.5% 89.4-126

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1840	16.0	05/29/2012	ND	416	104	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/25/2012	ND	188	94.0	200	3.23	
DRO >C10-C28	229	10.0	05/25/2012	ND	192	95.8	200	1.94	

Surrogate 1-Chlorooctane 91.0% 65.2-140

Surrogate 1-Chlorooctadecane 101% 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

### Notes and Definitions

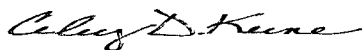
- S-06            The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
- ND             Analyte NOT DETECTED at or above the reporting limit
- RPD            Relative Percent Difference
- \*\*              Samples not received at proper temperature of 6°C or below.
- \*\*\*             Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
- Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

Company Name: <u>Talon/LPE</u>				<b>BILL TO:</b>				<b>ANALYSIS REQUEST</b>												
Project Manager: <u>Mike Stubblefield</u>				P.O. #:				<div style="display: flex; flex-direction: column; align-items: center;"> <div>80157 TPH</div> <div>00213 BTET</div> <div>Total chlorides</div> </div>												
Address: <u>408 West Texas Ave</u>				Company: <u>Talon/LPE</u>																
City: <u>Alameda</u> State: <u>NM</u> Zip: <u>88210</u>				Attn:																
Phone #: <u>575-441-2254</u> Fax #:				Address:																
Project #: <u>200794, 022.01</u> Project Owner: <u>Devon Energy Corp</u>				City:																
Project Name: <u>STRAWberry 2 No 2 TAILGATE</u>				State: Zip:																
Project Location: <u>SEC. 2-T195-R31E</u>				Phone #:																
Sampler Name: <u>Mike Stubblefield</u>				Fax #:																
FOR LAB USE ONLY	Lab I.D.	Sample I.D.	(S)RAB OR (C)OMP.	# CONTAINERS	MATRIX	PRESERV.	SAMPLING													
					GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER	ACID/BASE ICE/COOL OTHER	DATE	TIME												
	H201185-1	S-1 0' Tank battery	5		/	/	5/22/2012	2:53 PM	/	/	/									
	-2	S-1 1' bgs tank battery	5		/	/	5/22/2012	2:52 PM	/	/	/									
	-3	S-1 2' bgs tank battery	5		/	/	5/22/2012	2:59 PM	/	/	/									
	-4	S-1 3' bgs tank battery	5		/	/	5/22/2012	3:04 PM	/	/	/									
	-5	S-2 0' heater treater	5		/	/	5/22/2012	3:11 PM	/	/	/									
	-6	S-2 6" bgs heater treater	5		/	/	5/22/2012	3:14 PM	/	/	/									
	-7	S-2 1' bgs heater treater	5		/	/	5/22/2012	3:12 PM	/	/	/									

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Relinquished By: <u>Mike Stubblefield</u>	Date: <u>5/24/2012</u>	Received By: <u>S. Moran</u>	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #: _____
Relinquished By: _____	Date: _____	Received By: _____	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #: _____
Delivered By: (Circle One) Sampler - UPS - Bus - <u>Other</u>			REMARKS:	
Sample Condition: Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No			CHECKED BY: (Initials) <u>H3m</u>	

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476