

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 Merle Lewis	
Address P. O. Box 250 Artesia, NM 88211	Telephone No. 575-748-6304	
Facility Name Uncle Sam 13 Federal 1	Facility Type Oil Well API 30-025-30732	
Surface Owner	Mineral Owner	Lease No.

**LOCATION OF RELEASE**

Unit Letter B	Section 13	Township 18S	Range 32E	Feet from the 990	North/South Line North	Feet from the 1980	East/West Line East	County Lea
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**NATURE OF RELEASE**

Type of Release 50 bbls Produced Water / 5 bbls of Oil	Volume of Release - 55 bbls	Volume Recovered 5 Oil / 10 Produced Water
Source of Release Corrosion spot on Nipple	Date and Hour of Occurrence 5/28/12, 11:45AM	Date and Hour of Discovery 5/28/12, 11:45AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? BLM/ Marlain Eaton & OCD / Eli Gonzales	
By Whom? Merle Lewis	Date and Hour 5/28/12, BLM / 4:15PM, OCD/ 4:20PM	
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.\*  
At the Uncle Sam 13 Fed 1 Battery, a nipple on a water dump developed a leak, resulting in a spill of 50bbls of produced water and 5bbl spill of oil.

Describe Area Affected and Cleanup Action Taken.\* Talon/LPE was contracted for the correction of this release. The impacted area from this release was excavated to a depth of 7-feet deep, analytical testing was completed. The excavation was backfilled to grade using new material and contoured to match the surrounding location. A berm was reconstructed around the heater treater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: <i>Jamie Castillo</i>	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Jamie Castillo	Approved by District Supervisor: <i>Environmental Specialist</i>	
Title: Assistant Production Forman	Approval Date: <i>6/7/05/16</i>	Expiration Date: <i>—</i>
Date: 11/29/2012 Phone:	Conditions of Approval:	Attached <input type="checkbox"/>

\* Attach Additional Sheets If Necessary

*112P-4334*



HOBBS OCD

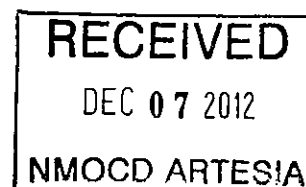
DEC 24 2012

December 5, 2012

RECEIVED

Mr. Geoffrey Leking  
NMOCD District 1  
1625 N. French Drive  
Hobbs, NM 88240

Subject: **Remediation and Closure Report**  
Devon Energy  
Uncle Sam 13 Federal No. 1  
API # 30-025-30732



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

ENVIRONMENTAL CONSULTING  
ENGINEERING  
DRILLING  
CONSTRUCTION  
SPILL MANAGEMENT  
GENERAL CONTRACTING

Dear Mr. Leking,

Devon Energy has contracted Talon/LPE (Talon) to perform soil sampling and remediation services for the referenced release at the Uncle Sam Federal No. 1 location. The results of our soil assessment, completed remediation activities and closure request are submitted herein.

#### Incident Date

May 28, 2012

#### Background Information

The Uncle Sam 13 Federal No. 1 is located approximately forty-five (45) miles east of Artesia, New Mexico. The legal location for the site is Section 13, Township 18 South and Range 32 East in Lea County, New Mexico. More specifically, the latitude and longitude for the release are 32.751905 North and - 103.717712 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 Kermit-Palomas fine sands with 0 to 12 percent slopes. The local surface and shallow geology is Quaternary in age and is comprised of eolian sands and piedmont deposits which include silty soils underlain with hard caliche. The New Mexico State Engineer web site indicates the nearest ground water data to be in S30-T18S-R33E. The ground water in Section 30 is reported to be at depth of 35' below ground surface (bgs). The referenced groundwater data is presented in Appendix I.

The ranking for this site is 20 based on the as following:

Depth to ground water	<50'
Wellhead Protection Area	>1000'
Distance to surface water body	>1000'

Toll Free: 866.742.0742  
www.talonlpe.com

## **Incident Description**

On May 28, 2012 corrosion on the piping of the heater treater lead to a release of 50 barrels of produced water and 5 barrels of oil. All fluids were contained within the bermed area of the heater treater. A vacuum truck was immediately brought to the location and recovered 5 barrels of oil and 10 barrels of produced water. The heater treater was repaired.

## **Remedial Actions Taken**

On August 8, 2012 Talon personnel mobilized to the site to begin excavation of the impacted area in accordance with the approved work plan. The impacted soil within the area of the release was excavated to a depth of 4-7 feet and transported to a NMOCD approved solid waste disposal facility, CRI, pursuant to the work plan. The excavated area was left open until approval to backfill was obtained from the BLM.

On August 16, 2012 Talon personnel mobilized to the site to begin closure soil sampling activities on the bottom and sidewalls of the excavation per the BLM and OCD requirements. Grab soil samples were collected and submitted for laboratory analysis. Based on lab results, the excavation was expanded and then re-sampled on August 27, 2012.

All soil samples were collected by Talon personnel wearing clean nitrile gloves. The soil samples were placed in laboratory provided sample containers, iced and transported to Cardinal Laboratories in Hobbs, New Mexico for analysis. The samples were tested for TPH (Total Petroleum Hydrocarbons) using EPA Method 8015M, and volatile organics (BTEX) using EPA Method 8021B. The chlorides were analyzed per SM4500Cl-B. The complete laboratory reports are attached as Appendix II.

## **Analytical Results**

Analytical results received from Cardinal Laboratories are summarized below:

August 24, 2012

<u>Sample</u>	<u>Depth</u>	<u>BTEX</u>	<u>Chlorides</u>	<u>TPH (mg/kg)</u>
S-2	4'	<0.150	144	<10
S-3	4'	74.99	816	13920
S-4		<0.150	<16	<10
S-5		<0.150	<16	<10
S-6		<0.150	176	<10
S-7		<0.150	16	<10

September 4, 2012

<u>Sample</u>	<u>Depth</u>	<u>BTEX</u>	<u>Chlorides</u>	<u>TPH (mg/kg)</u>
S-8	7'	<0.150	--	65.4

--Analyte Not Tested

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 100 mg/kg.

### Summary and Conclusions

- Ground water in the project vicinity is less than 50-feet below land surface.
- The impacted soil from this release was excavated from 4-feet to 7-feet deep. The excavated soil was transported to a NMOCD approved solid waste disposal facility.
- On September 13, 2012 the BLM granted approval of the confirmation samples and the excavated areas were backfilled to grade using new material transported from a local borrow pit. The areas were contoured to match the existing terrain.
- Based on the depth to groundwater and the remedial actions implemented, it is unlikely that the impacts identified from this release will pose a threat to groundwater.

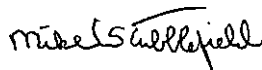
### Closure

On behalf of Devon Energy Corporation, we respectfully request that no further actions be required and that closure with respect to this release be granted.

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

Respectfully submitted,

TALON/LPE

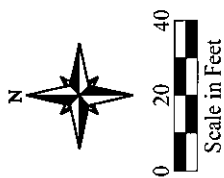
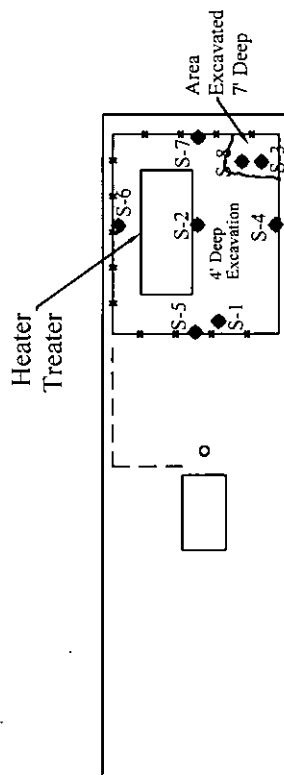


Mike Stubblefield  
Project Manager



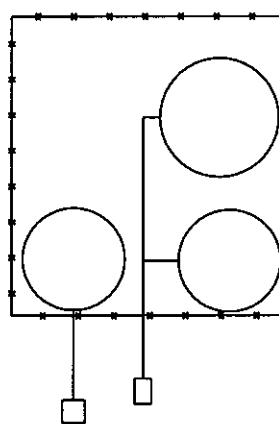
David J. Adkins  
District Manager

## **SITE MAP**



Legend

◆ - Sample Location



Date: 10/02/2012

Scale: 1" = 40'

Drawn By: TJS

Uncle Sam 13 Federal No. 1  
 Devon Energy Corporation  
 Maljamar, New Mexico  
 Figure 1 - Site Plan

**APPENDIX I**  
**GROUNDWATER DATA**



# 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 Code	Subbasin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
L 03454	L		LE	2	2	30	18S	33E		622200	3621422*	3744	100	35	65
													Average Depth to Water:	35 feet	
													Minimum Depth:	35 feet	
													Maximum Depth:	35 feet	

Record Count: 1

UTMNAD83 Radius Search (in meters):

Easting (X): 620425

Northing (Y): 3624719

Radius: 4000

\*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.



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



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

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August 24, 2012

MIKE STUBBLEFIELD

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: UNCLE SAM 13 FED. NO. 1

Enclosed are the results of analyses for samples received by the laboratory on 08/17/12 14:45.

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,

A handwritten signature in black ink, appearing to read "Coley D. Keene", written in a cursive style.

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: 08/17/2012  
Reported: 08/24/2012  
Project Name: UNCLE SAM 13 FED. NO. 1  
Project Number: 700794.029.01  
Project Location: SEC.13 - T19S - R32E

Sampling Date: 08/16/2012  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S - 2 4' BGS (H201958-01)**

BTEX 8021B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/23/2012	ND	1.92	96.0	2.00	0.190	
Toluene*	<0.050	0.050	08/23/2012	ND	1.96	98.2	2.00	1.16	
Ethylbenzene*	<0.050	0.050	08/23/2012	ND	1.99	99.4	2.00	1.76	
Total Xylenes*	<0.150	0.150	08/23/2012	ND	6.45	107	6.00	2.18	

Surrogate: 4-Bromofluorobenzene (PIL) 100 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	08/22/2012	ND	400	100	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	08/22/2012	ND	177	88.7	200	8.30	
DRO >C10-C28	<10.0	10.0	08/22/2012	ND	172	86.2	200	13.2	

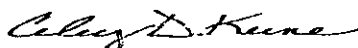
Surrogate: 1-Chlorooctane 87.8 % 65.2-140

Surrogate: 1-Chlorooctadecane 91.7 % 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: 08/17/2012  
Reported: 08/24/2012  
Project Name: UNCLE SAM 13 FED. NO. 1  
Project Number: 700794.029.01  
Project Location: SEC.13 - T19S - R32E

Sampling Date: 08/16/2012  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S - 3 4' BGS (H201958-02)**

BTEX 8021B		mg/kg	Analyzed By: AP					S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	08/24/2012	ND	1.92	96.0	2.00	0.190	
Toluene*	5.69	0.200	08/24/2012	ND	1.96	98.2	2.00	1.16	
Ethylbenzene*	16.5	0.200	08/24/2012	ND	1.99	99.4	2.00	1.76	
Total Xylenes*	52.8	0.600	08/24/2012	ND	6.45	107	6.00	2.18	

Surrogate: 4-Bromofluorobenzene (PIB) 187 % 89.4-126

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	816	16.0	08/22/2012	ND	400	100	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	3620	200	08/22/2012	ND	177	88.7	200	8.30	
DRO >C10-C28	10300	200	08/22/2012	ND	172	86.2	200	13.2	

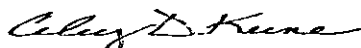
Surrogate: 1-Chlorooctane 254 % 65.2-140

Surrogate: 1-Chlorooctadecane 184 % 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: 08/17/2012  
 Reported: 08/24/2012  
 Project Name: UNCLE SAM 13 FED. NO. 1  
 Project Number: 700794.029.01  
 Project Location: SEC.13 - T19S - R32E

 Sampling Date: 08/16/2012  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: S - 4 (H201958-03)**

BTEX 8021B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/24/2012	ND	1.92	96.0	2.00	0.190	
Toluene*	<0.050	0.050	08/24/2012	ND	1.96	98.2	2.00	1.16	
Ethylbenzene*	<0.050	0.050	08/24/2012	ND	1.99	99.4	2.00	1.76	
Total Xylenes*	<0.150	0.150	08/24/2012	ND	6.45	107	6.00	2.18	

Surrogate: 4-Bromofluorobenzene (PIC) 104 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/22/2012	ND	400	100	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	08/22/2012	ND	177	88.7	200	8.30	
DRO >C10-C28	<10.0	10.0	08/22/2012	ND	172	86.2	200	13.2	

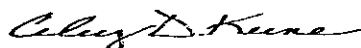
Surrogate: 1-Chlorooctane 89.3 % 65.2-140

Surrogate: 1-Chlorooctadecane 96.9 % 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:	08/17/2012	Sampling Date:	08/16/2012
Reported:	08/24/2012	Sampling Type:	Soil
Project Name:	UNCLE SAM 13 FED. NO. 1	Sampling Condition:	Cool & Intact
Project Number:	700794.029.01	Sample Received By:	Jodi Henson
Project Location:	SEC.13 - T19S - R32E		

**Sample ID: S - 5 (H201958-04)**

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/23/2012	ND	1.92	96.0	2.00	0.190		
Toluene*	<0.050	0.050	08/23/2012	ND	1.96	98.2	2.00	1.16		
Ethylbenzene*	<0.050	0.050	08/23/2012	ND	1.99	99.4	2.00	1.76		
Total Xylenes*	<0.150	0.150	08/23/2012	ND	6.45	107	6.00	2.18		

Surrogate: 4-Bromofluorobenzene (PBC) 102 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	08/22/2012	ND	400	100	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	08/22/2012	ND	177	88.7	200	8.30		
DRO >C10-C28	<10.0	10.0	08/22/2012	ND	172	86.2	200	13.2		

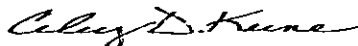
Surrogate: 1-Chlorooctane 90.6 % 65.2-140

Surrogate: 1-Chlorooctadecane 101 % 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: 08/17/2012  
Reported: 08/24/2012  
Project Name: UNCLE SAM 13 FED. NO. 1  
Project Number: 700794.029.01  
Project Location: SEC.13 - T19S - R32E

Sampling Date: 08/16/2012  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S - 6 (H201958-05)**

BTEX 8021B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/23/2012	ND	1.92	96.0	2.00	0.190	
Toluene*	<0.050	0.050	08/23/2012	ND	1.96	98.2	2.00	1.16	
Ethylbenzene*	<0.050	0.050	08/23/2012	ND	1.99	99.4	2.00	1.76	
Total Xylenes*	<0.150	0.150	08/23/2012	ND	6.45	107	6.00	2.18	

Surrogate: 4-Bromofluorobenzene (PIB) 102 % 89.4-126

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	08/22/2012	ND	400	100	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	08/22/2012	ND	177	88.7	200	8.30	
DRO >C10-C28	<10.0	10.0	08/22/2012	ND	172	86.2	200	13.2	

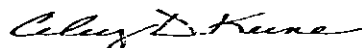
Surrogate: 1-Chlorooctane 93.6 % 65.2-140

Surrogate: 1-Chlorooctadecane 99.9 % 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:	08/17/2012	Sampling Date:	08/16/2012
Reported:	08/24/2012	Sampling Type:	Soil
Project Name:	UNCLE SAM 13 FED. NO. 1	Sampling Condition:	Cool & Intact
Project Number:	700794.029.01	Sample Received By:	Jodi Henson
Project Location:	SEC.13 - T19S - R32E		

**Sample ID: S - 7 (H201958-06)**

BTX 8021B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/23/2012	ND	1.92	96.0	2.00	0.190	
Toluene*	<0.050	0.050	08/23/2012	ND	1.96	98.2	2.00	1.16	
Ethylbenzene*	<0.050	0.050	08/23/2012	ND	1.99	99.4	2.00	1.76	
Total Xylenes*	<0.150	0.150	08/23/2012	ND	6.45	107	6.00	2.18	

Surrogate: 4-Bromofluorobenzene (PIL) 102 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	08/22/2012	ND	400	100	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	08/22/2012	ND	177	88.7	200	8.30	
DRO >C10-C28	<10.0	10.0	08/22/2012	ND	172	86.2	200	13.2	

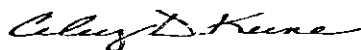
Surrogate: 1-Chlorooctane 88.1 % 65.2-140

Surrogate: 1-Chlorooctadecane 95.3 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



### Notes and Definitions

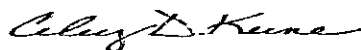
- S-06            The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
- ND             Analyte NOT DETECTED at or above the reporting limit
- RPD            Relative Percent Difference
- \*\*              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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Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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8/19/2012  
Time: 1:00 PM

Relinquished By: \_\_\_\_\_  
Date: \_\_\_\_\_  
Received By: \_\_\_\_\_

Delivered By: (Circle One)	Sample Condition	CHECKED BY:
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Sampler - UPS - Bus - Other ☒ UPS

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367	3	

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

017

September 04, 2012

MIKE STUBBLEFIELD

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: UNCLE SAM 13 FED. NO. 1

Enclosed are the results of analyses for samples received by the laboratory on 08/28/12 9:05.

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).

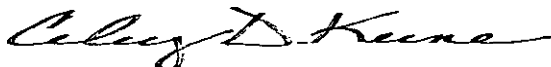
Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

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: 08/28/2012  
Reported: 09/04/2012  
Project Name: UNCLE SAM 13 FED. NO. 1  
Project Number: 700794.029.01  
Project Location: SEC.13 - T19S - R32E

Sampling Date: 08/27/2012  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S - 8 7' BGS (H202065-01)**

BTX 8021B		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/31/2012	ND	1.74	87.2	2.00	3.77	
Toluene*	<0.050	0.050	08/31/2012	ND	1.79	89.7	2.00	4.44	
Ethylbenzene*	<0.050	0.050	08/31/2012	ND	1.80	90.2	2.00	4.34	
Total Xylenes*	<0.150	0.150	08/31/2012	ND	5.84	97.4	6.00	4.48	

Surrogate: 4-Bromofluorobenzene (PIE) 107 % 89.4-126

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	08/29/2012	ND	197	98.3	200	2.74	
DRO >C10-C28	65.4	10.0	08/29/2012	ND	195	97.7	200	2.73	

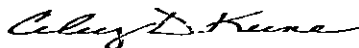
Surrogate: 1-Chlorooctane 93.9 % 65.2-140

Surrogate: 1-Chlorooctadecane 105 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

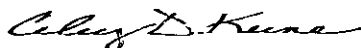
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager



**FINAL C-141**