

HOBBS OCD

July 1, 2012

JUL 0 3 2012

Mr. Geoffrey Leking NMOCD District 1 **AMARILLO** 1625 N. French Drive 921 North Bivins Hobbs, NM 88240

RECEIVED

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 Subject: Soil Assessment and Remediation Work Plan

Devon Energy

Uncle Sam 13 Federal No. 1

API # 30-025-30732

AUSTIN

911 West Anderson Lane Suite 202 Austin, Texas 78757 Phone 512.989.3428 Fax 512.989.3487 Dear Mr. Leking,

Devon Energy has contracted Talon/LPE (Talon) to perform soil sampling and remediation services at the referenced Uncle Sam Federal No. 1 release. Our soil sampling results and proposed remediation activities consist of the following:

HORRS

318 East Taylor Street Hobbs, New Mexico 88240 Phone 575.393.4261 Fax 575.393.4658 **Incident Date** 

May 28, 2012

MIDLAND

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

#### **Background Information**

Depth to ground water

Wellhead Protection Area

Distance to surface water body

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. B GW @ 30'

SAN ANTONIO II 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

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-P 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 under lain with hard caliche. The USGS Water Data web site indicates the nearest ground water data to be in S22-T18S-R32E. The ground water in Section 22 is reported to be at depth of 429.49' below ground surface (bgs). The referenced groundwater data is presented in Appendix I.

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

>100'

>1000°

>1000°

**ENVIRONMENTAL CONSULTING ENGINEERING** DRILLING

CONSTRUCTION SPILL MANAGEMENT GENERAL CONTRACTING

1RP-4334 PKJ 16/8738611

Toll Free: 866.742.0742 www.talonlpe.com



HOBBS OCD

July 1, 2012

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Mr. Geoffrey Leking NMOCD District 1 AMARILLO 1625 N. French Drive 921 North Bivins Hobbs, NM 88240

RECEIVED

Amarillo, Texas 79107 Phone 806.467.0607 Fax 806.467.0622

408 West Texas Ave.

Phone 575 748 8768 Fax 575.746.8905

Artesia, New Mexico 88210

Subject:

Soil Assessment and Remediation Work Plan

Devon Energy

Uncle Sam 13 Federal No. 1 API # 30-025-30732

AUSTIN

ARTESIA

**9II West Anderson Lane** Suite 202 Austin, Texas 78757 Phone 512,989,3428 Fax 512,989,3487

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

**Incident Date** 

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

**ENVIRONMENTAL CONSULTING** 

**ENGINEERING** DRILLING CONSTRUCTION SPILL MANAGEMENT GENERAL CONTRACTING

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

Toll Free: 866,742,0742 www.talonlpe.com THIS WAS ALREADY DONE - NEEDS aW DEPTH AND RANKING REVISED FOL501 EXCAVATE TO 3 AND TAKE CONF

EXCANATE TO

HI NO CONFERMPNESO

#### **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 to be released. 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.

#### **Actions Taken**

On June 8, 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 4-feet below ground surface. Soil sample locations are illustrated on the attached site plan.

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:

June 14, 2012

Sample	Depth	BTEX	Chlorides	TPH (mg/kg)
S-1, Berm Area	0'	191.5	1,550	47,820
	1'	1.968	384	3,570
	2'	0.072	96	5,000
	4'	< 0.150	96	16

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.

#### **Summary and Conclusions**

- Ground water in the project vicinity is approximately 429-feet below land surface per data obtained from the USGS Water Data web site.
- Based upon the results of the laboratory data obtained for this investigation, the vertical impacts of the hydrocarbon release have been documented to extend 2-3 feet below ground surface.

#### **Proposed Remedial Actions**

- The impacted area within the berm of the heater treater will be excavated to a depth of 2.5-feet deep and transported to a NMOCD approved solid waste disposal facility.
- Confirmation soil samples will be collected upon completion of the excavation activities. The soil samples will be submitted to the laboratory for TPH analysis using Method 8015M, and BTEX analysis using Method 8021B.
- Upon NMOCD approval of the confirmation samples, the excavated area will be backfilled to grade using new material transported from a local borrow pit. The area will be contoured to match the existing location.
- A final report documenting all field activities and lab reports will be provided to the NMOCD Hobbs Office utilizing Form C-141.

Should you have any questions or if further information is required, please do not hesitate to contact our office at 575.746.8768.

Respectfully submitted,

TALON/LPE

Mike Stubblefield

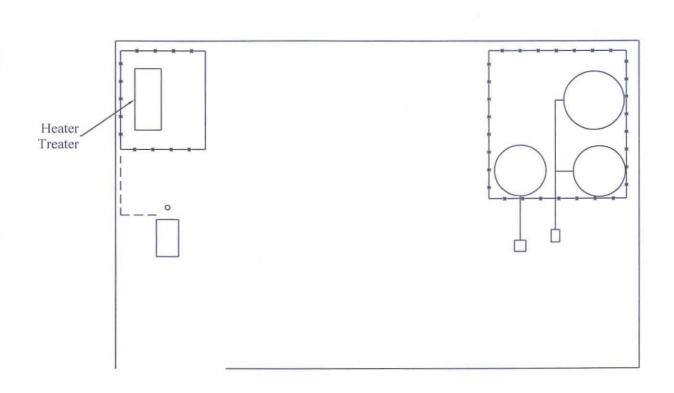
Project Manager

mae Stullefield

David J. Adkins District Manager

alsain

#### SITE MAP







Date: 06/19/2012

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 INITIAL C-141

#### Kimberly M. Wilson

From:

Michael Stubblefield

Sent:

To:

Subject:

Thursday, June 21, 2012 7:59 AM
Kimberly M. Wilson
Work plan for the Devon Energy Corp. Uncle Sam 13 Federal No.1

ſ								USGS SITE					
U	L SEC	TWN	RNG	SPOT		COUNTY	SOURCE	NUM.	QT	Y SITE LOCATION		DATE	LEVEL
0.		32E 32E	144 44		LEA	SEO SEO		1 1	177.02 112.0077117-03.00	E.04.144 E.07.44		65.00 460.00	
0.	185	32E	44233		LEA	SEO		1	18S.32	E.07.44233	1996-01-3	82.35	5
10	185	32E	22343	3	LEA	SEO		1	18S.32	E.16.223433	1991-10-1	17 84.59	
10	185	32E	22433		LEA	SEO		1	18S.32	E.16.22433	1968-03-1	18 84.18	3
20	185	32E	14411		LEA	SEO		1	18S.32	E.20.14411	1991-05-1	164.34	
2	185	32E	32322		LEA	SEO		1	18S.32	E.22.32322	1986-03-2	25 429.49	
34	185	32E	22200		LEA	SEO		1	18S.32	E.34.22200	1981-03-1	12 117.28	

Kimberly,

Please change the depth to water and site ranking for the Devon Energy Uncle Sam 13 Federal No.1 with the attached water information.

#### Mike Stubblefield

Project Manager

Talon/LPE

408 West Texas Avenue

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 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

Revised March 17, 1999

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

Form C-141

#### Release Notification and Corrective Action

				OI	PERA	ГOR		⊠ Ir	nitial Rep	ort Final Repo				
Name of	Company	Devon E	nergy		(	Contact	Merle Lewis							
Address Artesia, N					,	Telephone	e No. 575-7	48-63	04					
Facility N	ame Und	cle Sam 13	Federa	1 1	]	Facility T	ype Oil Wel	11						
Surface C	wner			Mineral	Owne	r			Lease	No.				
				LOCA	ATION	OF RE	LEASE							
Unit Letter B	Section 13	Township 18S	Range 32E	Feet from the 990	North/ North	South Line	Feet from the 1980	East/V East	Vest Line	County Lea				
				NAT	TURE	OF REL	EASE							
Type of Rele	ase 50 bbls	Produced Wa	ter / 5 bbl				Release 55 bbls		Volume F Water	ecovered 5 oil / 10 Produced				
Source of Re Corrosion sp		e				Date and F 5/28/12, 1	Iour of Occurrence 1:45AM	ce	Date and 11:45AM	Hour of Discovery 5/28/12,				
Was Immedi		Given?	Yes [	No Not R	equired		Whom? BLM/ N	Aarlain I	Eaton & OC	CD / Eli Gonzales				
By Whom?		ris					Iour 5/28/12, B			D/ 4:20PM				
Was a Water	course Read	ched?	Yes 🗵	No		If YES, Volume Impacting the Watercourse.								
If a Waterco	urse was Im	pacted, Descr	ibe Fully.	*										
N/A														
		em and Reme			veloned	a leak reculti	ng in a snill of 50	hble of	produced u	rater and 5bbl spill of oil.				
137	7				veloped	a reak, resurt	ng m a spin or 50	70015 01	produced w	ater and 5001 spin of on.				
It was disco	vered that the		rosion spo	ot on the nipple, v			ed. All fluid was			e heater treater berm. A				
regulations a public health should their or the enviro	all operators or the envi operations lonment. In a	are required to ronment. The nave failed to	o report a acceptan adequately OCD accep	nd/or file certain ce of a C-141 rep y investigate and	release n ort by the remediat	otifications a e NMOCD n e contaminat	nd perform correct parked as "Final Ration that pose a three tree the operator of	ctive act Report" of reat to go respons	ions for rel loes not rel round water ibility for c	eases which may endanger eve the operator of liability r, surface water, human health compliance with any other				
						OIL CONSERVATION DIVISION								
Signature: G	iracie Bi	istamante	<i>y</i>			Annroved by	District Superv	isor.						
Printed Nam	e: Gracie E	Bustamante				Approved by District Supervisor			¥1501.					
Title: Field	Adm. Supp	ort				Approval Da	te:		Expiration	Date:				
Date: 5/30/1	2 Phone:	(575) 746-5	5561			Conditions of	f Approval:			Attached				

<sup>\*</sup> Attach Additional Sheets If Necessary



### 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)

2 2 30 18S 33E

(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD

Depth Depth Water

**POD Number** 

Code Subbasin County 64 16 4 Sec Tws Rng

LE

Y Distance

Well Water Column

L 03454

622200 3621422\* 3744 100

35 feet

Average Depth to Water:

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

## APPENDIX II LABORATORY RESULTS



June 14, 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 06/08/12 13:34.

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 <a href="https://www.tceq.texas.gov/field/qa/lab">www.tceq.texas.gov/field/qa/lab</a> accredited certif.html.

Cardinal Laboratories is accreditated 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.

Celeg D. Keene

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



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

Received:

06/08/2012

06/14/2012

Sampling Date:

06/08/2012

Reported:

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-1 0' BERMED AREA (H201298-01)

BTEX 8021B	mg	/kg	Analyze	d By: ZZZ					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	3.30	0.500	06/13/2012	ND	2.10	105	2.00	4.88	
Toluene*	36.7	0.500	06/13/2012	ND	2.17	109	2.00	2.07	
Ethylbenzene*	50.5	0.500	06/13/2012	ND	2.21	111	2.00	1.77	
Total Xylenes*	101	1.50	06/13/2012	ND	6.86	114	6.00	0.457	
Surrogate: 4-Bromofluorobenzene (PIL	185	% 89.4-12	6			.,			
Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1550	16.0	06/12/2012	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	6420	200	06/12/2012	ND	176	88.0	200	4.28	
DRO >C10-C28	41400	200	06/12/2012	ND	172	86.2	200	7.49	
Surrogate: 1-Chlorooctane	562	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	1970	% 63.6-15	4						

#### Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene



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

Fax To:

(575) 745-8905

Received:

06/08/2012

Sampling Date:

06/08/2012

Reported:

06/14/2012

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-1 1' (H201298-02)

BTEX 8021B	mg,	/kg	Analyze	d By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.075	0.050	06/13/2012	ND	2.10	105	2.00	4.88	
Toluene*	0.933	0.050	06/13/2012	ND	2.17	109	2.00	2.07	
Ethylbenzene*	0.379	0.050	06/13/2012	ND	2.21	111	2.00	1.77	
Total Xylenes*	0.581	0.150	06/13/2012	ND	6.86	114	6.00	0.457	
Surrogate: 4-Bromofluorobenzene (PIL	123	% 89.4-12	6						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	384	16.0	06/12/2012	ND	416	104	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	06/12/2012	ND	176	88.0	200	4.28	
DRO >C10-C28	3570	50.0	06/12/2012	ND	172	86.2	200	7.49	
Surrogate: 1-Chlorooctane	95.0	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	178	% 63.6-15	4						

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\*=Accredited Analyte

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Celey D. Keine



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

Received:

06/08/2012

Reported:

06/14/2012

Project Name: Project Number: UNCLE SAM 13 FED. NO. 1

700794.029.01 SEC.13 - T19S - R32E

Project Location:

Sampling Date:

06/08/2012

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S-1 2' (H201298-03)

BTEX 8021B	mg/	'kg	Analyze	d By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/14/2012	ND	1.91	95.5	2.00	2.76	
Toluene*	0.072	0.050	06/14/2012	ND	1.93	96.3	2.00	3.98	
Ethylbenzene*	<0.050	0.050	06/14/2012	ND	1.97	98.4	2.00	4.72	
Total Xylenes*	<0.150	0.150	06/14/2012	ND	5.99	99.8	6.00	6.57	
Surrogate: 4-Bromofluorobenzene (PIL	102	% 89.4-12	6						
Chloride, SM4500CI-B	mg/	'kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	06/12/2012	ND	416	104	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<100	100	06/12/2012	ND	176	88.0	200	4.28	
DRO >C10-C28	5000	100	06/12/2012	ND	172	86.2	200	7.49	
Surrogate: 1-Chlorooctane	86.4	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	242	% 63.6-15	4						

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\*=Accredited Analyte

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Celey D. Keene



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

Received:

06/08/2012

Reported:

06/14/2012

UNCLE SAM 13 FED. NO. 1

Project Name:

700794.029.01

Project Number: Project Location:

SEC.13 - T19S - R32E

Sampling Date:

06/08/2012

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: S-1 3' (H201298-04)

BTEX 8021B	mg	/kg	Analyze	d By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	06/14/2012	ND	1.91	95.5	2.00	2.76	
Toluene*	< 0.050	0.050	06/14/2012	ND	1.93	96.3	2.00	3.98	
Ethylbenzene*	< 0.050	0.050	06/14/2012	ND	1.97	98.4	2.00	4.72	
Total Xylenes*	< 0.150	0.150	06/14/2012	ND	5.99	99.8	6.00	6.57	

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	06/12/2012	ND	416	104	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/12/2012	ND	176	88.0	200	4.28	
DRO >C10-C28	16.0	10.0	06/12/2012	ND	172	86.2	200	7.49	

Surrogate: 1-Chlorooctane 91.5% 65.2-140 Surrogate: 1-Chlorooctadecane 111 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keena

Celey D. Keene, Lab Director/Quality Manager



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

Fax To: (575) 745-8905

Received:

06/08/2012

Sampling Date:

06/08/2012

Reported:

06/14/2012

Sampling Type:

Soil

Project Name:

UNCLE SAM 13 FED. NO. 1

Sampling Condition:

Cool & Intact

Project Number:

700794.029.01

Project Location:

SEC.13 - T19S - R32E

Sample Received By:

Jodi Henson

#### Sample ID: S-1 4' (H201298-05)

BTEX 8021B	mg/	kg	Analyze	d By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/14/2012	ND	1.91	95.5	2.00	2.76	
Toluene*	<0.050	0.050	06/14/2012	ND	1.93	96.3	2.00	3.98	
Ethylbenzene*	<0.050	0.050	06/14/2012	ND	1.97	98.4	2.00	4.72	
Total Xylenes*	<0.150 0.150		06/14/2012	ND	5.99	99.8	6.00	6.57	
urrogate: 4-Bromofluorobenzene (PIE 104 %		% 89.4-12	6						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	06/12/2012	ND	416	104	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/12/2012	ND	176	88.0	200	4.28	
DRO >C10-C28	76.7	10.0	06/12/2012	ND	172	86.2	200	7.49	
Surrogate: 1-Chlorooctane	93.5	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	112 5	% 63.6-15	4						

#### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's lability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed walved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celegy D. Kreene



#### 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.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene



#### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Taton / CPE							BILL TO							-		VIII	-	ANA	LYS	S R	EQU	EST				
Project Manage	mike stubblefield						P.O.	#:						T			-				T	T	T			
Address:	408 West TEXAS Ave						Con	npany	: Ta	Lonk	PE															
City:	Arteria State: NM	Zip	: 00	710	0		Attn																		-	
Phone #:	575-441.7254 Fax#:						Add	ress:				-											1			
Project #:	700794.079.01 Project Owner	r: D	coon	Enc	toy	Torp	City	:										1					-			
Project Name:	uncle Sam 13 Fcd. No. 1				//		Stat	e:	Z	ip:											1	1	1			
Project Location	1: 500. 13 - T.95-P.32E					- 1	Pho	ne #:										1						1		- 1
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FOR LAS USE ONLY		0.	-	Г	MATR	IX.	- 1	PRESE	RV.	SAMP	LINC	3	107		BTEX	1.00		1								- 1
Lab I.D. H201298	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	WASTEWATER	SOIL	SLUDGE	OTHER:	ACID/BASE.	OTHER:	DATE	-	TIME	4700		8021B B	Total citorides										
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PLEASE NOTE: Liability an	d Damages, Cardinal's Sublity and client's exclusive remedy for	any slain	n erising	whethe	r based in a	contract o	r tort, s	shall be lin	niled to 1	tre amounts	paid by	the client for	the					_		_						
service. In no event shall Co	ng those for negligence and my other course whatspever shall be premained be liable for incidental or consequental damages, including as out of or related to the performance of services hereunder by	g withou	t limitatio	a, busin	ress interru	ptions, for	ss of u	se, or loss	of profit	is incurred b	y clien	t its subsidia	ries.	rable												
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M' Jag (S) Relinquished By	Date:	Re	ceive	d By	1:	97		100		/	=															
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