

September 4, 2013

RECEIVED SEP **05** 2013 N'MOCD ARTESIA

**AMARILIO** 921 North Bivins Amarillo, Texas 79107 Phone 806.467.0607

Fax 806.467.0622

408 West Texas Ave. Artesia, New Mexico 88210

> Phone 575.746.8768 Fax 575.746.8905

ARTESIA

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

Subject:

Soil Assessment and Remediation Work Plan

Oxy Permian

SDS 11 Federal 1 SWD Battery API#30-015-27627 2RP-1704

Dear Mr. Bratcher,

HOBBS 318 East Taylor Street

Hobbs, New Mexico 88240 Phone 575.393.4261 Fax 575.393.4658 Oxy Permian has contracted Talon/LPE (Talon) to perform soil assessment and remediation services for the SDS 11 Federal 1 SWD release. Talon's site assessment, soil sampling results and proposed work plan to perform remediation activities consist of the following:

**MIDLAND** 

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

**Incident Date** 

May 13, 2013

#### **Background Information**

OKLAHOMA CITY 7700 North Hudson Avenue Suite 10 Oklahoma City, Oklahoma 73II6 Phone 405.486.7030 Fax 806.467.0622

The SDS 11 Federal 1 SWD Battery is located approximately forty (40) miles southeast of Carlsbad, New Mexico. The legal location for the site is Section 11, Township 24 South and Range 31 East in Eddy County, New Mexico. More specifically, the latitude and longitude for the release are 32.23339 North and -103.750704 West.

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

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 Berino complex with 0 to 3 percent slopes, eroded. Per the New Mexico Bureau of Geology and Mineral Resources, the local surface and shallow geology, Quaternary Age sedimentary deposits, is comprised of alluvium and eolian sands which includes fine sandy loam under lain by sandy clay loam and hard caliches. Drainage courses in this area are normally dry. The New Mexico State Engineer web site indicates the nearest ground water data to be in S2-T24S-R31E. The ground water in Section 2 is reported to be at depth of 205' 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:

**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

#### **Incident Description**

On May 13, 2013 the triplex transfer pump line was found to be leaking causing a release of 20 barrels of produced water. No fluids were recovered. The triplex transfer pump was subsequently replaced. The fluid from this release flowed north and west across the location. It then ran off of the northern side of the location and flowed into the pasture measuring approximately 280-feet long.

#### **Sampling Activities**

On May 17, 2013 Talon mobilized personnel to obtain soil samples for the construction of a work plan. Grab soil samples were collected utilizing a hand auger from the surface of the impacted areas to a depth of 3-feet deep. A site plan illustrating the sample locations is attached.

On July 9, 2013 Talon returned to the site to collect deeper vertical delineation samples with a backhoe and again on August 8, 2013 Talon personnel returned to the site to collect additional soil samples using a drill rig. Grab samples were collected from a depth of 12-70 feet below land surface.

The soil samples were collected by Talon personnel wearing clean nitrile gloves. The samples were placed into 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, volatile organics (BTEX) using EPA Method 8021B and chlorides were analyzed per method SM4500Cl-B. The complete laboratory reports are attached as Appendix II.

#### **Analytical Results**

Analytical results received from Cardinal Laboratories are summarized below:

Date of Lab Report: May 24, 2013

Sample	<u>Depth</u>	<u>BTEX</u>	Chlorides	TPH (mg/kg)
S-1	0'	1.22	45600	1520
	1'	<0.300	2380	<10
	2'	<0.300	432	<10
S-2	0'	<0.300	21600	763
	1'	<0.300	18800	<10
	2'	<0.300	304	<10

Date of Lab Report: May 24, 2013, cont.

Sample	<u>Depth</u>	<u>BTEX</u>	<u>Chlorides</u>	TPH (mg/kg)
S-3	0' 1'	<0.300 <0.300	20400 12000	216 17
	2' 3'	<0.300	11200 12400	<10 
S-4	0' 1'	<0.300 <0.300	29200 5120	<10 <10
	2'	< 0.300	2720	<10
Analyta N	3' Jot Tostad		3680	

-- Analyte Not Tested

#### Date of Lab Report: July 15, 2013

Sample	<u>Depth</u>	<u>BTEX</u>	Chlorides	TPH (mg/kg)
S-1	12'		2560	
S-2	10'		10100	
S-3	4'		2960	
S-4	4'		1580	

#### Date of Lab Report: August 14, 2013

Sample	<u>Depth</u>	<u>BTEX</u>	Chlorides	TPH (mg/kg)
S-2	30' 40' 50' 60' 70'	   	1540 864 3480 576 464	   

<sup>--</sup> 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 5,000 mg/kg. The chloride cleanup levels are considered to be 1,000 mg/kg.

#### **Actions Taken**

On August 28, 2013 Talon personnel met with NMOCD Environmental Specialist Mike Bratcher to review the previous environmental remediation at this location which included the installation of a liner.

#### **Proposed Remedial Actions**

- The impacted area from this release will be excavated to a depth of 1.5-feet below land surface on and off the location. The excavated soil will be transported to a NMOCD approved solid waste disposal facility.
- The pre-existing liner (in the vicinity of S-2) will be repaired with a welded 20 mil liner patch and felt padding.
- The excavated area on location will be backfilled to grade using new caliche backhauled from a local borrow pit and the location will be reconstructed.
- A clay liner will be installed in the excavated flow path off the location over the historic pit area. The work area will be backfilled with clean sandy top soil and contoured to match the surrounding terrain.
- The area excavated off location will be seeded with the recommended BLM seed mixture for the area.
- A final closure report documenting all remedial actions and analytical results will be provided to Oxy, the NMOCD Artesia Office and the BLM along with a Final C-141 form.

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

Respectfully submitted,

TALON/LPE

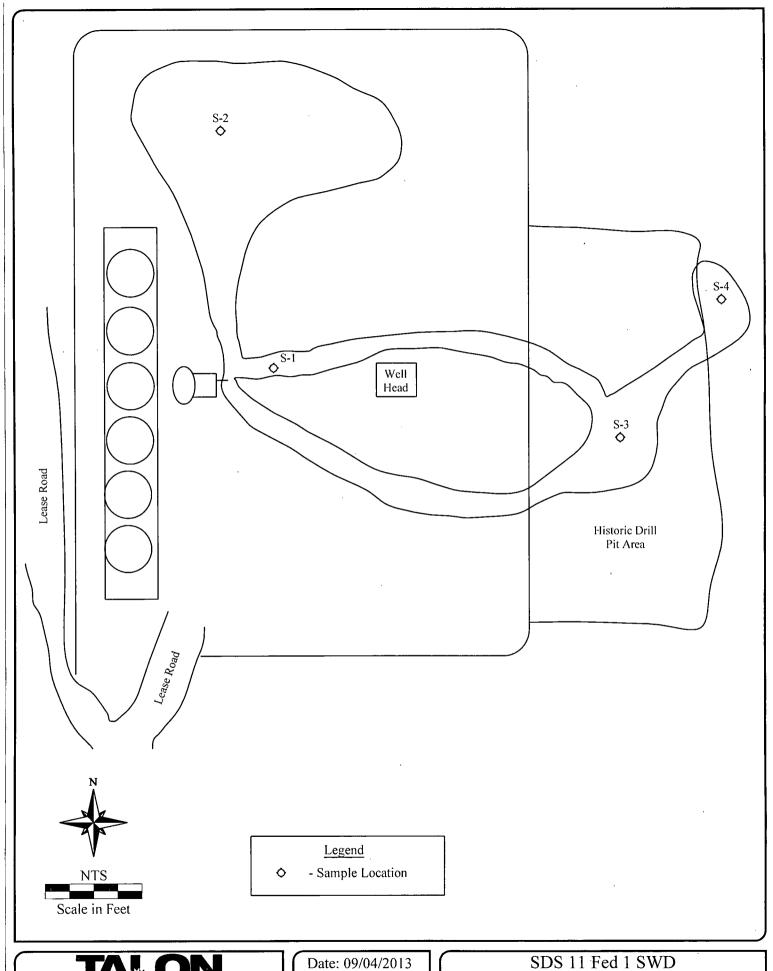
Himbury M. Wilson
Kimberly M. Wilson

Project Manager

David J. Adkins

District Manager

#### SITE MAP





Scale: NTS

Drawn By: TJS

Oxy USA, Inc Eddy County, 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)

		Sub-		$\overline{\mathbf{Q}}$	$\widehat{\mathbf{Q}}$	$\overline{\mathbf{Q}}$									Water
POD Number C 02460	Code	basin C	County ED	64	16	4	<b>Sec</b> 02	Tws 24S	Rng 31E	[ <u>X</u> 617496	₹ 3568022*	DistanceDep 1279	thWellDer 320		
C 02460 POD2		С	ED			3	02	24S	31E	617496	3568022*	1279	320		
<u>C 02464</u>		C	ED	3	4	1	02	24S	31E	617589	3568530*	1747	320	205	115
<u>C 02440</u>		С	ED		2	3	10	24S	31E	616103	3566599*	1826	350		
<u>C 02405</u>		C	ED		4	1	02	24S	31E	617690	3568631*	1831	275	160	115

Average Depth to Water: 182 feet Minimum Depth: 160 feet Maximum Depth: 205 feet

Record Count: 5

UTMNAD83 Radius Search (in meters):

Easting (X): 617917

Northing (Y): 3566814

Radius: 2000

\*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.

6/20/13 10:40 AM

WATER COLUMN/ A VERAGE DEPTH TO

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

#### State of New Mexico Energy Minerals and Natural Resources

Form C-141
Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

7.1/	n and Corrective Action	
N)MW1318437317	OPERATOR Initial Rep	ort Final Report
Name of Company Oxy Permian 16696	Contact C.J. Summers	
Address 102 S. Main St. Carlsbad, NM 88220	Telephone No. 575-397-8216	
Facility Name SDS 11 Federal 1 SWD Battery	Facility Type SWD	<u> </u>
Surface Owner BLM Mineral Owner	BLM API No. 30-0	15-27627
	N OF RELEASE	
1 (	h/South Line   Feet from the   East/West Line   Cour	•
F 11 24S 31E 2090 North	h 1980 West Eddy	
Latitude_32.23339	Longitude103.75070	
NATURE	E OF RELEASE	
Type of Release Produced Water	Volume of Release 20 bbls Volume Recove	red 0 bbls
Source of Release Transfer Pump	Date and Hour of Occurrence Date and Hour of	of Discovery
	May 13, 2013 Time: Unknown May 13, 2013 T	ime: Unknown
Was Immediate Notice Given?  ☐ Yes ☐ No ☐ Not Required	If YES, To Whom?  Jim Amos of the BLM and Mike Bratcher of NMOCI	`
		,
By Whom? C.J. Summers Was a Watercourse Reached?	Date and Hour 5/15/2013 @ 1:38 pm	
Yes ⊠ No	If YES, Volume Impacting the Watercourse.	
	L RECE	IVED
If a Watercourse was Impacted, Describe Fully.*		
	JUN 2	<b>6</b> 2013
·	NMOCD A	ARTESIA
Describe Cause of Problem and Remedial Action Taken.*	1	
The release was due to a leak on the triplex transfer pump line. Initial rer initial site assessment and soil sampling. Upon receipt of analytical resul	neural actions will be conducted by Oxy. Taloniere was	contracted to perform an
activities will begin upon its approval.	to the son sampling activities a work plan will be of	area and remediar
Describe Area Affected and Cleanup Action Taken.*	***************************************	
The fluid from this release flowed north and west across the location. Th	e fluid ran off of the Northern side of the location and flo	wed into the pasture for
approximately 280-feet. Talon/LPE collected soil samples on the locatio		,
	•	
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 v	vhich may endanger
public health or the environment. The acceptance of a C-141 report by the should their operations have failed to adequately investigate and remedia	he NMOCD marked as "Final Report" does not relieve the	e operator of liability
or the environment. In addition, NMOCD acceptance of a C-141 report	does not relieve the operator of responsibility for compliant	nce water, numan nearm
federal, state, or local laws and/or regulations.		
	OIL CONSERVATION DIV	ISION
Signature:		
Signature.	American Inc. Production and Co. 111	
Printed Name: C.J. Summers	Approved by Environmental Specialist: Signed By	14 DRARMER
	JUI 0 3 2013	
Title: HES Advisor	Approval Date: Expiration Date:	
E-mail Address: Chancey_Summers@oxy.com	Conditions of Approval:	
E-man Address: Chancey Summers Woxy (COM)		ached 🔲
Date: 6-70-13 Phone: 575-397-8216	Remediation per OCD Rule & Guidelines, &	
Attach Additional Sheets If Necessary	like approval by BLM. SUBMIT REMEDIATION 7	RP-1711
	PROPOSAL NO LATER THAN:	1107
•	CIOY, O TOURING	

# APPENDIX II LABORATORY RESULTS



May 24, 2013

DAVID ADKINS

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: SDS 11 FED #1 SWD

Enclosed are the results of analyses for samples received by the laboratory on 05/21/13 8:00.

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> accred 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. Keens

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 DAVID ADKINS 408 W. TEXAS AVE. ARTESIA NM, 88210

Fax To:

(575) 745-8905

Received:

05/21/2013

Sampling Date:

05/17/2013

Reported:

05/24/2013

Sampling Type:

Soil

Project Name:

SDS 11 FED #1 SWD

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Daniel Wade

Project Location:

S11- T24S - R31E

Sample ID: S-1 0' (H301207-01)

BTEX 8021B	mg/	kg	Analyze	d By: AP					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/23/2013	ND	2.29	114	2.00	2.88	
Toluene*	0.255	0.050	05/23/2013	ND	2.08	104	2.00	1.96	
Ethylbenzene*	0.169	0.050	05/23/2013	ND	2.32	116	2.00	2.27	
Total Xylenes*	0.792	0.150	05/23/2013	ND	6.70	112	6.00	2.65	
Total BTEX	1.22	0.300	05/23/2013	ND					
Surrogate: 4-Bromofluorobenzene (PIL	160 5	% 89.4-12	6				-9-25-		
Chloride, SM4500CI-B	mg/	'kg	Analyze	d By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	45600	16.0	05/22/2013	ND	448	112	400	3.64	
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	<50.0	50.0	05/22/2013	ND	206	103	200	4.75	
DRO >C10-C28	1520	50.0	05/22/2013	ND	200	100	200	6.06	
Surrogate: 1-Chlorooctane	110	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	152	% 63.6-15	4						

Cardinal Laboratories

\*=Accredited Analyte

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Celing D. Keine



TALON LPE DAVID ADKINS 408 W. TEXAS AVE. ARTESIA NM, 88210

Fax To:

(575) 745-8905

Received:

05/21/2013

05/24/2013

Reported: Project Name:

SDS 11 FED #1 SWD

Project Number:

NONE GIVEN

Project Location:

S11-T24S - R31E

Sampling Date:

05/17/2013

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Daniel Wade

#### Sample ID: S-1 1' (H301207-02)

BTEX 8021B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/23/2013	ND	2.29	114	2.00	2.88	
Toluene*	<0.050	0.050	05/23/2013	ND	2.08	104	2.00	1.96	
Ethylbenzene*	<0.050	0.050	05/23/2013	ND	2.32	116	2.00	2.27	
Total Xylenes*	<0.150	0.150	05/23/2013	ND	6.70	112	6.00	2.65	
Total BTEX	<0.300	0.300	05/23/2013	ND					
Surrogate: 4-Bromofluorobenzene (PIL	118 %	6 89.4-12	6						<del></del>
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2380	16.0	05/22/2013	ND	448	112	400	3.64	
TPH 8015M	mg/	kg	Analyze	d By: MS		<del></del>	<del></del>		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/22/2013	ND	206	103	200	4.75	
DRO >C10-C28	<10.0	10.0	05/22/2013	ND	200	100	200	6.06	
Surrogate: 1-Chlorooctane	106 9	65.2-14	0						
Surrogate: 1-Chlorooctadecane	115 9	63.6-15	14						

#### Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keine



TALON LPE DAVID ADKINS 408 W. TEXAS AVE. ARTESIA NM, 88210

Fax To:

(575) 745-8905

Received: Reported: 05/21/2013

05/24/2013

Project Name: Project Number: SDS 11 FED #1 SWD NONE GIVEN

Project Location:

S11- T24S - R31E

Sampling Date:

05/17/2013

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Daniel Wade

Sample ID: S-1 2' (H301207-03)

BTEX 8021B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/23/2013	ND	2.29	114	2.00	2.88	
Toluene*	<0.050	0.050	05/23/2013	ND	2.08	104	2.00	1.96	
Ethylbenzene*	<0.050	0.050	05/23/2013	ND	2.32	116	2,00	2.27	
Total Xylenes*	<0.150	0.150	05/23/2013	ND	6.70	112	6.00	2.65	
Total BTEX	<0.300	0.300	05/23/2013	ND					
Surrogate: 4-Bromofluorobenzene (PIL	117 9	6 89.4-12	6						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	432	16.0	05/22/2013	ND	448	112	400	3.64	
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	05/22/2013	ND	206	103	200	4.75	
DRO >C10-C28	<10.0	10.0	05/22/2013	ND	200	100	200	6.06	
Surrogate: 1-Chlorooctane	106	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	114	63.6-15	4						

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\*=Accredited Analyte

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Celey & Keine



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

Received: Reported:

05/21/2013

05/24/2013

Project Name:

SDS 11 FED #1 SWD

Project Number: Project Location:

NONE GIVEN S11- T24S - R31E Sampling Date:

05/17/2013

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Daniel Wade

#### Sample ID: S-2 0' (H301207-04)

BTEX 8021B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/24/2013	ND	2.29	114	2.00	2.88	
Toluene*	0.057	0.050	05/24/2013	ND	2.08	104	2.00	1.96	
Ethylbenzene*	< 0.050	0.050	05/24/2013	ND	2.32	116	2.00	2.27	
Total Xylenes*	< 0.150	0.150	05/24/2013	ND	6.70	112	6.00	2.65	
Total BTEX	<0.300	0.300	05/24/2013	ND					
Surrogate: 4-Bromofluorobenzene (PIL	113 %	6 89.4-12	6	-					
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	21600	16.0	05/22/2013	ND	448	112	400	3.64	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	B\$	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/22/2013	ND	206	103	200	4.75	
DRO >C10-C28	763	10.0	05/22/2013	ND	200	100	200	6.06	
Surrogate: 1-Chlorooctane	109 9	65.2-14	0			Urus.			
Surrogate: 1-Chlorooctadecane	132 %	63.6-15	4						

#### Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keine



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

Received: Reported: 05/21/2013

05/24/2013

Project Name: Project Number:

SDS 11 FED #1 SWD NONE GIVEN

Project Location:

S11- T245 - R31E

Sampling Date:

05/17/2013

Sampling Type:

Soil

Sampling Condition: -

Cool & Intact

Sample Received By:

Daniel Wade

#### Sample ID: \$-2 1' (H301207-05)

BTEX 8021B	mg/	kg	Analyze	d By: AP					
. Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/23/2013	ND	2.29	114	2.00	2.88	
Toluene*	<0.050	0.050	05/23/2013	ND	2.08	104	2.00	1.96	
Ethylbenzene*	<0.050	0.050	05/23/2013	ND	2.32	116	2.00	2.27	
Total Xylenes*	<0.150	0.150	05/23/2013	ND	6.70	112	6.00	2.65	
Total BTEX	<0.300	0.300	05/23/2013	ND					
Surrogate: 4-Bromofluorobenzene (PIL	1169	6 89.4-12	6					-	
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	18800	16.0	05/22/2013	ND	448	112	400	3.64	
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	05/22/2013	ND	206	103	200	4.75	
DRO >C10-C28	<10.0	10.0	05/22/2013	ND	200	100	200	6.06	
Surrogate: 1-Chlorooctane	108 9	% 65.2-14	10	·					
Surrogate: 1-Chlorooctadecane	113 9	63.6-15	14						

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Celing D. Keine



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

Received:

05/21/2013

Reported:

05/24/2013

Project Name:

SDS 11 FED #1 SWD

Project Number: Project Location:

NONE GIVEN S11- T24S - R31E Sampling Date:

05/17/2013

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Daniel Wade

Sample ID: S-2 2' (H301207-06)

BTEX 8021B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/23/2013	ND	2.29	114	2.00	2.88	
Toluene*	<0.050	0.050	05/23/2013	ND	2.08	104	2.00	1.96	
Ethylbenzene*	<0.050	0.050	05/23/2013	ND	2.32	116	2.00	2.27	
Total Xylenes*	<0.150	0.150	05/23/2013	ND	6.70	112	6.00	2.65	
Total BTEX	<0.300	0.300	05/23/2013	ND					
Surrogate: 4-Bromofluorobenzene (PIL	115 9	% 89.4-12	6						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	304	16.0	05/22/2013	ND	448	112	400	3.64	
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	05/22/2013	ND	206	103	200	4.75	
DRO >C10-C28	<10.0	10.0	05/22/2013	ND	200	100	200	6.06	
Surrogate: 1-Chlorooctane	110 5	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	119 9	% 63.6-15	4						

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Fax To:

(575) 745-8905

Received:

05/21/2013

05/24/2013

Reported: Project Name:

SDS 11 FED #1 SWD

Project Number:

NONE GIVEN

Project Location:

S11- T24S - R31E

Sampling Date:

05/17/2013

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Daniel Wade

#### Sample ID: S-3 0' (H301207-07)

BTEX 8021B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/23/2013	ND	2.29	114	2.00	2.88	
Toluene*	<0.050	0.050	05/23/2013	ND	2.08	104	2.00	1.96	
Ethylbenzene*	<0.050	0.050	05/23/2013	ND	2.32	116	2.00	2.27	
Total Xylenes*	< 0.150	0.150	05/23/2013	ND	6.70	112	6.00	2.65	
Total BTEX	<0.300	0.300	05/23/2013	ND					
Surrogate: 4-Bromofluorobenzene (PIL	120 %	6 89.4-12	6						-
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: DW		<del></del>			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	20400	16.0	05/22/2013	ND	448	112	400	3.64	
TPH 8015M	mg/	kg	Analyze	d By: MS			·	<del></del>	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/22/2013	ND	206	103	200	4.75	
DRO >C10-C28	216	10.0	05/22/2013	ND	200	100	200	6.06	
Surrogate: 1-Chlorooctane	112 9	65.2-14	10		·				
Surrogate: 1-Chlorooctadecane	118 9	63.6-15	4						

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Fax To:

(575) 745-8905

Received:

05/21/2013

Sampling Date:

05/17/2013

Reported:

05/24/2013

Sampling Type:

Soil

Project Name:

SDS 11 FED #1 SWD

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Daniel Wade

Project Location:

S11- T24S - R31E

Sample ID: S-3 1' (H301207-08)

BTEX 8021B	mg/	kg	Analyze	d By: AP					
, Analyte	Result	Reporting Limit	Analyzed	Method Blánk	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/23/2013	ND	2.29	114	2.00	2.88	
Toluene*	<0.050	0.050	05/23/2013	ND	2.08	104	2.00	1.96	
Ethylbenzene*	<0.050	0.050	05/23/2013	ND	2.32	116	2.00	2,27	
Total Xylenes*	<0.150	0.150	05/23/2013	ND	6.70	112	6.00	2.65	
Total BTEX	<0.300	0.300	05/23/2013	ND					
Surrogate: 4-Bromofluorobenzene (PIL	115 9	% 89.4-12	6						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	12000	16.0	05/22/2013	ND	448	112	400	3.64	
TPH 8015M	mg/	'kg	Analyze	ed By: MS					····
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/22/2013	ND	206	103	200	4.75	
DRO >C10-C28	17.0	10.0	05/22/2013	ND	200	100	200	6.06	
Surrogate: 1-Chlorooctane	112 9	% 65.2-14	70						
Surrogate: 1-Chlorooctadecane	120 5	% 63.6-15	4						

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Fax To:

(575) 745-8905

Received:

05/21/2013

Sampling Date:

05/17/2013

Reported:

05/24/2013

Sampling Type:

Soil

Project Name:

SDS 11 FED #1 SWD

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Daniel Wade

Project Location:

S11- T245 - R31E

#### Sample ID: S-3 2' (H301207-09)

BTEX 8021B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/23/2013	ND	2.29	114	2.00	2.88	
Toluene*	<0.050	0.050	05/23/2013	ND	2.08	104	2.00	1.96	
Ethylbenzene*	<0.050	0.050	05/23/2013	ND	2.32	116	2.00	2.27	
Total Xylenes*	<0.150	0.150	05/23/2013	ND	6.70	112	6.00	2.65	
Total BTEX	<0.300	0.300	05/23/2013	ND					
Surrogate: 4-Bromofluorobenzene (PIL	116 9	% 89.4-12	6						*
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	11200	16.0	05/22/2013	ND	448	112	400	3.64	
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	05/22/2013	ND	206	103	200	4.75	
DRO >C10-C28	<10.0	10.0	05/22/2013	ND	200	100	200	6.06	
Surrogate: 1-Chlorooctane	113 9	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	121 9	% 63.6-15	4						

#### Sample ID: S-3 3' (H301207-10)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	12400	16.0	05/22/2013	ND	448	112	400	3.64	

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Fax To:

(575) 745-8905

Received:

05/21/2013

05/17/2013

Reported:

05/24/2013

Sampling Date: Sampling Type:

Soil

Project Name:

SDS 11 FED #1 SWD

Sampling Condition:

Cool & Intact

Project Number: Project Location:

NONE GIVEN S11- T24S - R31E Sample Received By:

Daniel Wade

#### Sample ID: S-4 0' (H301207-11)

BTEX 8021B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/23/2013	ND	2.29	114	2.00	2.88	
Toluene*	<0.050	0.050	05/23/2013	ND	2.08	104	2.00	1.96	
Ethylbenzene*	<0.050	0.050	05/23/2013	ND	2.32	116	2.00	2.27	
Total Xylenes*	<0.150	0.150	05/23/2013	ND	6.70	112	6.00	2.65	
Total BTEX	<0.300	0.300	05/23/2013	ND					
Surrogate: 4-Bromofluorobenzene (PIL	117 9	6 89.4-12	б						,
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	29200	16.0	05/22/2013	ND	432	108	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	05/22/2013	ND	206	103	200	4.75	
DRO >C10-C28	<10.0	10.0	05/22/2013	ND	200	100	200	6.06	
Surrogate: 1-Chlorooctane	105 9	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	115 9	63.6-15	4						

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

Received: Reported:

05/21/2013

05/24/2013

Project Name:

SDS 11 FED #1 SWD

Project Number: Project Location:

NONE GIVEN S11- T24S - R31E Sampling Date:

05/17/2013

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Daniel Wade

#### Sample ID: S-4 1' (H301207-12)

BTEX 8021B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/23/2013	ND	2.29	114	2.00	2.88	
Toluene*	<0.050	0.050	05/23/2013	ND	2.08	104	2.00	1.96	
Ethylbenzene*	<0.050	0.050	05/23/2013	ND	2.32	116	2.00	2.27	
Total Xylenes*	< 0.150	0.150	05/23/2013	ND	6.70	112	6.00	2.65	
Total BTEX	<0.300	0.300	05/23/2013	ND				•	
Surrogate: 4-Bromofluorobenzene (PIL	118 9	% 89.4-12	6						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: DW					25.
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5120	16.0	05/22/2013	ND	432	108	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	05/22/2013	ND	206	103	200	4.75	
DRO >C10-C28	<10.0	10.0	05/22/2013	ND	200	100	200	6.06	
Surrogate: 1-Chlorooctane	114 9	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	122 9	% 63.6-15	4						

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Fax To:

(575) 745-8905

Received:

05/21/2013

Reported:

05/24/2013

Project Name:

SDS 11 FED #1 SWD

Project Number:

NONE GIVEN

Project Location:

S11- T24S - R31E

Sampling Date:

05/17/2013

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Daniel Wade

#### Sample ID: S-4 2' (H301207-13)

BTEX 8021B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/23/2013	ND	2.29	114	2.00	2,88	
Toluene*	<0.050	0.050	05/23/2013	ND	2.08	104	2.00	1.96	
Ethylbenzene*	<0.050	0.050	05/23/2013	ND	2.32	116	2.00	2.27	
Total Xylenes*	<0.150	0.150	05/23/2013	ND	6.70	112	6.00	2.65	
Total BTEX	<0.300	0.300	05/23/2013	ND					
Surrogate: 4-Bromofluorobenzene (PIL	118 9	6 89.4-12	6						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2720	16.0	05/22/2013	ND	432	108	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	05/22/2013	ND	206	103	200	4.75	
DRO >C10-C28	<10.0	10.0	05/22/2013	ND	200	100	200	6.06	
Surrogate: 1-Chlorooctane	103 9	65.2-14	0			*** <u>*</u>			<del></del>
Surrogate: 1-Chlorooctadecane	109 9	63.6-15	4						

#### Sample ID: S-4 3' (H301207-14)

Chloride, SM4500CI-B	mg/	'kg	Analyze	d By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3680	16.0	05/22/2013	ND	432	108	400	0.00	

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Celey D. Kuna



#### **Notes and Definitions**

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  $6^{\circ}\text{C}$ 

Samples reported on an as received basis (wet) unless otherwise noted on report

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

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

(575) 393-2326 FAX (575) 393-2476					
Company Name: Tglon/LPE	BILL TO	ANALYSIS REQUEST			
Project Manager: D. Adrins	P.O. #:				
Address: 408 W. Texa 5 Ave.	Company: Talon/LPE				
City: Artesia State: NM Zip: 88210	Attn:				
Phone #: 575-746-8768 Fax #: 575-746-8905	Address:				
Project #: Project Owner: OXY	City:				
Project Name: 555 11 Fed 1 SWD	State: Zip:				
Project Location: 511 - T245 - R31E	Phone #:				
Sampler Name: Sheldon HITCh COCK	Fax #:	1   2			
FOR LAB USE ONLY MATRIX	PRESERV. SAMPLING				
(C)OMP.					
Lab I.D. Sample I.D.	اينا	PH TEX hlorid			
	R R R R R R R R R R R R R R R R R R R	3			
H 30120.  (G)RAB OR (C)ON WASTEWATER SOIL. SOIL.	SLUDGE OTHER: ACIDIBASE ICE / COOL OTHER: ACIDIBASE				
1 4-1 0'	5-17-13 1:40				
24-11	1:45				
34-12	11:47				
4 5-20'	1:50				
56-21	1:52				
65-22	1:55				
7 5-3 0'	21,02				
8 5-3 1	1 2:04				
9 5-3 2' 10 5-3 3'	2:07				
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analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profils incurred by client, its subsidiaries.					
affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whother such Relinquished By:    Relinquished By:   Regelyed By:	Phone Res				
5/21/13	Fax Result				

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<sup>†</sup> Cardinal cannot accept verbal changes. Please fax written changes to 505



#### <u>CHAIN-OF-CUSTODY AND ANALYSIS REQUEST</u>

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

(575) 393-2326 FAX (575) 393-2476		
Company Name: Tqlon/LPE	BILL TO	ANALYSIS REQUEST
Company Name: Tglon/LPE Project Manager: D. AdkinS	P.O. #:	
Address: 408 W. Texas Ave.  City: Artesia State: NM Zip: 88210  Phone #: 575-746-8768 Fax #: 575-746-8906	Company: Talon/LPE	
City: Artesia State: NM Zip: 88210	Atin:	
Phone #: 575-746-8768 Fax #: 575-746-8905	Address:	
Project #: Project Owner: OXY	City:	
Project Name: 5D5 11. Ftd 1 5 LD	State: Zip:	
Project Location: 411 -T 245 - R 3 E	Phone #:	
Sampler Name: Sheldon HitchCOCK	Fax #:	
FOR LAB USE ONLY MATRIX	PRESERV. SAMPLING	
(C)OMP BERS ATER TER		
VATTER (C)		
Lab I.D. Sample I.D.	BASE: SOOL R:	1 ( 4
G)RAB OR (C)ON #CONTAINERS GROUNDWATER SOIL OIL SLUDGE	OTHER: ACIDIBASE: OTHER: ACIDIBASE: OTHER: BMIL BAD ACIDIBASE: ACI	1 2 7 1 1 1 1 1 1 1
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12 4-4 1	9-17-13 2 1 JU	
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14 6 9 3	5-17-13 2:18	
PLEASE NOTE: Liability and Oamages. Cardinal's liability and client's accidance remedy for any claim arising whether based in contract analyses. All claims including those for negligence and any other cause whatsoever shell be deemed waived unless made in writing and	received by Cardinal within 30 days after completion of the appli	icable
service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim		· · · · · · · · · · · · · · · · · · ·
Relinquished By:    Date:   Received By:	Phone Result:	☐ Yes ☐ No Add'l Phone #: ☐ Yes ☐ No Add'l Fax #:
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Sample Condition of the Cool Macch	on CHECKED BY:	
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† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476



July 15, 2013

DAVID ADKINS

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: SDS 11 FED #1 SWD

Enclosed are the results of analyses for samples received by the laboratory on 07/12/13 14:50.

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.qoy/field/ga/lab\_accred\_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.

Celey D. Keine

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 DAVID ADKINS 408 W. TEXAS AVE. ARTESIA NM, 88210

Fax To:

(575) 745-8905

Received: Reported: 07/12/2013

07/15/2013

Project Name:

SDS 11 FED #1 SWD

Project Number:

700608.201.01

Project Location:

S11- T24S - R31E

Sampling Date:

07/09/2013

Sampling Type:

Soil

Sampling Condition:

\*\* (See Notes)

Sample Received By:

Jodi Henson

Sample ID: S-1 12' (H301642-01)

Chlorida	SM4500CI-I
Chioriae,	- 3M43UUCI-I

#### mg/kg

#### Analyzed By: AP

Chloride

Chloride

Chloride

Result

2560

Result

10100

Reporting Limit

Analyzed 07/15/2013 Method Blank ND

BS 400

BS

400

% Recovery 100

True Value QC 400

RPD 0.00 Qualifier

Sample ID: S-2 10' (H301642-02)

Chloride,	SM4500CI-B
-----------	------------

#### mg/kg

16.0

Reporting Limit

16.0

Reporting Limit

16.0

#### Analyzed By: AP

Analyzed Method Blank

% Recovery

100

True Value QC RPD

Qualifier

#### Sample ID: S-3 4' (H301642-03)

Chloride,	SM4500CI-B	

Analyte

mg/kg

Analyzed By: AP

Analyte

Result Reporting Limit 2960 16.0

Analyzed 07/15/2013

07/15/2013

Method Blank ND

ND

BS 400 % Recovery 100

True Value QC 400

400

RPD 0.00

0.00

Qualifier

Sample ID: S-4 4' (H301642-04)

#### Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Analyte Result Chloride 1580

Analyzed 07/15/2013 Method Blank ND

BS 400 % Recovery 100

True Value QC 400

RPD 0.00 Qualifier

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keine



ND

#### **Notes and Definitions**

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. Keena

# CARDINAL Laboratories

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

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

Company Name: Tglon/LPE Project Manager: D. Adling					BILLTO						i				ANA	LYSI	S RE	QUE	ST								
Project Manager: D. Adring						P.O. #:										[			[								
Address: 408 W. Texa 5 Ave.							Company: Talon/LPE				] i						ŀ										
					Attn:													}									
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Project Name:		Fed			<i>'</i>			·	State: Zip:								1										
Project Location									Phone #:				. ^									ŀ					
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analyses. All claims includi	ing those for negligence a	ability and client's exclusive remedy for and any other cause whatsoever shall be	deeme	d waive	d unte	ss made	in wri	ling end	d récei	ved by	Cardina	el withi	in 30 days alte	r complet	lian of li	ha applicat	te			٠					•		
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† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476. , /																											



August 14, 2013

DAVID ADKINS

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: S D S

Enclosed are the results of analyses for samples received by the laboratory on 08/12/13 12:20.

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.

Celey D. Keine

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 DAVID ADKINS 408 W. TEXAS AVE. ARTESIA NM, 88210

Fax To:

(575) 745-8905

Received:

08/12/2013

Reported:

08/14/2013 SDS

Project Name: Project Number:

700608.204.01

Project Location:

Analyte

Analyte

Analyte

Analyte

NONE GIVEN

Sampling Date:

08/07/2013

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: S-2 30' (H301905-01)

Chloride, SM4500CI-B

Chloride

Chloride

mg/kg

Result

1540

Result

864

Analyzed By: AP

Reporting Limit

16.0

Reporting Limit

16.0

Analyzed 08/14/2013

Analyzed

08/14/2013

Method Blank ND

Method Blank

ND

432

BS

% Recovery

True Value QC 400

Qualifier

Sample ID: S-2 40' (H301905-02)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

BS

432

108

% Recovery

108

True Value QC

400

Sample ID: S-2 50' (H301905-03) Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Analyzed

Method Blank

3.77

RPD

RPD

3.77

Chloride

Chloride

Result 3480

Result

576

Reporting Limit 16.0

Reporting Limit

16.0

08/14/2013

Analyzed

08/14/2013

ND

BS 432 % Recovery 108

True Value QC 400

RPD

Qualifier

Qualifier

Qualifier

Sample ID: S-2 60' (H301905-04)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Method Blank ND

BS 432 % Recovery 108

True Value QC 400

RPD 3.77

3.77

\*=Accredited Analyte

#### Cardinal Laboratories

All claims, including those for negligence and claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. unless made in writing and received by Cardinal within thirty (30) days after completion of the 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

Celey D. Keine



TALON LPE DAVID ADKINS 408 W. TEXAS AVE. ARTESIA NM, 88210

Fax To: (575) 745-8905

Received: Reported: 08/12/2013

08/14/2013

Project Name:

SDS

Project Number:

700608.204.01

Project Location:

NONE GIVEN

Sampling Date:

08/07/2013

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

#### Sample ID: S-2 70' (H301905-05)

Chloride, SM4500CI-B	mg/	'kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	464	16.0	08/14/2013	ND	432	108	400	3.77	

Cardinal Laboratories \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability 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 thirry (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

Celey D. Keine



#### **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 SM4500CI-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

PLEASE NOTE: Liability and Damages. Cardinal's liability 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 waved 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 claims a 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.

Celey D. Keine



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

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

Company Name: Telan / (PE	BEEFER BILLIANTO	ANALYSIS REQUEST
Project Manager:	P.O. #:	
Address: 408 W Texas Auc.	Company: Talon	1
	Attn:	
City: Actes/a State: Nm Zip: 882/0-  Phone #: 575 - 146 8368 Fax #: 575 - 146 - 97es  Project #: 760602 207.0 ( Project Owner: OXy	Address:	
Project #: 760602 207 Q.( Project Owner: (7) Xu	City:	
Project Name: SAS	State: Zip:	
Project Location:	Phone #:	
Sampler Name: Cochoirl Racza	Fax #:	
FOR LAB USE ONLY MATRIX	PRESERV. SAMPLING	]
(C)OMP ERS ATER FER		
A CONTRACTOR (C)		
Lab I.D. Sample I.D.	R: BASE	
(G)RAB OR (C)ON #CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE	OTHER: ACIDIBASE: ICE / COOL OTHER: ATAM	
15-2 30' (2 1	X 8/2/13 1:28	
28-2 40' 6 8	V 1:33	
3 5-2 50'	140	
4 C. 2 GO' G X	X 1:54	$ \mathcal{S} $
5 3-2 70' G Y	1:56	X
PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remady for any claim arising whether based in contract analyses. All claims including those for negligence and my other cause whatsoever shall be deemed waived unless made in writing an		
amilyses, or calms including unes on regigence and my other cause whatsoever shall be deemed warved unless made in whiting and service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such pain	loss of use, or loss of profits incurred by client, its subsidi	aries,
Relinquished By: Received By:	Phone Re	esult: 🗆 Yes 🖾 No  Add'l Phone#:
This of Man	Fax Resu REMARK	
Reinguished By: Date: Reported By:	5,000	
Time:		
Delivered By: (Circle One) Sample Condit	ion CHECHEL BY:	
Sampler - UPS - Bus - Other:		

#54

<sup>†</sup> Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326