

October 23, 2013

Mr. Mike Bratcher **NMOCD District 2**

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

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

> MIDLAND 290I State Hwy 349 Midland, Texas 79706 Phone 432.522.2133 Fax 432.522.2180

OKLAHOMA CITY 7700 North Hudson Avenue Suite IO Oklahoma City, Oklahoma 73116 Phone 405.486.7030 Fax 806.467.0622

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

811 S. 1st Street Artesia, NM 88210

Subject:

Soil Assessment and Remediation Work Plan Oxy Permian LTD

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Indian Basin Gas Plant Release IBGP-PC-51-0100

Dear Mr. Bratcher,

Oxy Permian LTD has contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the referenced Indian Basin Gas Plant release. The results of our soil assessment and proposed remediation activities consist of the following:

Incident Date

The release was discovered September 12, 2013.

Background Information

The Indian Basin Gas Plant is located approximately forty (40) miles southwest of Artesia, New Mexico. The legal location for the site is Section 23, Township 21 South and Range 23 East in Eddy County, New Mexico.

According to the soil survey provided by the United States Department of Agriculture National Resources Conservation Services, the soil in this area is a Paleozoic Age sedimentary deposit, the Guadalupian Queen and Grayburg formation, consisting of gypsum, sandstone, anhydrite and dolomite under lain by siltstone material and hard caliches. The New Mexico State Engineer web site indicates the nearest ground water data to be in S2-T21S-R23E. The ground water in Section 2 is reported to be a depth of 180' 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:

	Depth to ground water	>100'
	Wellhead Protection Area	>1000'
NVIRONMENTAL CONSULTING	Distance to surface water body	>1000'
ENGINEERING		
DRILLING		
CONSTRUCTION		
SPILL MANAGEMENT		

Toll Free: 866.742.0742 www.talonlpe.com

GENERAL CONTRACTING

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Incident Description

A 3-inch steel flow line was found to be leaking due to corrosion causing a release of 5 barrels of produced water. A vac truck was immediately called to the location and recovered 4.5 barrels. The flow line was isolated, drained of all fluids, replaced and returned to service. Oxy conducted some initial remediation. The impacted area was approximately 15'x15'and excavated to a depth of 3.5 feet deep in order to repair the line.

Actions Taken

On September 19, 2013 Talon/LPE mobilized personnel to perform soil sampling activities for the construction of a work plan. Grab soil samples were collected at a depth of 3.5 feet deep. A site map illustrating the sample location is attached.

Soils samples were collected by Talon personnel wearing clean nitrile gloves. The samples were placed in laboratory provided glassware, iced and transported to Cardinal Laboratories in Hobbs, New Mexico for analysis. The samples were tested for volatile organics pursuant to EPA Method 8021B, Total Petroleum Hydrocarbons (TPH) per EPA Method 8015M and Total Chlorides via Method SM4500Cl-B. The complete laboratory report is attached as Appendix II.

Analytical Results

Analytical results received from Cardinal Laboratories are summarized below:

Sample ID	Depth (feet)	BTEX (mg/kg)	Chlorides (mg/kg)	TPH (mg/kg) GRO	TPH (mg/kg) DRO
S-1	3.5	13.1	<16	22.7	220
S-2	3.5	3.79	1060	₹<10	16.4
S-3	3.5	< 0.300	128	<10	50.6
S-4	3.5	51.7	<16	779	5350
S-5	3.5	< 0.300	1650	<10	26.6
S-6	0	< 0.300	32	<10	<10
S-7	0	< 0.300	64	<10	<10

September 27, 2013

Summary and Conclusions

- Ground water in the project vicinity is 180-feet below land surface per the New Mexico State Engineer Database.
- Based on the depth to groundwater, it is unlikely that the impacts identified from this release will pose a threat to groundwater after proposed remediation activities are complete.

Proposed Remedial Actions

- The impacted soil from this release in the vicinity of sample locations S-4 will be excavated an additional 0.5-foot deep. The impacted soil will be transported to a NMOCD approved solid waste disposal facility.
- Confirmation soil samples will be collected the excavated area. The soil samples will be submitted to laboratory for TPH analysis using Method 8015M, and BTEX analysis using Method 8021B.
- The excavated area will be backfilled and contoured to match existing terrain.
- A final closure report documenting all remedial actions and analytical results will be provided to the NMOCD Artesia Office along with a C-141 Form.

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

M. Wilson Kimberly M Wilson

Project Manager

David J. Adkins District Manager

SITE MAP

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	Legend ◆ - Sample Location - A Pipeline - ∞ Overhead Power Lines ZZZ - Impacted Area
Date: 09/26/2013 IBGP Release Scale: NTS Oxy - NM - Nor Drawn By: TJS Figure 1 - Site P	rth Mexico

APPENDIX I

GROUNDWATER DATA

INITIAL C-141

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(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)					2=NE i st to la	3=SW 4=SE rgest) (N/	:) AD83 UTM in me	ters)	(1	In feet)	
POD Number	POD Sub- Code basin Count	- F -	Q Q 16 4	200	Tws	Rng_	, X		where the		Depth Water (Water Column
RA 05131	ED	2	32	23	21S	23E	540424	3592266* 🚱	140	255		
RA 05131 S	ED	2	32	23	21S	23E	540424	3592266* 🌍	140	292	180	112
RA 05060	ED	3	31	23	21S	23E	539419	3592064* 🌍	911	250		
RA 09565	ED	3	1 1	23	21S	23E	539416	3592466* 🌍	956	250		
								Averag	je Depth to '	Water:	180 1	feet
									Minimum	Depth:	180 1	feet
									Maximum I	Depth:	180 f	feet
Record Count: 4							-				. <u></u>	
Basin/County Searcl	<u>h:</u>											
County: Eddy												

UTMNAD83 Radius Search (in meters):

Easting (X): 540325

Northing (Y): 3592167

Radius: 1000

*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.

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 October 10, 2003

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
Contact : Rodney Campbell		
Telephone No. : 575-725-7822		
Facility Type: Gas Plant		
	Contact : Rodney Campbell Telephone No. : 575-725-7822	Contact : Rodney Campbell Telephone No. : 575-725-7822

Surface Owner : Federal	Mineral Owner	API#: Lease #:

	LOCATION OF RELEASE									
Unit Letter	Section 23	Township 21S	Range 23E	Feet from the	North/South Line North	Fect from the	East/West Line	County: Eddy		

Latitude_____Longitude_____ NATURE OF RELEASE

Type of Release : Produced Water				Volume of Release : 5 bbls	Volume Recovered: 4.5 bbls
Source of Release : 3" Water Line				Date and Hour of Occurrence: 9/12/2013	Date and Hour of Discovery: 9/12/2013 5:15 pm
Was Immediate Notice Given?	🛛 Ye	s 🗌 No	Not Required	If YES, To Whom? OCD/Mike Bratcher & BLM/Jim	
By Whom: Pat Bowen				Date and Hour : 9/13/2013	
Was a Watercourse Reached?		s 🖾 No		If YES, Volume Impacting the W	atercourse.
Describe Cause of Problem and R	enedial	Action Tab	en.* A 3-inch steel 1	low line was found to be leaking du	e to corrosion causing a release of 5 barrels
of produced water. A vac truck w and returned to service. Talon/LP	as immed E was cor	iately calle stacted to e	ed to the location and complete the site ass	recovered 4.5 barrels. The flow line	e was isolated, drained of all fluids, replaces an up actions.
laboratory results are available Ta	lon will a	rubmit a de	sailed work plan.		area was approximately 15'x15'. Once
I hereby certify that the informati regulations all operators are requi	on given red to rep	above is tr ort and/or	te and complete to fi file certain release n	te best of my knowledge and unders otifications and perform corrective a	tand that pursuant to NMOCD rules and actions for releases which may endanger
nublic health or the environment	The accord	ntance of	a C-141 report by the	NMOCD marked as "Rinal Report	does not relieve the operator of Hability

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 Hability 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: Ray	OILCC	DNSERVATION DIVISION
Printed Name: Rodney Campbell	Approved by District Supe	rvisor:
Title: HES Specialist	Approval Date:	Expiration Date:
E-mail Address: Rodney Campbell@oxy.com	Conditions of Approval;	Attached
Date: 10/10/2013 Phone: 575-725-7822		

* Attach Additional Sheets If Necessary

APPENDIX II

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LABORATORY RESULTS

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September 27, 2013

DAVID ADKINS

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: OXY IBGP

Enclosed are the results of analyses for samples received by the laboratory on 09/24/13 9:52.

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.

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.

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. Kun

Celey D. Keene Lab Director/Quality Manager



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

Received:	09/24/2013	Sampling Date:	09/19/2013
Reported:	09/27/2013	Sampling Type:	Soil
Project Name:	OXY IBGP	Sampling Condition:	Cool & Intact
Project Number:	700608.337.01	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S-1 3.5' (H302318-01)

BTEX 8021B	mg/kg		Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	0.311	0.050	09/26/2013	ND	1.89	94.4	2.00	3.20	
Toluene*	3.43	0.050	09/26/2013	ND	1.95	97.3	2.00	2.40	
Ethylbenzene*	0.970	0.050	09/26/2013	ND	2.06	103	2.00	2.62	
Total Xylenes*	8.41	0.150	09/26/2013	ND	6.20	103	6.00	2.42	
Total BTEX	13.1	0.300	09/26/2013	ND					
Surrogate: 4-Bromofluorobenzene (PIL	123	% 89.4-12	б	······································					
Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Chloride	<16.0	16.0	09/25/2013	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
GRO C6-C10	22.7	10.0	09/25/2013	ND	191	95.6	200	0.842	

Surrogate: 1-Chlorooctadecane 100 % 63.6-154

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager



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Received:	09/24/2013	Sampling Date:	09/19/2013
Reported:	09/27/2013	Sampling Type:	Soil
Project Name:	OXY IBGP	Sampling Condition:	Cool & Intact
Project Number:	700608.337.01	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S-2 3.5' (H302318-02)

BTEX 8021B	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.464	0.050	09/26/2013	ND	1.89	94.4	2.00	3.20	
Toluene*	1.38	0.050	09/26/2013	ND	1.95	97.3	2.00	2.40	
Ethylbenzene*	0.298	0.050	09/26/2013	ND	2.06	103	2.00	2.62	
Total Xylenes*	1.65	0.150	09/26/2013	ND	6.20	103	6.00	2.42	
Total BTEX	3.79	0.300	09/26/2013	ND					

Surrogate: 4-Bromofluorobenzene (PIE 114 % 89.4-126

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	[.] Recovery	True Value QC	RPD	Qualifier
Chloride	1060	16.0	09/25/2013	ND	416	104	400	3.77	
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	09/25/2013	ND	191	95.6	200	0.842	
DRO >C10-C28	16.4	10.0	09/25/2013	ND	184	91.8	200	1.16	
Surrogate: 1-Chlorooctane	95.9	% 65.2-14	0			····			
Surrogate: 1-Chlorooctadecane	104	% 63.6-15	4						

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Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager



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Received:	09/24/2013	Sampling Date:	09/19/2013
Reported:	09/27/2013	Sampling Type:	Soil
Project Name:	OXY IBGP	Sampling Condition:	Cool & Intact
Project Number:	700608.337.01	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S-3 3.5' (H302318-03)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	. RPD	Qualifier
Benzene*	<0.050	0.050	09/26/2013	ND	1.89	94.7	2.00	2.02	
Toluene*	<0.050	0.050	09/26/2013	ND	1.94	96.9	2.00	2.11	
Ethylbenzene*	<0.050	0.050	09/26/2013	ND	2.02	101	2.00	2.34	
Total Xylenes*	<0.150	0.150	09/26/2013	ND	5.96	99.3	6.00	2.22	
Total BTEX	<0.300	0.300	09/26/2013	ND					
Surrogate: 4-Bromofluorobenzene (PIL	103 %	6 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	128	16.0	09/25/2013	ND	416	104	400	3.77	
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	09/25/2013	ND	191	95.6	200	0.842	
DRO >C10-C28	50.6	10.0	09/25/2013	ND	184	91.8	200	1.16	
Surrogate: 1-Chlorooctane	82.8 9	65.2-14	0						
Surrogate: 1-Chlorooctadecane	92.5 9	63.6-15	4						

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



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Received:	09/24/2013	Sampling Date:	09/19/2013
Reported:	09/27/2013	Sampling Type:	Soil
Project Name:	OXY IBGP	Sampling Condition:	Cool & Intact
Project Number:	700608.337.01	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S-4 3.5' (H302318-04)

BTEX 8021B	mg/	'kg	Analyze	d By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.793	0.100	09/27/2013	ND	1.89	94.7	2.00	2.02	
Toluene*	5.60	0.100	09/27/2013	ND	1.94	96.9	2.00	2.11	
Ethylbenzene*	1.44	0.100	09/27/2013	ND	2.02	101	2.00	2.34	
Total Xylenes*	43.8	0.300	09/27/2013	ND	5.96	99.3	6.00	2.22	
Total BTEX	51.7	0.600	09/27/2013	ND					
Surrogate: 4-Bromofluorobenzene (PIL	1319	% 89.4-12	6						
Chloride, SM4500Cl-B	mg/	'ka	Analyze	d Bv: AP					

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/26/2013	ND	416	104	400	3.77	
TPH 8015M	mg	/kg	Analyze	d By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	779	10.0	09/25/2013	ND	191	95.6	200	0.842	
DRO >C10-C28	5350	10.0	09/25/2013	ND	184	91.8	200	1.16	
Surrogate: 1-Chlorooctane	102	% 65.2-14							

Surrogate: 1-Chlorooctadecane 165 % 63.6-154

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Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager



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Received:	09/24/2013	Sampling Date:	09/19/2013
Reported:	09/27/2013	Sampling Type:	Soil
Project Name:	OXY IBGP	Sampling Condition:	Cool & Intact
Project Number:	700608.337.01	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S-5 3.5' (H302318-05)

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BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/26/2013	ND	1.89	94.7	2.00	2.02	
Toluene*	0.059	0.050	09/26/2013	ND	1.94	96.9	2.00	2.11	
Ethylbenzene*	<0.050	0.050	09/26/2013	ND	2.02	101	2.00	2.34	
Total Xylenes*	0.177	0.150	09/26/2013	ND	5.96	99.3	6.00	2.22	
Total BTEX	<0.300	0.300	09/26/2013	ND					
Surrogate: 4-Bromofluorobenzene (PIL	104 9	% 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	1650	16.0	09/26/2013	ND	416	104	400	3.77	
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	09/25/2013	ND	191	95.6	200	0.842	
DRO >C10-C28	26.6	10.0	09/25/2013	ND	184	91.8	200	1.16	
Surrogate: 1-Chlorooctane	90.5	% 65.2-14	0						,
Surrogate: 1-Chlorooctadecane	97.2	63.6-15	4						

Cardinal Laboratories

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Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager



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

Received:	09/24/2013	Sampling Date:	09/19/2013
Reported:	09/27/2013	Sampling Type:	Soil
Project Name:	OXY IBGP	Sampling Condition:	Cool & Intact
Project Number:	700608.337.01	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S-6 0' (H302318-06)

BTEX 8021B	mg/	kg	Analyze	d By: MS	· · · · · · · · · · · · · · · · · · ·				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/26/2013	ND	1.89	94.7	2.00	2.02	
Toluene*	<0.050	0.050	09/26/2013	ND	1.94	96.9	2.00	2.11	
Ethylbenzene*	<0.050	0.050	09/26/2013	ND	2.02	101	2.00	2.34	
Total Xylenes*	<0.150	0.150	09/26/2013	ND	5.96	99.3	6.00	2.22	
Total BTEX	<0.300	0.300	09/26/2013	ND					
Surrogate: 4-Bromofluorobenzene (PIL	101 9	6 89.4-120	5						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	09/26/2013	ND	416	104	400	3.77	
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	09/25/2013	ND	191	95.6	200	0.842	
DRO >C10-C28	<10.0	10.0	09/25/2013	ND	184	91.8	200	1.16	
Surrogate: 1-Chlorooctane	86.8 5	65.2-140)						

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Celey D. Keene, Lab Director/Quality Manager



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

Received:	09/24/2013	Sampling Date:	09/19/2013
Reported:	09/27/2013	Sampling Type:	Soil
Project Name:	OXY IBGP	Sampling Condition:	Cool & Intact
Project Number:	700608.337.01	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S-7 0' (H302318-07)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/26/2013	ND	1.89	94.7	2.00	2.02	
Toluene*	0.068	0.050	09/26/2013	ND	1.94	96.9	2.00	2.11	
Ethylbenzene*	<0.050	0.050	09/26/2013	ND	2.02	101	2.00	2.34	
Total Xylenes*	<0.150	0.150	09/26/2013	ND	5.96	99.3	6.00	2.22	
Total BTEX	<0.300	0.300	09/26/2013	ND					
Surrogate: 4-Bromofluorobenzene (PIL	IE 103 % 89.4-12		6						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP				•	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	09/26/2013	ND	416	104	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: MS					<u> </u>
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	· % Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/25/2013	ND	191	95.6	.200	0.842	
DRO >C10-C28	<10.0	10.0	09/25/2013	ND	184	91.8	200	1.16	
Surrogate: 1-Chlorooctane	89.9	65.2-14	0						
Surrogate: 1-Chlorooctadecane	94.0	63.6-15	4						

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

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CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 10 of 10

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