# OXY USA, Inc. West Dollarhide Devonian Unit #101 Closure

Section 33, T24S, R38E Lea County, New Mexico June 01, 2015

APPROVED

By OCD; Dr. Oberding at 11:22 am, Jun 04, 2015



**Prepared for:** 

OXY USA, Inc. 1017 W Stanolind Road Hobbs, New Mexico 88240

By:

Safety & Environmental Solutions, Inc. 703 East Clinton Street Hobbs, New Mexico 88240 (575) 397-0510

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## I. Company Contacts

Representative	Company	Telephone	E-mail
Austin Tramell	OXY USA, INC.	575-499-4919	Austin_Tramell@oxy.com
Bob Allen	SESI	575-397-0510	ballen@sesi-nm.com

## II. Background

Safety and Environmental Solutions, Inc. (SESI) was engaged by OXY USA, INC to perform site assessment of and cleanup a release area at the West Dollarhide Devonian Unit #101 located in Section 33 of Township 24 South, Range 38 East, Lea County, New Mexico.

According to the C-141 dated January 9, 2014 the cause of release was a tank spilling over. The release was approximately 5 bbls of crude oil and 5 bbls of produced water. Approximately 3 bbls of crude oil and 3bbls of produced water were recovered.

## III. Surface and Ground Water

The nearest groundwater of record is approximately 8.0 miles Northwest of the site. The New Mexico Office of State Engineer record is in Section 20 Range 38 East and Township 25 South. The reported depth was 75 feet below ground surface (BGS).

## IV. Characterization

The target cleanup levels are determined using the *Guidelines for Remediation of Leaks, Spills and Releases* published by the NMOCD (August 13, 1993). Based on the ranking criteria presented below, the applicable Recommended Remediation Action Levels (RRAL) are 10 parts per million (ppm) Benzene, 50 ppm combined benzene, toluene, ethylbenzene, and total xylenes (BTEX), and 1000 ppm Total Petroleum Hydrocarbons (TPH).

Depth to Ground Water:									
(Vertical distance from contaminants to	Less than 50 feet	20 points							
seasonal high water elevation of	50 feet to 99 feet	10 points	X						
groundwater)	>100 feet	0 points							
Wellhead Protection Area:									
(Less than 200 feet from a private domestic	Yes	20 points							
water source; or less than 1000 feet from all	No	0 points	X						
other water sources)									
Distance to Surface Water:									
(Horizontal distance to perennial lakes,	Less than 200 feet	20 points							
ponds, rivers, streams, creeks, irrigation	200 feet to 1000 feet	10 points							
canals and ditches)	>1000 feet	0 points	X						
RANKING SCORE (TOTAL POINTS)									

## V. Work Performed

BBC International Inc. was onsite to determine vertical extent of contamination. Samples were taken at site SP1 at the surface and at a depth of 1', 2', 3', 4' 6', 8', 10' and 12'. Samples were taken at site SP2 were taken at 1', 2', 4', 6', 8', 10' and 12'. All samples were properly packaged, preserved and transported to the Laboratory, Hobbs New Mexico and analyzed for Benzene, Toluene, Ethylbenzene, Xylenes, Total BTEX and

Chloride (CI<sup>-</sup>) (Method SM4500CI-B). The results of the analysis are presented in the table below:

		Sample	SP1@ SURFACE	SP1 @ 1'	SP1 @ 2'	SP1 @ 3'	SP1 @ 4'	SP1 @ 6'	SP1 @ 8'	SP1 @ 10'	SP1 @ 12'
Analyte	Method	Date	12/12/13	12/12/13	12/12/13	12/12/13	1/22/14	1/22/14	1/22/14	1/22/14	1/22/14
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		<0.050	< 0.050	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Toluene	BTEX 8021B		<0.050	< 0.050	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Ethylbenzene	BTEX 8021B		<0.050	< 0.050	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total Xylenes	BTEX 8021B		<0.150	< 0.150	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total BTEX	BTEX 8021B		< 0.300	< 0.300	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Chloride	SM4500CI-B		1010	496	1840	1800	3560	4800	4720	6480	2200
GRO	TPH 8015M		<10.0	<10.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a
DRO	TPH 8015M		288	<10.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Laboratory Analytical Results Summary	
West Dollarhide Devonian Unit 101	

	1		000.0							
		Sample	SP2 @ SURFACE	SP2 @ 1'	SP2 @ 2'	SP2 @ 4'	SP2 @ 6'	SP2 @ 8'	SP2 @ 10'	SP2 @ 12'
Analyte	Method	Date	12/12/13	12/12/13	12/12/13	1/22/14	1/22/14	1/22/14	1/22/14	1/22/14
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		< 0.050	< 0.050	n/a	n/a	n/a	n/a	n/a	n/a
Toluene	BTEX 8021B		< 0.050	< 0.050	n/a	n/a	n/a	n/a	n/a	n/a
Ethylbenzene	BTEX 8021B		< 0.050	< 0.050	n/a	n/a	n/a	n/a	n/a	n/a
Total Xylenes	BTEX 8021B		<0.150	< 0.150	n/a	n/a	n/a	n/a	n/a	n/a
Total BTEX	BTEX 8021B		< 0.300	< 0.300	n/a	n/a	n/a	n/a	n/a	n/a
Chloride	SM4500CI-B		1120	1150	1840	4080	4640	3920	5600	2600
GRO	TPH 8015M		<50.0	<50.0	n/a	n/a	n/a	n/a	n/a	n/a
DRO	TPH 8015M		613	551	n/a	n/a	n/a	n/a	n/a	n/a

The sample results indicate that the chloride concentration at 12' BGS is still between 2200ppm and 2600 ppm.

On March 20, 2014, BBC International Inc. was onsite to determine vertical extent of contamination using a coring rig. A bore hole was advanced to a depth of 55' BGS with samples taken a 15', 25', 25', 45' and 55'. All samples were properly packaged, preserved and transported to the Laboratory, Hobbs New Mexico and analyzed for Chloride (CI<sup>-</sup>) (Method SM4500CI-B). The results of the analysis are presented in the table below:

Laboratory Analytical Results Summary West Dollarhide Devonian Unit #101

		Sample	SB1 @ 15'	SB1 @ 25'	SB1 @ 35'	SB1 @ 45'	SB1 @ 55'
Analyte	Method	Date	3/20/14	3/20/14	3/20/14	3/20/14	3/20/14
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Chloride	SM4500CI-B		3280	704	816	464	128

The sample results indicate that the vertical extent of contamination was determined to be between 45' & 55'.

On September 24, 2014 SESI submitted a Delineation Report and Work plan to the NMOCD and BLM regulatory authorities. The following was the proposed plan of action:

## VI. Action Plan

Due to the results listed above and the fact that this is an active location, the following action plan is proposed:

- 1. Excavate areas around NW SP-4, SW SP-2, NE SP-2 and SE SP-3 to the depth where the chloride concentrations are in the 500PPM range. Contaminated soil transported to an approved NMOCD facility for disposal. In the event that these areas do not reach the target of 500 PPM within 2' an impermeable liner will be installed in just that area. Otherwise, no liner was to be installed for this site.
- 2. The excavated area will be backfilled with caliche and returned to grade.

## VII. Conclusion

On February 20, 2015 excavation began on the site. The site was excavated to a depth of approximately 2' bgs. On March 4, 2015 SESI collected 14 field samples, (refer to photo below for sample points). The results of the field samples are presented in the table below:

Northwest	Southwest	Northeast	Southeast
SP-1 152PPM	SP-1 532PPM	SP-1 204PPM	SP-1 204PPM
SP-2 580PPM	SP-2 2444PPM	SP-2 864PPM	SP-2 404PPM
SP-3 532PPM	SP-3 204PPM	SP-3 204PPM	SP-3 864PPM
Sp-4 740PPM	Sp-4 364PPM		

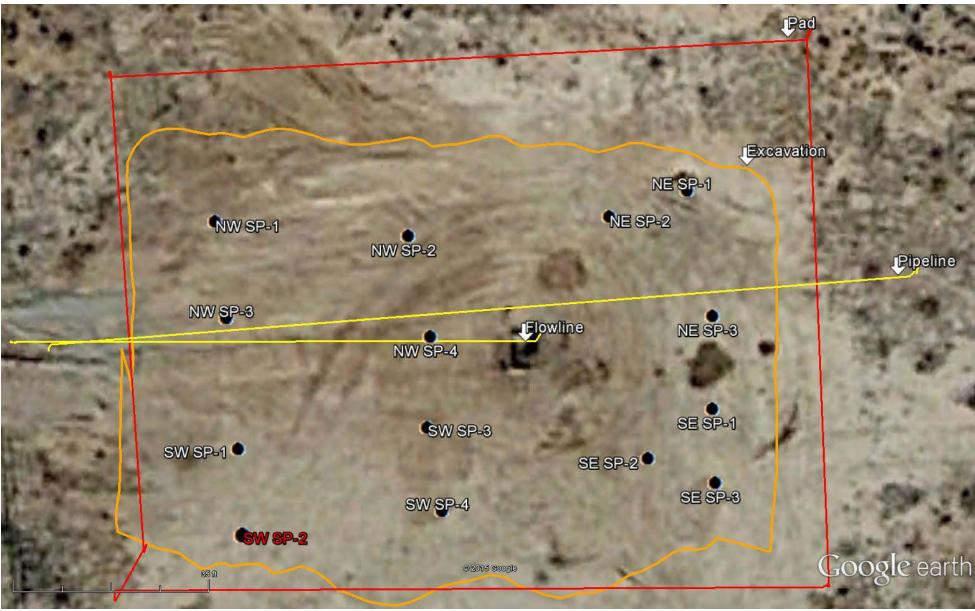
On March 12, 2015 excavation activities were completed. SESI personnel retrieved representative soil samples of exaction sidewalls. These samples were field tested for Chloride in accordance with method SM4500CI-B, preserved and taken to a commercial laboratory for confirmation of the analyses. The following is a recap of those results:

North Wall	East Wall	West Wall	South Wall	Bottom
SW-SP2 304PM	SW-SP2 144PPM	SE-SP3 480PPM	NW-SP4 160PPM	SW-SP2 1920PPM
SE-SP3 160PPM	NE-SP2 384PPM	NW-SP4 512PPM	NE-SP2 400PPM	NW-SP4 752PPM
NW-SP4 240PPM				SE-SP3 1620PPM
NE-SP2 384PPM				NE-SP2 752PPM

Based on the above analyses: it was determined and agreed upon by the regulatory authorities that a 20 mil. Liner would be placed in the bottom of the excavated area at the following sample point positions: SW-SP2, SE-SP3, NE-SP2, and NW-SP4 respectively (Figure 3). The lined area was backfilled and returned to grade. All impacted soils were removed to an NMOCD approved facility. No further action is required. SESI on behalf of OXY Permian Ltd., respectfully requests regulatory closure of the incident associated with this location.

## VII. Figures & Appendices

Figure 1 – Vicinity Map Figure 2 – Site Plan Figure 3 – Lined Areas Appendix A – Groundwater Appendix B – Analytical Appendix C – Photograph Documentation Appendix D – C-141



West Dollarhide Devonian Unit 101

Figure 1 Vicinity Map

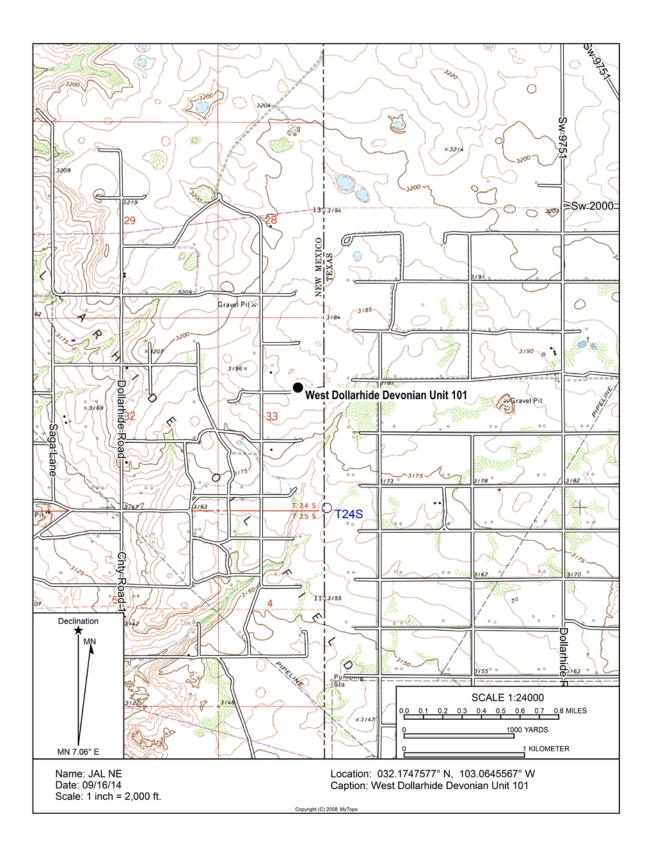


Figure 2 Site Plan



West Dollarhide Devonian Unit 101

## Figure 3 Lined Areas

Excavated Are	a Diagram			
		NW SP-4	NE SP-2	
CW CD 2				Lined SE SP-3
SW SP-2				Lineu 3E 3F*3

\*LINED AREAS DENOTED IN BLUE

Appendix A Groundwater Study



## 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)	l, (quarters (quarters						3 UTM in m	eters)		(In feet)	
POD Number	POD Sub- Code basin (		Q Q 16 4		: Tws	Rng	×				Depth W Water Co	
CP 00455		LE			25S		680497	3555267*		100	75	25
CP 00455 CLW473406	0	LE	1	20	25S	38E	680497	3555267*		115	80	35
CP 00458		LE	1	20	25S	38E	680497	3555267*	Û	115 	80	35
								Average D	epth to	Water:	78 fee	t
								Mi	nimum	Depth:	75 fee	
								Ma	ximum	Depth:	80 fee	t
Record Count: 3								1		<sup>ي</sup> ا		
PLSS Search:												
Section(s): 20	Tow	nship: 258	3	Ra	nge: 3	88E						
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								1 <sup>1</sup> 2		3 <sup>66</sup>		
l location was derived from	PLSS - see Help									1		

9/19/14 12:49 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER

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# Appendix B Analytical Results



December 19, 2013

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: WEST DOLLARHIDE

Enclosed are the results of analyses for samples received by the laboratory on 12/13/13 11:08.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

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. Keine

Celey D. Keene Lab Director/Quality Manager



BBC International, Inc. Cliff Brunson P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397

Received:	12/13/2013	Sampling Date:	12/12/2013
Reported:	12/19/2013	Sampling Type:	Soil
Project Name:	WEST DOLLARHIDE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	JAL		

## Sample ID: SP1 @ SURFACE (H303017-01)

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	12/18/2013	ND	1.90	95.2	2.00	2.21	
Toluene*	<0.050	0.050	12/18/2013	ND	1.90	95.0	2.00	2.67	
Ethylbenzene*	<0.050	0.050	12/18/2013	ND	1.88	93.8	2.00	4.04	
Total Xylenes*	<0.150	0.150	12/18/2013	ND	5.50	91.7	6.00	3.57	
Total BTEX	<0.300	0.300	12/18/2013	ND					
Surrogate: 4-Bromofluorobenzene (PID	96.8 9	% 89.4-12	6						
Chloride, SM4500Cl-B	mg/	kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1010	16.0	12/18/2013	ND	416	104	400	3.92	
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	12/18/2013	ND	206	103	200	6.55	
DRO >C10-C28	288	10.0	12/18/2013	ND	206	103	200	7.48	
Surrogate: 1-Chlorooctane	113 %	65.2-14	0						
Surrogate: 1-Chlorooctadecane	128 9	63.6-15	1						

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\*=Accredited Analyte

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



BBC International, Inc. Cliff Brunson P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397

Received:	12/13/2013	Sampling Date:	12/12/2013
Reported:	12/19/2013	Sampling Type:	Soil
Project Name:	WEST DOLLARHIDE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	JAL		

#### Sample ID: SP1 @ 1 FT (H303017-02)

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	12/18/2013	ND	1.90	95.2	2.00	2.21	
Toluene*	<0.050	0.050	12/18/2013	ND	1.90	95.0	2.00	2.67	
Ethylbenzene*	<0.050	0.050	12/18/2013	ND	1.88	93.8	2.00	4.04	
Total Xylenes*	<0.150	0.150	12/18/2013	ND	5.50	91.7	6.00	3.57	
Total BTEX	<0.300	0.300	12/18/2013	ND					
Surrogate: 4-Bromofluorobenzene (PID	96.6 9	% 89.4-12	6						
Chloride, SM4500Cl-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	12/18/2013	ND	416	104	400	3.92	
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	12/18/2013	ND	206	103	200	6.55	
DRO >C10-C28	<10.0	10.0	12/18/2013	ND	206	103	200	7.48	
Surrogate: 1-Chlorooctane	114 %	65.2-14	0						
	116 %	63.6-15							

## Sample ID: SP1 @ 2 FT (H303017-03)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1840	16.0	12/18/2013	ND	416	104	400	3.92	

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\*=Accredited Analyte

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



BBC International, Inc. **Cliff Brunson** P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397

Received:	12/13/2013	Sampling Date:	12/12/2013
Reported:	12/19/2013	Sampling Type:	Soil
Project Name:	WEST DOLLARHIDE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	JAL		

#### Sample ID: SP1 @ 3 FT (H303017-04)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1800	16.0	12/18/2013	ND	416	104	400	3.92	

## Sample ID: SP2 @ SURFACE (H303017-05)

BTEX 8021B	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/18/2013	ND	1.90	95.2	2.00	2.21	
Toluene*	<0.050	0.050	12/18/2013	ND	1.90	95.0	2.00	2.67	
Ethylbenzene*	<0.050	0.050	12/18/2013	ND	1.88	93.8	2.00	4.04	
Total Xylenes*	<0.150	0.150	12/18/2013	ND	5.50	91.7	6.00	3.57	
Total BTEX	<0.300	0.300	12/18/2013	ND					
Surrogate: 4-Bromofluorobenzene (PID	97.2	% 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	1120	16.0	12/18/2013	ND	416	104	400	3.92	
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	12/18/2013	ND	206	103	200	6.55	

GRU C6-C10	<50.0	50.0	12/18/2013
DRO >C10-C28	613	50.0	12/18/2013
Surrogate: 1-Chlorooctane	103 %	65.2-1	40
Surrogate: 1-Chlorooctadecane	122 %	63.6-1	54

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#### \*=Accredited Analyte

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



BBC International, Inc. Cliff Brunson P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397

Received:	12/13/2013	Sampling Date:	12/12/2013
Reported:	12/19/2013	Sampling Type:	Soil
Project Name:	WEST DOLLARHIDE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	JAL		

#### Sample ID: SP2 @ 1FT (H303017-06)

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	12/18/2013	ND	1.90	95.2	2.00	2.21	
Toluene*	<0.050	0.050	12/18/2013	ND	1.90	95.0	2.00	2.67	
Ethylbenzene*	<0.050	0.050	12/18/2013	ND	1.88	93.8	2.00	4.04	
Total Xylenes*	<0.150	0.150	12/18/2013	ND	5.50	91.7	6.00	3.57	
Total BTEX	<0.300	0.300	12/18/2013	ND					
Surrogate: 4-Bromofluorobenzene (PID	97.7 9	% 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	1150	16.0	12/18/2013	ND	416	104	400	3.92	
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	12/18/2013	ND	206	103	200	6.55	
DRO >C10-C28	551	50.0	12/18/2013	ND	206	103	200	7.48	
Surrogate: 1-Chlorooctane	117 %	65.2-14	0						
			4						

## Sample ID: SP2 @ 2FT (H303017-07)

Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1840	16.0	12/18/2013	ND	416	104	400	3.92	

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



## **Notes and Definitions**

- ND
   Analyte NOT DETECTED at or above the reporting limit

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

#### 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 waived 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 sample identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

Relinquished By: Delivered By: Sampler - UPS - † Cardinal c	Relinquished By	PLEASE NOTE: Liability an analyses. All claims includin service. In no event shall Ca affiliates or successors arisin	DI FAGE MOTE, I JAGBA	7	51	R	-w	e-	-	Lab I.D.	FOR LAB USE ONLY	Sampler Name:	Project Location:	Project Name: (	Project #:	Phone #: 575-397-6388	city: Hobbs	Address: P.O.	Project Manager	Company Name	A
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I changes. Please fax	Date: R 12-13-13 Time: 100 cm	PLEASE MOTE: Lability and Damages. Cardnait's liability and client's exclusive remedy for any dain analyses. All claims including those for negligence and any other cause whatsoever shall be deemed to service. In no event shall Cardinal be liable for incidental or consequential damages, including without it affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, r		6	66		10	6	CP	(G)RAB OR (C)OMP					Project Owner: Ory	Fax #: 575-30	State: NM Zi			nal, Inc.	<b>RDINAL LABORATORIES</b> 101 East Marland, Hobbs, NM 88240 (505) 393-2326 FAX (505) 393-2476
uished By: Page: 1.3 Received By: Page: 1.3 Received By: Page: 1.3 Received By: Page: 1.3 Received By: Cool Intact Cool Intact Cool Intact Cool Intact Cool Intact No No Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476	Received By:	PLEASE MOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any calim assign whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsever 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 table for incidental or consequential damages, including whole 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 services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.		2		< ×	4 4 4 4	X	~	# CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE	MATRIX				ha	575-397-0397	Zip: 88241				
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Page 7 of 7



January 30, 2014

Cliff Brunson BBC International, Inc. P.O. Box 805

Hobbs, NM 88241

**RE: WEST DOLLARHIDE 101** 

Enclosed are the results of analyses for samples received by the laboratory on 01/24/14 8:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

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. Keine

Celey D. Keene Lab Director/Quality Manager



BBC International, Inc. Cliff Brunson P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397

Received:	01/24/2014	Sampling Date:	01/22/2014
Reported:	01/30/2014	Sampling Type:	Soil
Project Name:	WEST DOLLARHIDE 101	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	JAL		

## Sample ID: SP 1 @ 4' (H400231-01)

Chloride, SM4500Cl-B	mg/kg			Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3560	16.0	01/29/2014	ND	416	104	400	3.92	

## Sample ID: SP 1 @ 6' (H400231-02)

Chloride, SM4500CI-B	Analyze	Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4800	16.0	01/29/2014	ND	416	104	400	3.92	

#### Sample ID: SP 1 @ 8' (H400231-03)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4720	16.0	01/29/2014	ND	416	104	400	3.92	

## Sample ID: SP 1 @ 10' (H400231-04)

Chloride, SM4500Cl-B	mg	/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6480	16.0	01/29/2014	ND	416	104	400	3.92	

#### **Cardinal Laboratories**

\*=Accredited Analyte

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



BBC International, Inc. Cliff Brunson P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397

Received:	01/24/2014	Sampling Date:	01/22/2014
Reported:	01/30/2014	Sampling Type:	Soil
Project Name:	WEST DOLLARHIDE 101	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	JAL		

#### Sample ID: SP 1 @ 12' (H400231-05)

Chloride, SM4500Cl-B	mg/kg			d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2200	16.0	01/29/2014	ND	416	104	400	3.92	

## Sample ID: SP 2 @ 4' (H400231-06)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4080	16.0	01/29/2014	ND	416	104	400	3.92	

## Sample ID: SP 2 @ 6' (H400231-07)

Chloride, SM4500Cl-B	4500Cl-B mg/kg			Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4640	16.0	01/29/2014	ND	416	104	400	0.00	

#### Sample ID: SP 2 @ 8' (H400231-08)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3920	16.0	01/29/2014	ND	416	104	400	0.00	

## Sample ID: SP 2 @ 10' (H400231-09)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5600	16.0	01/29/2014	ND	416	104	400	0.00	

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



BBC International, Inc. Cliff Brunson P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397

Received:	01/24/2014	Sampling Date:	01/22/2014
Reported:	01/30/2014	Sampling Type:	Soil
Project Name:	WEST DOLLARHIDE 101	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	JAL		

### Sample ID: SP 2 @ 12' (H400231-10)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2600	16.0	01/29/2014	ND	416	104	400	0.00	

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



## **Notes and Definitions**

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   Analyte NOT DETECTED at or above the reporting limit

   RPD
   Relative Percent Difference
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- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

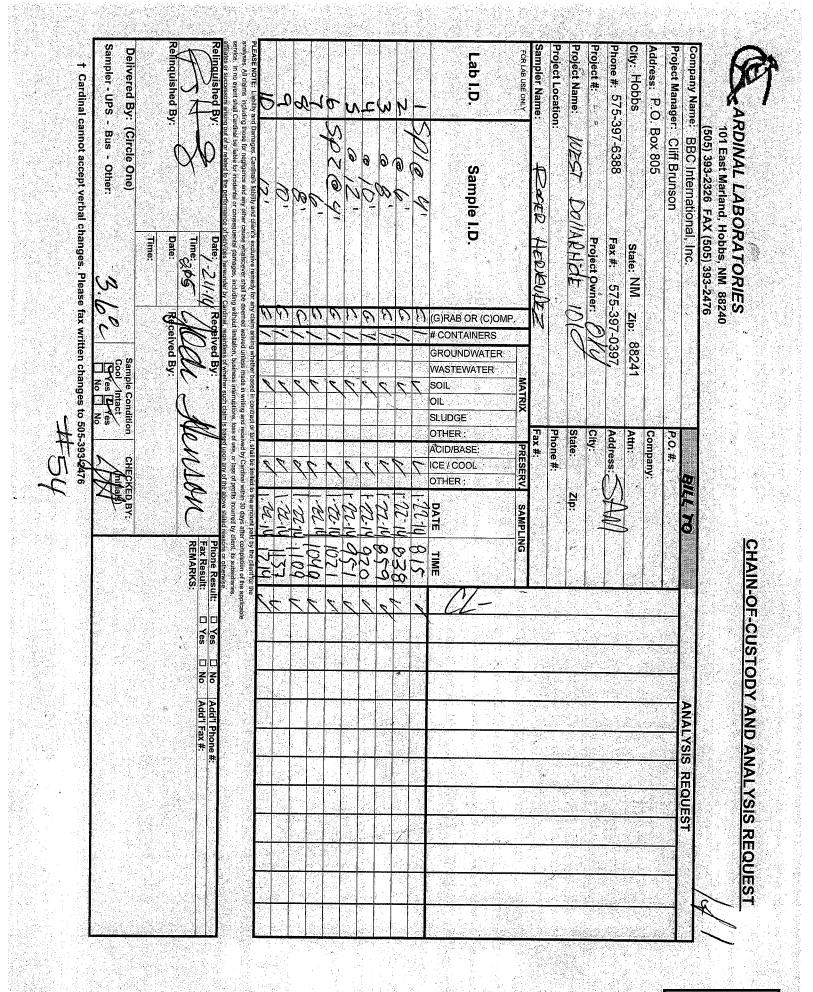
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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager





April 01, 2014

Cliff Brunson BBC International, Inc. P.O. Box 805 Hobbs, NM 88241

RE: WEST DOLLARHIDE DU #101

Enclosed are the results of analyses for samples received by the laboratory on 03/24/14 16:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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\_accred\_certif.html">www.tceq.texas.gov/field/qa/lab\_accred\_certif.html</a>.

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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. Keine

Celey D. Keene Lab Director/Quality Manager



BBC International, Inc. Cliff Brunson P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397

Received:	03/24/2014	Sampling Date:	03/20/2014
Reported:	04/01/2014	Sampling Type:	Soil
Project Name:	WEST DOLLARHIDE DU #101	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

## Sample ID: SB 1 @ 15' (H400869-01)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3280	16.0	03/26/2014	ND	416	104	400	3.77	

## Sample ID: SB 1 @ 25' (H400869-02)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	704	16.0	03/26/2014	ND	416	104	400	0.00	

#### Sample ID: SB 1 @ 35' (H400869-03)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	816	16.0	03/26/2014	ND	416	104	400	0.00	

## Sample ID: SB 1 @ 45' (H400869-04)

Chloride, SM4500Cl-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	03/26/2014	ND	416	104	400	0.00	

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



BBC International, Inc. Cliff Brunson P.O. Box 805 Hobbs NM, 88241 Fax To: (575) 397-0397

Received:	03/24/2014	Sampling Date:	03/20/2014
Reported:	04/01/2014	Sampling Type:	Soil
Project Name:	WEST DOLLARHIDE DU #101	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

#### Sample ID: SB 1 @ 55' (H400869-05)

Chloride, SM4500Cl-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	03/26/2014	ND	416	104	400	0.00	

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



## **Notes and Definitions**

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   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

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

(505) 393-2326 FAX (505) 393-2476	76			
Company Name: BBC International, Inc.		BILL TO		ANALYSIS REQUEST
	P.(	P.O. #:		
Address: P.O. Box 805	00	Company:		
bbs	Zip: 88241 Att	Attn:		
5-397-6388 Fax #:	-0397	Address:		
Project #: Project Owner: Oxy		City:	2	
ame: West Dollarhide Devo		State: Zip:	0	
Project Location: Lea County, NM		Phone #:		
Sampler Name: Jeff Ornelas	Fa	Fax #:		
	MATRIX	PRESERV. SAMPLING	G	
Lab I.D. Sample I.D.	G)RAB OR (C)OMP CONTAINERS BROUNDWATER VASTEWATER GOIL DIL SLUDGE DTHER :	ACID/BASE: CE / COOL DTHER :	TIME	
SB1 @ 15'		✓ 3/20/14	2:22 PM 🖌	
2 SB1 @ 25	6 1	✓ 3/20/14	2:48 PM 🖌	
SB1 @ 35'	-	3/20/14	2:58 PM 🖌	
_	5- 2	× 3/20/14	3:10 PM 🖌	
	-	<ul><li>✓ 3/20/14</li></ul>	3:25 PM 🗸	
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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 the client for the	for any claim arising whether based in contract or t	tort, shall be limited to the amount pair	d by the client for the	
analyses. All claims including those for negligence and any other cause whatsoever shall be deemed varved unitess manual in wining and recovery y woman over	be deemed waived unless made in writing and re- iding without limitation, business interruptions, loss	s of use, or loss of profits incurred by c	asons or otherwise	
affiates or successors arising out of or related to the performance of services hereunder Relinquished By: Relinquished By: Relinquished By:	Pro Cardinal, regardies of whether such calls is based upon any of the environment Received By: U Regeived By:	meg 1/1.	r D	Yes □ No Add'l Phone #: Yes □ No Add'l Fax #:
Delivered By: Circle Oney	Sample Condition Sample Condition Cool Intact Cool Intact Cool Intact	n CHECKEDBY: (Infilials)		
1 Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476	ase fax written changes to 50	05-393-2476		

Page 5 of 5

**CARDINAL** Laboratories

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

March 18, 2015

Bob Allen

Safety & Environmental Solutions

703 East Clinton

Hobbs, NM 88240

RE: WEST DOLLARHIDE #101

Enclosed are the results of analyses for samples received by the laboratory on 03/13/15 11:55.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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.

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,

Celeg D. Keine

Celey D. Keene Lab Director/Quality Manager





Safety & Environmental Solutions Bob Allen 703 East Clinton Hobbs NM, 88240 Fax To: (575) 393-4388

Received:	03/13/2015	Sampling Date:	03/12/2015
Reported:	03/18/2015	Sampling Type:	Soil
Project Name:	WEST DOLLARHIDE #101	Sampling Condition:	Cool & Intact
Project Number:	OXY-14-016	Sample Received By:	Jodi Henson
Project Location:	JAL, NM		

## Sample ID: SW - SP 2 - NORTH WALL (H500705-01)

Chloride, SM4500CI-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	304	16.0	03/18/2015	ND	416	104	400	0.00	

## Sample ID: SW - SP 2 - EAST WALL (H500705-02)

Chloride, SM4500Cl-B mg/kg			Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	03/18/2015	ND	416	104	400	0.00	

## Sample ID: SE - SP 3 - NORTH WALL (H500705-03)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Anaiyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	03/18/2015	ND	416	104	400	0.00	

## Sample ID: SE - SP 3 - WEST WALL (H500705-04)

Chloride, SM4500CI-B	mg	/kg	Analyzed By: AP					<u></u>	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	480	16.0	03/18/2015	ND	416	104	400	0.00	

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

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alegit trene-

Celey D. Keene, Lab Director/Quality Manager



# Analytical Results For:

Safety & Environmental Solutions Bob Allen 703 East Clinton Hobbs NM, 88240 Fax To: (575) 393-4388

Received:	03/13/2015	Sampling Date:	03/12/2015
Reported:	03/18/2015	Sampling Type:	Soil
Project Name:	WEST DOLLARHIDE #101	Sampling Condition:	Cool & Intact
Project Number:	OXY-14-016	Sample Received By:	Jodi Henson
Project Location:	JAL, NM		

## Sample ID: NW - SP 4 - NORTH WALL (H500705-05)

Chloride, SM4500Cl-B mg/kg			Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	03/18/2015	ND	416	104	400	0.00	

## Sample ID: NW - SP 4 - WEST WALL (H500705-06)

Chloride, SM4500CI-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	512	16.0	03/18/2015	ND	416	104	400	0.00	

# Sample ID: NW - SP 4 - SOUTH WALL (H500705-07)

Chloride, SM4500Cl-B mg/kg		Analyze	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	03/18/2015	ND	416	104	400	0.00	

## Sample ID: NE - SP 2 - NORTH WALL (H500705-08)

Chloride, SM4500Cl-B mg/kg			Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	384	16.0	03/18/2015	ND	416	104	400	0.00	

#### Sample ID: NE - SP 2 - EAST WALL (H500705-09)

Chloride, SM4500Cl-B mg/kg			Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	384	16.0	03/18/2015	ND	416	104	400	0.00	

#### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Uability and Damages. Cardinal's fability 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 whotsoever shall be deemed walved unless made in writing and received by claims, including those for angligence and including, without kinitation, business interruptions, loss of use, or loss of profits incurred by client, its sublidaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether, such climin is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall note percloted except in full with written approval of Cardinal Laboratories.

Celler D. Kenne

Celey D. Keene, Lab Director/Quality Manager





# Analytical Results For:

Safety & Environmental Solutions Bob Allen 703 East Clinton Hobbs NM, 88240 Fax To: (575) 393-4388

Received:	03/13/2015	Sampling Date:	03/12/2015
Reported:	03/18/2015	Sampling Type:	Soil
Project Name:	WEST DOLLARHIDE #101	Sampling Condition:	Cool & Intact
Project Number:	OXY-14-016	Sample Received By:	Jodi Henson
Project Location:	JAL, NM		

## Sample ID: NE - SP 2 - SOUTH WALL (H500705-10)

Chloride, SM4500Cl-B	mg/kg			Analyzed By: AP					
Analyte	Result	Reporting Limit	Anaiyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	400	16.0	03/18/2015	ND	416	104	400	0.00	

# Sample ID: SW - SP 2 - BOTTOM (H500705-11)

Chloride, SM4500Cl-B	hloride, SM4500Cl-B mg/kg			Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1920	16.0	03/18/2015	ND	416	104	400	0.00		

# Sample ID: NW - SP 4 - BOTTOM (H500705-12)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	752	16.0	03/18/2015	ND	416	104	400	0.00	

### Sample ID: SE - SP 3 - BOTTOM (H500705-13)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1620	16.0	03/18/2015	ND	416	104	400	0.00	

## Sample ID: NE - SP 2 - BOTTOM (H500705-14)

Chloride, SM4500Cl-B mg/kg			Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	752	16.0	03/18/2015	ND	416	104	400	0.00	

#### Cardinal Laboratories

\*=Accredited Analyte

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Cellen Linkene ----

Celey D. Keene, Lab Director/Quality Manager



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

# **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

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Celey D. Keene, Lab Director/Quality Manager

† Cardinal cannot accept verbal changes. Please fax written changes to 576-393-2476.	Sampler - UPS - Bus - Other:	(Jienty Santo	Timy 55 Mult Llo	Radfiquished By:		Received By: Phone Result: 1	jári fi hall Grafoji je slede for indetenza or ornangujskaj drimagos, kobidno polibilityto, futbales niompokou, jest of usu or polibinaristi by Signi. Is subditativa, V jeden je slede for indetenza or ornangujskaj drimagos, kobidno polibilityto, futbales niompokou, jest of usu o	ny dhir tening saring sa tang yang sa ay sang mining na sa na nang yang sa na sa nang sa sa sa sa sa sa sa sa s Ny dhir tening saring sa	10 DE SV-2 SOUTOWINIAN NIN NIN NIN DAILY SA VILLIN	SP-2 GARTWALL GI C IV NIC 14	SP-2 NORTHWALL SIII V	SA4 Southway (4)()	N 63(12 1	N 20 X X X X X X X X X X X X X X X X X X	SP-3 NEWTHENNIA ( K	?	(G)RA GROL GROL SCIL SLUD GITHE ACID/ ICE // DATE	NTAIN JNDW TEWAT GE ER : //BASE COOL ER :	(C)OA ERS (ATER TER	F SOZ JENN       MATRIX     BEFERENT SAME INC	Project Location: Lez Courry (JA( 2).W) Phone # 575-499-4919 (V)	State: NV Zip:	Project #: OX4-14-016 Project Owner: OX4 City: (44666 N	#: 575-397-0510 Fax #: 575-393-4388	Clinton	Project Manager: Boh Allen	Safety & Environmental Solutions, Inc. All and a second seco		101 East Marland, Hobbs, NM 88240 Page Page	ARDINAL LABORATORIES	CHAIN-OF-CUSTODY AND ANALYSIS		
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Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.	Sampler Kelinquilshed:     Bit (S     Received By:     Plone Result:     I vs       Timy Los     Timy Los     Timy Los     Received By:     Received By:     Result:     I vs       Relinquished By:     Date:     Date:     Plone Result:     I vs     Received By:     Received By:       Delivered By:     (Circle One)     Timy 1.55     Automatication of the condition     Condition     Circle One)     Received By:       Sampler - UPS - Bus - Other:     Timy 1.55     Tomm:     Sample Condition     Circle One)     Received By:	In bister end Dährtigst, Caulina's taultigt sind Edent's sociations entriesty fire any datase states based to ciochand or ford, strat for firms in G. the entropy fire any datase states based to ciochand or ford, strat for firms in G. the entropy fire and by the dataset is before the strate of the entropy fire and by the dataset is before the strate of the entropy fire and the ciochand or ford, strate for the entropy fire and by the dataset is before the strate of the entropy fire and the strate of the entropy fire and the ciochand or ford, strate for the entropy fire dataset is before the strate of the entropy fire and the ciochand or ford, strate for the entropy fire dataset is before the strate of the entropy fire and the strate of the	11 SUN-SV-Z FRUTTUM (SII W X 07/12 1600 X 13 SC-SV-3 HENTON GII W X 07/12 1600 X 14 NE-SP-Z HENTON SII W X 07/12 1600 X	CO a T D e D (G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE	Pio: # Gainingy: Same OYCH Attn: (WANCH, WSTTN) Addressi (017 STANSLINE City: (NS bb 5 State: NN Zip: 88240 Phone #: 575-499-4919	CHAIN-OF-CUS ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240 (505) 393-2326 Fax (505) 393-2476 Company Name: Safety & Environmental Solutions, Inc.
	<u>13 No.</u>  Add1 Fax#: 3					CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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Page 7 of 7

## Laboratory Analytical Results Summary West Dollarhide Devonian Unit #101

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		Sample	SB1@15'1	SB1@25	SB1@35	SB1@45	(SB1.@ 55)
Analyte	Method	Date	3/20/14	3/20/14	3/20/14	3/20/14	3/20/14
			mg/Kg	mg/Kg	mg/Kg ···	mg/Kg	mg/Kg
Chloride	SM4500CI-B		3280	704	816	464	128

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# Appendix C Site Photographs



West of wellhead looking Northeast (Photo # 1)



West of wellhead looking Northeast (Photo # 2)



West of wellhead looking Northeast (Photo # 3)



Wellhead facing Northeast (Photo # 4)



From wellhead looking Northwest (Photo # 5)



From wellhead looking Northwest (Photo # 6)



From North of wellhead looking West (Photo #7)



From North of wellhead looking South (Photo #8)



From North of wellhead looking West Excavated area



North of wellhead looking South Excavated area



Backfill of wellhead area



Site at Completion

# Appendix D C-141 Final

# 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	$\boxtimes$	Final Report
Name of Company: Oxy Permian Ltd.	Contact: Austin Tramell				
Address: 1017 W Stanolind Road, Hobbs, NM 88240	Telephone No. (575)499-4919	-	1		
Facility Name West Dollarhide Devonian Unit 101	Facility Type: Well Location			1.1	

Surface Owner: BLM	Mineral Owner:	API No. 30-025-12335

# LOCATION OF RELEASE

hit Letter Section Township 33 24S	RangeFeet from the38E1980	North/South Line North	Feet from the 779	East/West Line West	County Lea
---------------------------------------	---------------------------	---------------------------	-------------------	------------------------	---------------

Latitude32.175350° Longitude103.0666°

# NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release 35Bbls	Volume Re	ecovered 0
Source of Release: 2" riser on well head broke off	Date and Hour of Occurrence 09/24/13	Date and H	lour of Discovery
Was Immediate Notice Given?	If YES, To Whom? Geoffrey Leking NMOCD; Jennif	er Van Curen	BLM
By Whom? Austin Tramell	Date and Hour 09/24/13 @2:31PM	M	
Was a Watercourse Reached?	If YES, Volume Impacting the Wa	atercourse.	·
If a Watercourse was Impacted, Describe Fully.* Describe Cause of Problem and Remedial Action Taken.*			×.
A 2 inch riser on the well head broke off causing 35 bbls of produced wat repaired/replaced	ter to leak onto the ground. No fluids	s were recover	ed and the riser was
Describe Area Affected and Cleanup Action Taken.* The affected area was excavated according to the NMOCD approved wor disposal facility. The excavated area was backfilled with caliche transport		insported to Si	undance, a NMOCD approved
I hereby certify that the information given above is true and complete to t regulations all operators are required to report and/or file certain release r public health or the environment. The acceptance of a C-141 report by th should their operations have failed to adequately investigate and remediat or the environment. In addition, NMOCD acceptance of a C-141 report of federal, state, or local have and/or regulations.	notifications and perform corrective a ne NMOCD marked as "Final Report" te contamination that pose a threat to	ctions for relea does not relie ground water,	ases which may endanger we the operator of liability surface water, human health
1 De la	OIL CONSER	VATION I	DIVISION
Signature: Austin Tramell	Approved by District Supervisor:		
Title: HSE Coordinator	Approval Date:	Expiration D	Date:
E-mail Address: Austin_travell@oxy.com Date: 05-15-2015 Phone: 575-499-4919	Conditions of Approval:		Attached

\* Attach Additional Sheets If Necessary