BURGUNDY OIL & GAS OF NEW MEXICO, INC.



Ben Taylor

State Vacuum Unit #15

CLOSURE REPORT

API No. 30-025-02173

Release Date: 08/28/2014

Unit I, Section 32, Township 17 South, Range 34 East

2RP - 3300

October 31, 2014

Prepared by:

Environmental Department Diversified Field Service, Inc. 206 W Snyder Hobbs, NM 88240 Phone: (575)964-8394 Fax: (575)393-8396

State Vacuum Unit #15

1 INTRODUCTION

Burgundy Oil and Gas of New Mexico (Burgundy) has retained Diversified Field Service, Inc. (DFSI) to address environmental issues for the site detailed herein.

The site is located southeast of Maljamar NM, Unit letter 'I', S32, T17S, R34E, in Lea County. It was initially believed that the impacted area at this site resulted from a water injection line leak of an estimated of 3 bbls of produced water. The leak was detected on August 28, 2014. This release impacted an initial area of 3823 sq. ft. of combined pad and pasture area (Figure A). DFSI reassessed the site due to horizontal delineation, whereby the area of impact was found to be approximately 7,451 square feet of combined pad and pasture area (Figure B). Burgundy submitted a form C-141 to the NMOCD on September 2, 2014 2RP-3300 (Appendix 1).

DFSI conducted a groundwater analysis of the area. Both the U.S. Geological Survey and the NM Office of the State Engineer estimated that the depth to ground water to be 145' below ground surface (bgs), each concluded there was no eminent threat of groundwater impact. It is the intention of Burgundy Oil and Gas to preserve natural habitat by restoring the area, preventing any impact to groundwater, and preserving life forms.

2 SITE ACTIVITIES

On September 03, 2014, DFSI personnel visited the site to make an initial assessment and horizontally delineate the site. Soil samples were field tested utilizing Photoionization (PID) and chloride titration. Soil samples were retrieved from seven sample points at 1' intervals. All sample points returned levels of chlorides above regulatory acceptable limits.

On September 09, 2014, DFSI personnel revisited the site in order to complete simultaneous vertical field delineation (Appendix IV). At SP1 backhoe refusal was encountered at 16'bgs., however at depth of 15'bgs the field sample indicated the CL⁻ constituent level was 2224 mg/kg, and the TPH level was <.6 mg/kg.

On September 11, 2014, DFSI personnel returned to the site in order to complete a vertical delineation. Field samples were collect at 1'bgs intervals and field tested for Chlorides and Hydrocarbons until acceptable levels could be ascertained. Representative soil samples were collected and sent to a commercial laboratory for analyses. The following is a recap of the returned analyses: SP2: 8' - 1300 mg/kg Cl and <10 mg/kg TPH SP3: 5' - 704 mg/kg Cl and <10 mg/kg TPH SP4: 7' - 944 mg/kg Cl and <10 mg/kg TPH SP5: 7'- 992 mg/kg Cl and <10 mg/kg TPH SP6: 7'- 816 mg/kg Cl and <10 mg/kg TPH SP7: 9'- 704 mg/kg Cl and <10 mg/kg TPH

On September 22, 2014 DFSI Environmental Director submitted a formal written request to the NMOCD to (i) remediate the 3,823 sq. ft. area of impact to 4'bgs, (ii) install a 20 mil liner, (iii) backfill with fresh imported soil and (iv) contour and seed the area. On same said date the Remediation Plan was submitted and was approved by the NMOCD. Remediation began on September 25, 2014.

On September 26, 2014 DFSI personnel revisited the site of the excavation in order to determine vertical extent of impact. Simultaneous sidewall sampling was conducted again on October 7 and October 08, 2014, whereby representative samples were retrieved and sent to a commercial laboratory for confirmation. The following is a recap of the returned analyses:

SW1: 2' out – 16 mg/kg Cl, <0.300 mg/kg BTEX and <10 mg/kg TPH 8015 SW2: 2' out – 32 mg/kg Cl, <0.300 mg/kg BTEX and <10 mg/kg TPH 8015 SW3: 8' out - 16 mg/kg Cl, <0.300 mg/kg BTEX and <10 mg/kg TPH 8015 SW4: 2' out - 848 mg/kg Cl, < 0.300 mg/kg BTEX and < 10 mg/kg TPH 8015 SW5: 4' out - <16 mg/kg Cl, <0.300 mg/kg BTEX and <10 mg/kg TPH 8015 SW6: 4' out – 800 mg/kg Cl, <0.300 mg/kg BTEX and <10 mg/kg TPH 8015 SW7: 10' out - <16 mg/kg Cl, <0.300 mg/kg BTEX and <10 mg/kg TPH 8015 SW8: 2' out – 176 mg/kg Cl, <0.300 mg/kg BTEX and <10 mg/kg TPH 8015 SW9: 4' out – 32 mg/kg Cl, <0.300 mg/kg BTEX and <10 mg/kg TPH 8015 SW10: 28' out – 464 mg/kg Cl, <0.300 mg/kg BTEX and <10 mg/kg TPH 8015 SW11: 34' out – 400 mg/kg Cl, <0.300 mg/kg BTEX and <10 mg/kg TPH 8015 SW12: 12' out - 1200 mg/kg Cl, <0.300 mg/kg BTEX and <10 mg/kg TPH 8015 SW13: 4' out – 624 mg/kg Cl, <0.300 mg/kg BTEX and <10 mg/kg TPH 8015 SW14: 8' out – 848 mg/kg Cl, <0.300 mg/kg BTEX and <10 mg/kg TPH 8015 SW15: 2' out – 2400 mg/kg Cl, <0.300 mg/kg BTEX and <10 mg/kg TPH 8015 SW16: 4' out – 448 mg/kg Cl, <0.300 mg/kg BTEX and <10 mg/kg TPH 8015 SW17: 16' out – 816 mg/kg Cl, <0.300 mg/kg BTEX and <10 mg/kg TPH 8015

On October 10, 2014, DFSI personnel conducted further vertical delineation at SW#12 and SW#15, whereby representative soil samples were retrieved and sent to a commercial laboratory for analyses. The following is a recap of the returned analyses:

SW12: 14' out - <16 mg/kg Cl, <0.300 mg/kg BTEX and <10 mg/kg TPH 8015 SW15: 4' out - <16 mg/kg Cl, <0.300 mg/kg BTEX and <10 mg/kg TPH 8015 Diversified Field Service, Inc. It was determined, based on the aforementioned laboratory analyses that the injection line leak was significantly higher than the 3 bbls that was initially estimated; and as a result of horizontal leaching of chlorides, the area of impact was significantly larger than originally assessed. The GIS mapping technician revisited the site remapping the area based on the field delineation analyses from October 10, 2014. The NMOCD was apprised of the new assessment with site mapping outlining sidewall sampling and area of impact which was now extended to a proposed area of excavation of 14,189 sq. ft. (Figure C). It was determined by NMOCD officials that the areas sampled on September 11, 2014 were the most prominent areas of impact (inside area as outlined in blue). As a result of the NMOCD evaluation of the data submitted by DFSI, the NMOCD ordered that the larger area of impact be excavated to 3'bgs, as opposed to the 4'bgs it had initially ordered to be excavated in the Work Plan. It further ordered that DFSI carryout the installation of a 20 mil liner, and to backfill with fresh topsoil. Furthermore, the outlying areas (area outside of the blue line) of impact would be excavated to a depth of 2'bgs. DFSI personnel were to utilize surrounding and imported topsoil "to knock in" and contour to the surface terrain.

On October 15, 2014 the excavation activities were completed. A 20 mil liner was installed in the 3'bgs excavated area. The lined area was backfilled with fresh imported topsoil. The outlying area as previously aforementioned, and agreed to by the regulatory authorities, was excavated to 2'bgs and backfilled. The backfilled area was contoured to the surrounding terrain. All visual staining and impacted soils were removed to an NMOCD approved facility.

Photographs of site activities can be viewed in Appendix II.

3 CONCLUSIONS & RECOMMENDATIONS

The areas impacted by the injection line leak of August 28th, 2014, were properly tested, treated and restored per the requirements of the NMOCD. BOGNM has complied fully with the rules and policies applied by the NMOCD and therefore requests that the NMOCD close the regulatory file for this surface impact event.

Table of Contents

- 1 Introduction
- 2 Site Activities
- 3 Conclusion

Figure – Site Diagram-A

Site Diagram-B

Site Diagram-C

APPENDICES

Appendix I – Initial Form C-141

Appendix II – Site Photographs

Appendix III – Groundwater Data

Appendix IV – Laboratory Analyses

Appendix V – Correspondence

Appendix VI – Final C-141

Diversified Field Service, Inc. 206 W Snyder Hobbs, NM 88240 (575) 964-8394

Site Diagram



Site Diagram



Site Diagram



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.

Release Notification and Corrective Action OPERATOR Initial Report Final Report Name of Company: Burgundy Oil and Gas of New Mexico Contact: Ben Taylor Final Report Address: 401 W Texas Suite 1003 Midland, TX 79701 Telephone No. 432-684-4033 Facility Name: State Vacuum Unit #15 Facility Type: WIW Surface Owner State Mineral Owner State API No. 30-025-02173 API No. 30-025-02173

Unit Letter Section	Township	Range	Feet from the	North/South Line	Feet from	East/West Line	County
I 32	17S	34E	1980	South	680	East	Lea

Latitude: 32.7895034299485 Longitude -103.576372754491

NATURE OF RELEASE

Type of Release: Produced water	Volume of Release 3bbls	ecovered 3bbls					
Source of Release: Flowline	Date and Hour of Occurrence	Date and H	lour of Discovery				
	08-28-14 14:00	08-28-14 1	4:00				
Was Immediate Notice Given?	If YES, To Whom?						
🛛 Yes 🗌 No 🗌 Not Required	NMOCD M Whitaker						
Dr. Whom? Don Toylor	Date and Hour: 08/28/14 14:00						
By Whom? Ben Taylor Was a Watercourse Reached?	If YES, Volume Impacting the Wa	tanaannaa					
\square Yes \square No	If 1 ES, volume impacting the wa	litercourse.					
If a Watercourse was Impacted, Describe Fully.*							
NA							
Describe Cause of Problem and Remedial Action Taken.* A rupture occur	red in an injection line next to the we	ell. DFSI was	retained to repair the line and				
remediate the site.	-		-				
Describe Area Affected and Cleanup Action Taken. Leak traversed 387 ft	Describe Area Affected and Cleanup Action Taken. Leak traversed 387 ft south of the well and ran 4ft wide in pasture area. DFSI has been retained to						
fully remediate the site according to NMOCD guidelines.		-					
I hereby certify that the information given above is true and complete to the	e best of my knowledge and underst	and that pursu	ant to NMOCD rules and				
regulations all operators are required to report and/or file certain release no	otifications and perform corrective ac	ctions for relea	ases which 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 remediate							
or the environment. In addition, NMOCD acceptance of a C-141 report do	bes not relieve the operator of respon	sibility for co	mpliance with any other				
federal, state, or local laws and/or regulations.							
	OIL CONSER	VATION I	DIVISION				
Signature: Ben Taylor							
	Approved by Environmental Speciali	st:					
Printed Name: Ben Taylor							
Title: Field Foreman	Approval Date:	Expiration D	ate:				
E-mail Address: btaylor.bogi@att.net	Conditions of Approval:	Attached					
Date: 09/02/2014 Phone: 432—557-2684							

* Attach Additional Sheets If Necessary

Burgundy, State Vacuum #15 Section 32, T17S R34E



Signage Well Location 09-03-14



15



Excavation to pasture area 09-30-14

Excavated area at wellhead 09-11-14



Excavation of injection line 10-14-14

Burgundy, State Vacuum #15 Section 32, T17S R34E



Eastern side of excavated pasture 10-03-14



East Excavation 10-14-14



Stockpile of impacted soil 10-06-14



Pasture excavation 10-14-14

Burgundy, State Vacuum #15 Section 32, T17S R34E



Line excavation 10-15-14



Seeded pasture area 10-17-14



Lined excavation 10-15-14



Pad at completion of firewall 10-17-14





Diversified Environmental Services

Company	Name:	Burgundy		_	SP Date:	9/26/2014	10/7/2014	10/8/2014	10/10/2014					
Location N	lame:	State Vacuu	ım #15	_	Rel Date:									
Sidewall Sa	ampling Ev	/ent		_				-						
SE SW	CHL	трн	SW1	CHL	трн	SW2	CHL	трн	SW3	CHL	ТРН	SW4	CHL	трн
Surface	3623	2.9	Surface	49	8.1	Surface	99	4.4	Surface	3373	6.3	Surface	4498	6.3
2'	2824	1.9	2'	324	5.1	2'	49	6.5	2'	2949	4.6	2'	1624	4.6
4'	1749	1.2	2'	16	<.300	2'	32	<.300	4'	4678	8.5	4'	949	5.3
8'	2874	1.6							6'	1124	3.5	2'	848	<.300
12'	1549								8'	74	4.1			
16'	399								<mark>8'</mark>	16	<.300			
20'	399	1.8												
24'	499	0.4												

Lab Confirmation Sample
Field Sampling
Needs Delineation and confirmation samples

SW5	CHL	ТРН	SW6	CHL	ТРН	SW7	CHL	ТРН	SW8	CHL	ТРН	SW9	CHL	ТРН
Surface	6622	5.5	Surface	5698	2.2	Surface	3773	9.4	Surface	9272	3.5	Surface	3748	8.2
2'	2749	3.1	2'	2024	8.5	2'	3373	8.5	2'	174	6.7	2'	1624	4.6
4'	50	3.8	4'	649	5.3	4'	2249	0.4	2'	176	<10.0	4'	49	0.7
4'	<16.0	<10.0	4'	800	<10.0	6'	2749	0.7				<mark>4'</mark>	32	<10.0
						8'	3873	1.1						
						10'	74	0.9						
						10'	<16.0	<10.0						

	Lab Confirmation Sample
	Field Sampling
	Needs Delineation and confirmation samples

SW10	CHL	ТРН	SW11	CHL	ТРН	SW12	CHL	ТРН	SW13	CHL	ТРН	SW14	CHL	ТРН
Surface	3873	3.6	Surface	3942	14.2	Surface	4678	2.5	Surface	374	3.6	Surface	4648	0.6
2'	2874	1.4	2'	2199	0.5	2'	2999	1.5	Surface	624	<10.0	2'	2549	0.3
4'	2124	1	4'	1249	0.6	4'	3049	0.7				4'	1949	0.1
6'	3498	0.7	6'	1374	1.2	6'	2949	0.3				6'	1124	1
8'	1724	0.5	8'	1574	0.8	8'	2899	1.2				8'	499	1.2
10'	1174	0.7	10'	1649	0.7	10'	1399	2.3				8'	848	<10.0
12'	1149	0.4	12'	1774	0.4	12'	924	4.8						
14'	1374	1	14'	1149	0.8	12'	1200	<10.0						
16'	1524	0.3	16'	3124	1.1	14'	<16.0	<10.0						
18'	1774	0.5	18'	3248	1.3									
20'	1699	0.8	20'	2624	0.9									
22'	1249	0.6	22'	2324	0.8									
24'	1474	0.5	24'	2024	0.3									
26'	1074	0.6	26'	1549	0.5									
28'	449	1.2	28'	1224	0.4									
28'	464	<10.0	30'	1124	0.7									
			32'	1049	1.1									
			34'	374	0.8									
			<mark>34'</mark>	400	<10.0									

Lab Confirmation Sample
Field Sampling
Needs Delineation and confirmation samples

SW15	CHL	ТРН	SW16	CHL	ТРН	SW17	CHL	ТРН	SP19	CHL	ТРН	SP20	CHL	ТРН
Surface	999	0.8	Surface	3723	2.4	Surface	5123	0.6						
2'	974	0.5	2'	1124	1.8	2'	1399	1.2						
2'	2400	<10.0	4'	199	1.3	4'	1049	0.8						
4'	<16.0	<10.0	<mark>4'</mark>	448	<10.0	6'	1699	0.7						
						8'	2249	1						
						10'	2499	0.5						
						12'	2799	0.3						
						14'	1274	0.2						
						16'	749	0.8						
						16'	816	<10.0						

	Lab Confirmation Sample
	Field Sampling
	Needs Delineation and confirmation samples



September 18, 2014

NATALIE GLADDEN DIVERSIFIED FIELD SERVICES, INC. P. O. BOX 5966 HOBBS, NM 88241

RE: STATE VACUUM UNIT WELL #15

Enclosed are the results of analyses for samples received by the laboratory on 09/11/14 15:30.

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 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. Keine

Celey D. Keene Lab Director/Quality Manager



DIVERSIFIED FIELD SERVICES, INC. NATALIE GLADDEN P. O. BOX 5966 HOBBS NM, 88241 Fax To: (575) 393-2981

Received:	09/11/2014	Sampling Date:	09/11/2014
Reported:	09/18/2014	Sampling Type:	Soil
Project Name:	STATE VACUUM UNIT WELL #15	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: SP 2 @ 8' (H402839-01)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1300	16.0	09/12/2014	ND	400	100	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	09/13/2014	ND	189	94.7	200	0.886	
DRO >C10-C28	<10.0	10.0	09/13/2014	ND	220	110	200	0.526	
Surrogate: 1-Chlorooctane	99.8	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	104	63.6-15	4						

Sample ID: SP 3 @ 5' (H402839-02)

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	09/12/2014	ND	400	100	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	09/13/2014	ND	189	94.7	200	0.886	
DRO >C10-C28	<10.0	10.0	09/13/2014	ND	220	110	200	0.526	
Surrogate: 1-Chlorooctane	98.9	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	106	% 63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



DIVERSIFIED FIELD SERVICES, INC. NATALIE GLADDEN P. O. BOX 5966 HOBBS NM, 88241 Fax To: (575) 393-2981

Received:	09/11/2014	Sampling Date:	09/11/2014
Reported:	09/18/2014	Sampling Type:	Soil
Project Name:	STATE VACUUM UNIT WELL #15	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: SP 4 @ 7' (H402839-03)

Chloride, SM4500Cl-B	mg,	′kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	944	16.0	09/15/2014	ND	416	104	400	8.00	
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	09/13/2014	ND	189	94.7	200	0.886	
DRO >C10-C28	<10.0	10.0	09/13/2014	ND	220	110	200	0.526	
Surrogate: 1-Chlorooctane	104	65.2-14	0						
Surrogate: 1-Chlorooctadecane	117 9	63.6-15	4						

Sample ID: SP 5 @ 7' (H402839-04)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	992	16.0	09/16/2014	ND	416	104	400	8.00	
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	09/13/2014	ND	189	94.7	200	0.886	
DRO >C10-C28	<10.0	10.0	09/13/2014	ND	220	110	200	0.526	
Surrogate: 1-Chlorooctane	109	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	123	% 63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



DIVERSIFIED FIELD SERVICES, INC. NATALIE GLADDEN P. O. BOX 5966 HOBBS NM, 88241 Fax To: (575) 393-2981

Received:	09/11/2014	Sampling Date:	09/11/2014
Reported:	09/18/2014	Sampling Type:	Soil
Project Name:	STATE VACUUM UNIT WELL #15	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: SP 6 @ 7' (H402839-05)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	816	16.0	09/18/2014	ND	400	100	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	09/13/2014	ND	189	94.7	200	0.886	
DRO >C10-C28	<10.0	10.0	09/13/2014	ND	220	110	200	0.526	
Surrogate: 1-Chlorooctane	110	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	127	% 63.6-15	4						

Sample ID: SP 7 @ 9' (H402839-06)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	704	16.0	09/18/2014	ND	400	100	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	09/13/2014	ND	189	94.7	200	0.886	
DRO >C10-C28	<10.0	10.0	09/13/2014	ND	220	110	200	0.526	
Surrogate: 1-Chlorooctane	108	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	124	% 63.6-15	4						

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*=Accredited Analyte

Celeg 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

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

101 East Marland, Hobbs, NM 88240		
(575) 393-2326 FAX (575) 393-2476	BILL TO	ANALYSIS REQUEST
Project Manager: NATALIE QLADDEN	P.O. #Diversified	
Address:	company: Burgundy	
City: State: Zip:	Attn: Ber Taylor	
Phone #: Fax #:	Address:	
Project #: Project Owner:	city:	
Project Name:	State: Zip:	
Project Location: State Vacuum Unit Well	#15 Phone #:	
	Fax #:	
	MATRIX PRESERV. SAMPLING	
Lab I.D. Sample I.D. B OR (C)OMP. ITAINERS	R : BASE: COOL :R :	
#CO	WAS SOIL OIL SLUE OTHE ACID ICE / OTHE	
50.208	/ q-11-14	
1 12 202 20 20		
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6 Sp. 7@ 9'	/ / / / /:30 / /	
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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Laboratories



October 17, 2014

NATALIE GLADDEN DIVERSIFIED FIELD SERVICES, INC. P. O. BOX 5966 HOBBS, NM 88241

RE: STATE VACUUM UNIT WELL #15

Enclosed are the results of analyses for samples received by the laboratory on 10/10/14 16:20.

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 www.tceq.texas.gov/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.

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



DIVERSIFIED FIELD SERVICES, INC. NATALIE GLADDEN P. O. BOX 5966 HOBBS NM, 88241 Fax To: (575) 393-2981

Received:	10/10/2014	Sampling Date:	10/10/2014
Reported:	10/17/2014	Sampling Type:	Soil
Project Name:	STATE VACUUM UNIT WELL #15	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: SIDEWALL #1 2' OUT (H403129-01)

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	10/15/2014	ND	1.77	88.5	2.00	9.77	
Toluene*	<0.050	0.050	10/15/2014	ND	1.67	83.6	2.00	10.1	
Ethylbenzene*	<0.050	0.050	10/15/2014	ND	1.59	79.7	2.00	10.0	
Total Xylenes*	<0.150	0.150	10/15/2014	ND	4.76	79.4	6.00	10.1	
Total BTEX	<0.300	0.300	10/15/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	102 %	61-154							
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	10/14/2014	ND	400	100	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	10/14/2014	ND	172	86.2	200	5.00	
DRO >C10-C28	<10.0	10.0	10/14/2014	ND	170	85.2	200	0.657	
Surrogate: 1-Chlorooctane	77.9 \$	47.2-157							

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



DIVERSIFIED FIELD SERVICES, INC. NATALIE GLADDEN P. O. BOX 5966 HOBBS NM, 88241 Fax To: (575) 393-2981

Received:	10/10/2014	Sampling Date:	10/10/2014
Reported:	10/17/2014	Sampling Type:	Soil
Project Name:	STATE VACUUM UNIT WELL #15	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: SIDEWALL #2 2' OUT (H403129-02)

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	10/15/2014	ND	1.77	88.5	2.00	9.77	
Toluene*	<0.050	0.050	10/15/2014	ND	1.67	83.6	2.00	10.1	
Ethylbenzene*	<0.050	0.050	10/15/2014	ND	1.59	79.7	2.00	10.0	
Total Xylenes*	<0.150	0.150	10/15/2014	ND	4.76	79.4	6.00	10.1	
Total BTEX	<0.300	0.300	10/15/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	102 9	% 61-154							
Chloride, SM4500Cl-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	10/14/2014	ND	400	100	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	10/14/2014	ND	172	86.2	200	5.00	
DRO >C10-C28	<10.0	10.0	10/14/2014	ND	170	85.2	200	0.657	
Surrogate: 1-Chlorooctane	77.8	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	85.0	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



DIVERSIFIED FIELD SERVICES, INC. NATALIE GLADDEN P. O. BOX 5966 HOBBS NM, 88241 Fax To: (575) 393-2981

Received:	10/10/2014	Sampling Date:	10/10/2014
Reported:	10/17/2014	Sampling Type:	Soil
Project Name:	STATE VACUUM UNIT WELL #15	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: SIDEWALL #3 8' OUT (H403129-03)

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	10/15/2014	ND	1.77	88.5	2.00	9.77	
Toluene*	<0.050	0.050	10/15/2014	ND	1.67	83.6	2.00	10.1	
Ethylbenzene*	<0.050	0.050	10/15/2014	ND	1.59	79.7	2.00	10.0	
Total Xylenes*	<0.150	0.150	10/15/2014	ND	4.76	79.4	6.00	10.1	
Total BTEX	<0.300	0.300	10/15/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	102 %	61-154							
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	10/14/2014	ND	400	100	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	10/14/2014	ND	172	86.2	200	5.00	
DRO >C10-C28	<10.0	10.0	10/14/2014	ND	170	85.2	200	0.657	
Surrogate: 1-Chlorooctane	78.7 9	47.2-15	7						
Surrogate: 1-Chlorooctadecane	87.1 9	52.1-17	6						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



DIVERSIFIED FIELD SERVICES, INC. NATALIE GLADDEN P. O. BOX 5966 HOBBS NM, 88241 Fax To: (575) 393-2981

Received:	10/10/2014	Sampling Date:	10/10/2014
Reported:	10/17/2014	Sampling Type:	Soil
Project Name:	STATE VACUUM UNIT WELL #15	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: SIDEWALL #4 2' OUT (H403129-04)

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	10/15/2014	ND	1.77	88.5	2.00	9.77	
Toluene*	<0.050	0.050	10/15/2014	ND	1.67	83.6	2.00	10.1	
Ethylbenzene*	<0.050	0.050	10/15/2014	ND	1.59	79.7	2.00	10.0	
Total Xylenes*	<0.150	0.150	10/15/2014	ND	4.76	79.4	6.00	10.1	
Total BTEX	<0.300	0.300	10/15/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	101 9	61-154							
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	848	16.0	10/14/2014	ND	400	100	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	10/14/2014	ND	172	86.2	200	5.00	
DRO >C10-C28	<10.0	10.0	10/14/2014	ND	170	85.2	200	0.657	
Surrogate: 1-Chlorooctane	79.2	47.2-15	7						
Surrogate: 1-Chlorooctadecane	85.6	52.1-17	5						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



DIVERSIFIED FIELD SERVICES, INC. NATALIE GLADDEN P. O. BOX 5966 HOBBS NM, 88241 Fax To: (575) 393-2981

Received:	10/10/2014	Sampling Date:	10/10/2014
Reported:	10/17/2014	Sampling Type:	Soil
Project Name:	STATE VACUUM UNIT WELL #15	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: SIDEWALL #5 4' OUT (H403129-05)

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	10/15/2014	ND	1.77	88.5	2.00	9.77	
Toluene*	<0.050	0.050	10/15/2014	ND	1.67	83.6	2.00	10.1	
Ethylbenzene*	<0.050	0.050	10/15/2014	ND	1.59	79.7	2.00	10.0	
Total Xylenes*	<0.150	0.150	10/15/2014	ND	4.76	79.4	6.00	10.1	
Total BTEX	<0.300	0.300	10/15/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	101 9	% 61-154							
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/14/2014	ND	400	100	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	10/14/2014	ND	172	86.2	200	5.00	
DRO >C10-C28	<10.0	10.0	10/14/2014	ND	170	85.2	200	0.657	
Surrogate: 1-Chlorooctane	80.9	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	87.6	% 52.1-17	6						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



DIVERSIFIED FIELD SERVICES, INC. NATALIE GLADDEN P. O. BOX 5966 HOBBS NM, 88241 Fax To: (575) 393-2981

Received:	10/10/2014	Sampling Date:	10/10/2014
Reported:	10/17/2014	Sampling Type:	Soil
Project Name:	STATE VACUUM UNIT WELL #15	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: SIDEWALL #6 4' OUT (H403129-06)

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	10/16/2014	ND	1.77	88.5	2.00	9.77	
Toluene*	<0.050	0.050	10/16/2014	ND	1.67	83.6	2.00	10.1	
Ethylbenzene*	<0.050	0.050	10/16/2014	ND	1.59	79.7	2.00	10.0	
Total Xylenes*	<0.150	0.150	10/16/2014	ND	4.76	79.4	6.00	10.1	
Total BTEX	<0.300	0.300	10/16/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	101 %	61-154							
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	800	16.0	10/14/2014	ND	400	100	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	10/14/2014	ND	172	86.2	200	5.00	
DRO >C10-C28	<10.0	10.0	10/14/2014	ND	170	85.2	200	0.657	
Surrogate: 1-Chlorooctane	86.1 9	47.2-152	7						
Surrogate: 1-Chlorooctadecane	93.0 \$	52.1-170	5						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



DIVERSIFIED FIELD SERVICES, INC. NATALIE GLADDEN P. O. BOX 5966 HOBBS NM, 88241 Fax To: (575) 393-2981

Received:	10/10/2014	Sampling Date:	10/10/2014
Reported:	10/17/2014	Sampling Type:	Soil
Project Name:	STATE VACUUM UNIT WELL #15	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: SIDEWALL #7 10' OUT (H403129-07)

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	10/16/2014	ND	1.77	88.5	2.00	9.77	
Toluene*	<0.050	0.050	10/16/2014	ND	1.67	83.6	2.00	10.1	
Ethylbenzene*	<0.050	0.050	10/16/2014	ND	1.59	79.7	2.00	10.0	
Total Xylenes*	<0.150	0.150	10/16/2014	ND	4.76	79.4	6.00	10.1	
Total BTEX	<0.300	0.300	10/16/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	101 9	61-154							
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/14/2014	ND	400	100	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	10/14/2014	ND	172	86.2	200	5.00	
DRO >C10-C28	<10.0	10.0	10/14/2014	ND	170	85.2	200	0.657	
Surrogate: 1-Chlorooctane	85.7	47.2-157	7						
Surrogate: 1-Chlorooctadecane	93.6	52.1-176	5						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



DIVERSIFIED FIELD SERVICES, INC. NATALIE GLADDEN P. O. BOX 5966 HOBBS NM, 88241 Fax To: (575) 393-2981

Received:	10/10/2014	Sampling Date:	10/10/2014
Reported:	10/17/2014	Sampling Type:	Soil
Project Name:	STATE VACUUM UNIT WELL #15	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: SIDEWALL #8 2' OUT (H403129-08)

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	10/16/2014	ND	1.82	90.9	2.00	6.29	
Toluene*	<0.050	0.050	10/16/2014	ND	1.70	85.1	2.00	6.51	
Ethylbenzene*	<0.050	0.050	10/16/2014	ND	1.60	80.1	2.00	6.78	
Total Xylenes*	<0.150	0.150	10/16/2014	ND	4.74	79.0	6.00	7.31	
Total BTEX	<0.300	0.300	10/16/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	101 %	61-154							
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	10/14/2014	ND	400	100	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	10/14/2014	ND	172	86.2	200	5.00	
DRO >C10-C28	<10.0	10.0	10/14/2014	ND	170	85.2	200	0.657	
Surrogate: 1-Chlorooctane	85.6 9	47.2-15	7						
Surrogate: 1-Chlorooctadecane	92.8 9	52.1-17	6						

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*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



DIVERSIFIED FIELD SERVICES, INC. NATALIE GLADDEN P. O. BOX 5966 HOBBS NM, 88241 Fax To: (575) 393-2981

Received:	10/10/2014	Sampling Date:	10/10/2014
Reported:	10/17/2014	Sampling Type:	Soil
Project Name:	STATE VACUUM UNIT WELL #15	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: SIDEWALL #9 4' OUT (H403129-09)

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	10/16/2014	ND	1.82	90.9	2.00	6.29	
Toluene*	<0.050	0.050	10/16/2014	ND	1.70	85.1	2.00	6.51	
Ethylbenzene*	<0.050	0.050	10/16/2014	ND	1.60	80.1	2.00	6.78	
Total Xylenes*	<0.150	0.150	10/16/2014	ND	4.74	79.0	6.00	7.31	
Total BTEX	<0.300	0.300	10/16/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	101 9	61-154							
Chloride, SM4500Cl-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	10/14/2014	ND	400	100	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	10/14/2014	ND	172	86.2	200	5.00	
DRO >C10-C28	<10.0	10.0	10/14/2014	ND	170	85.2	200	0.657	
Surrogate: 1-Chlorooctane	82.0	% 47.2-152	7						
Surrogate: 1-Chlorooctadecane	88.3	% 52.1-170	5						

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*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



DIVERSIFIED FIELD SERVICES, INC. NATALIE GLADDEN P. O. BOX 5966 HOBBS NM, 88241 Fax To: (575) 393-2981

Received:	10/10/2014	Sampling Date:	10/10/2014
Reported:	10/17/2014	Sampling Type:	Soil
Project Name:	STATE VACUUM UNIT WELL #15	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: SIDEWALL #10 28' OUT (H403129-10)

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	10/16/2014	ND	1.82	90.9	2.00	6.29	
Toluene*	<0.050	0.050	10/16/2014	ND	1.70	85.1	2.00	6.51	
Ethylbenzene*	<0.050	0.050	10/16/2014	ND	1.60	80.1	2.00	6.78	
Total Xylenes*	<0.150	0.150	10/16/2014	ND	4.74	79.0	6.00	7.31	
Total BTEX	<0.300	0.300	10/16/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	102 %	61-154							
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	10/14/2014	ND	400	100	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	10/14/2014	ND	172	86.2	200	5.00	
DRO >C10-C28	<10.0	10.0	10/14/2014	ND	170	85.2	200	0.657	
Surrogate: 1-Chlorooctane	86.0 \$	47.2-15	7						
Surrogate: 1-Chlorooctadecane	93.9 9	52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



DIVERSIFIED FIELD SERVICES, INC. NATALIE GLADDEN P. O. BOX 5966 HOBBS NM, 88241 Fax To: (575) 393-2981

Received:	10/10/2014	Sampling Date:	10/10/2014
Reported:	10/17/2014	Sampling Type:	Soil
Project Name:	STATE VACUUM UNIT WELL #15	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: SIDEWALL #11 34' OUT (H403129-11)

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	10/16/2014	ND	1.82	90.9	2.00	6.29	
Toluene*	<0.050	0.050	10/16/2014	ND	1.70	85.1	2.00	6.51	
Ethylbenzene*	<0.050	0.050	10/16/2014	ND	1.60	80.1	2.00	6.78	
Total Xylenes*	<0.150	0.150	10/16/2014	ND	4.74	79.0	6.00	7.31	
Total BTEX	<0.300	0.300	10/16/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	102 %	61-154							
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	400	16.0	10/14/2014	ND	400	100	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	10/14/2014	ND	172	86.2	200	5.00	
DRO >C10-C28	<10.0	10.0	10/14/2014	ND	170	85.2	200	0.657	
Surrogate: 1-Chlorooctane	82.0 9	47.2-15	7						
Surrogate: 1-Chlorooctadecane	89.6 9	52.1-17	6						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager


DIVERSIFIED FIELD SERVICES, INC. NATALIE GLADDEN P. O. BOX 5966 HOBBS NM, 88241 Fax To: (575) 393-2981

Received:	10/10/2014	Sampling Date:	10/10/2014
Reported:	10/17/2014	Sampling Type:	Soil
Project Name:	STATE VACUUM UNIT WELL #15	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: SIDEWALL #12 12' OUT (H403129-12)

BTEX 8021B	mg/kg		Analyze	Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/16/2014	ND	1.82	90.9	2.00	6.29	
Toluene*	<0.050	0.050	10/16/2014	ND	1.70	85.1	2.00	6.51	
Ethylbenzene*	<0.050	0.050	10/16/2014	ND	1.60	80.1	2.00	6.78	
Total Xylenes*	<0.150	0.150	10/16/2014	ND	4.74	79.0	6.00	7.31	
Total BTEX	<0.300	0.300	10/16/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.2	% 61-154							
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1200	16.0	10/14/2014	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	10/14/2014	ND	172	86.2	200	5.00	
DRO >C10-C28	<10.0	10.0	10/14/2014	ND	170	85.2	200	0.657	
Surrogate: 1-Chlorooctane	85.4	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	92.5	% 52.1-17	6						

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Celey D. Keene, Lab Director/Quality Manager



DIVERSIFIED FIELD SERVICES, INC. NATALIE GLADDEN P. O. BOX 5966 HOBBS NM, 88241 Fax To: (575) 393-2981

Received:	10/10/2014	Sampling Date:	10/10/2014
Reported:	10/17/2014	Sampling Type:	Soil
Project Name:	STATE VACUUM UNIT WELL #15	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: SIDEWALL #13 (H403129-13)

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	10/16/2014	ND	1.82	90.9	2.00	6.29	
Toluene*	<0.050	0.050	10/16/2014	ND	1.70	85.1	2.00	6.51	
Ethylbenzene*	<0.050	0.050	10/16/2014	ND	1.60	80.1	2.00	6.78	
Total Xylenes*	<0.150	0.150	10/16/2014	ND	4.74	79.0	6.00	7.31	
Total BTEX	<0.300	0.300	10/16/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	101 %	61-154							
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	624	16.0	10/14/2014	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	10/14/2014	ND	172	86.2	200	5.00	
DRO >C10-C28	<10.0	10.0	10/14/2014	ND	170	85.2	200	0.657	
Surrogate: 1-Chlorooctane	85.3 9	47.2-152	7						
Surrogate: 1-Chlorooctadecane	91.0 9	52.1-170	5						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



DIVERSIFIED FIELD SERVICES, INC. NATALIE GLADDEN P. O. BOX 5966 HOBBS NM, 88241 Fax To: (575) 393-2981

Received:	10/10/2014	Sampling Date:	10/10/2014
Reported:	10/17/2014	Sampling Type:	Soil
Project Name:	STATE VACUUM UNIT WELL #15	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: SIDEWALL #14 8' OUT (H403129-14)

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	10/16/2014	ND	1.82	90.9	2.00	6.29	
Toluene*	<0.050	0.050	10/16/2014	ND	1.70	85.1	2.00	6.51	
Ethylbenzene*	<0.050	0.050	10/16/2014	ND	1.60	80.1	2.00	6.78	
Total Xylenes*	<0.150	0.150	10/16/2014	ND	4.74	79.0	6.00	7.31	
Total BTEX	<0.300	0.300	10/16/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	102 %	61-154							
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	848	16.0	10/14/2014	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	10/14/2014	ND	172	86.2	200	5.00	
DRO >C10-C28	<10.0	10.0	10/14/2014	ND	170	85.2	200	0.657	
Surrogate: 1-Chlorooctane	82.1 9	47.2-15	7						
Surrogate: 1-Chlorooctadecane	90.0 \$	52.1-17	6						

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Celey D. Keene, Lab Director/Quality Manager



DIVERSIFIED FIELD SERVICES, INC. NATALIE GLADDEN P. O. BOX 5966 HOBBS NM, 88241 Fax To: (575) 393-2981

Received:	10/10/2014	Sampling Date:	10/10/2014
Reported:	10/17/2014	Sampling Type:	Soil
Project Name:	STATE VACUUM UNIT WELL #15	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: SIDEWALL #15 2' OUT (H403129-15)

BTEX 8021B	mg/kg		Analyze	Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/16/2014	ND	1.82	90.9	2.00	6.29	
Toluene*	<0.050	0.050	10/16/2014	ND	1.70	85.1	2.00	6.51	
Ethylbenzene*	<0.050	0.050	10/16/2014	ND	1.60	80.1	2.00	6.78	
Total Xylenes*	<0.150	0.150	10/16/2014	ND	4.74	79.0	6.00	7.31	
Total BTEX	<0.300	0.300	10/16/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	99. 7 9	% 61-154							
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2400	16.0	10/14/2014	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	10/15/2014	ND	170	85.1	200	2.28	
DRO >C10-C28	<10.0	10.0	10/15/2014	ND	172	86.1	200	2.02	
Surrogate: 1-Chlorooctane	87.0	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	97.2	52.1-170	6						

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Celey D. Keene, Lab Director/Quality Manager



DIVERSIFIED FIELD SERVICES, INC. NATALIE GLADDEN P. O. BOX 5966 HOBBS NM, 88241 Fax To: (575) 393-2981

Received:	10/10/2014	Sampling Date:	10/10/2014
Reported:	10/17/2014	Sampling Type:	Soil
Project Name:	STATE VACUUM UNIT WELL #15	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: SIDEWALL #16 4' OUT (H403129-16)

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	10/16/2014	ND	1.82	90.9	2.00	6.29	
Toluene*	<0.050	0.050	10/16/2014	ND	1.70	85.1	2.00	6.51	
Ethylbenzene*	<0.050	0.050	10/16/2014	ND	1.60	80.1	2.00	6.78	
Total Xylenes*	<0.150	0.150	10/16/2014	ND	4.74	79.0	6.00	7.31	
Total BTEX	<0.300	0.300	10/16/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	101 9	61-154							
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	448	16.0	10/14/2014	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	10/15/2014	ND	178	88.8	200	2.04	
DRO >C10-C28	<10.0	10.0	10/15/2014	ND	183	91.3	200	4.55	
Surrogate: 1-Chlorooctane	92.7	47.2-15	7						
Surrogate: 1-Chlorooctadecane	101 9	6 52.1-17	6						

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Celey D. Keene, Lab Director/Quality Manager



DIVERSIFIED FIELD SERVICES, INC. NATALIE GLADDEN P. O. BOX 5966 HOBBS NM, 88241 Fax To: (575) 393-2981

Received:	10/10/2014	Sampling Date:	10/10/2014
Reported:	10/17/2014	Sampling Type:	Soil
Project Name:	STATE VACUUM UNIT WELL #15	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: SIDEWALL #17 16' OUT (H403129-17)

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	10/16/2014	ND	1.82	90.9	2.00	6.29	
Toluene*	<0.050	0.050	10/16/2014	ND	1.70	85.1	2.00	6.51	
Ethylbenzene*	<0.050	0.050	10/16/2014	ND	1.60	80.1	2.00	6.78	
Total Xylenes*	<0.150	0.150	10/16/2014	ND	4.74	79.0	6.00	7.31	
Total BTEX	<0.300	0.300	10/16/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	102 9	% 61-154							
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	10/14/2014	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	10/15/2014	ND	178	88.8	200	2.04	
DRO >C10-C28	<10.0	10.0	10/15/2014	ND	183	91.3	200	4.55	
Surrogate: 1-Chlorooctane	85.0	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	93.6	% 52.1-17	6						

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Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

- ND
 Analyte NOT DETECTED at or above the reporting limit

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

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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 claims 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 Loratories.

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 19 of 21

Company Name: D	(5/5) 393-2326 FAX (5/3) 333-2410		BILL TO		ANALYSIS REQUEST	
Project Manager:	ungunung Nata	tale Gladden P.O.	#			
Address:			company: Burgundy			
City:	State:	Zip: Attu	Attn: Ben Taylor			
Phone #:	Fax #:	Ado	Address:			
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PLEASE NOTE: Liability and Dami analyses. All claims including those	PLEASE NOTE: Liability and Damages. Cardinals liability and client's exclusive remedy for any claim arising whether based in contract of tort, shall be limited to the amount paid by the client of the applicable analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal which 30 days after completion of the applicable analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal which 30 days after completion of the applicable analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardina which 30 days after completion of the applicable and the share of the share	If or any claim arising whether based in contract or tort, shall be deemed waived unless made in writing and received by	rt shall be limited to the amount paid by the client for the sived by Cardinal within 30 days after completion of the a buse or loss of profils incurred by client, its subsidiaries	by the client for the completion of the applicable lent, its subsidiaries,		
service. In no event shall Cardinal affiliates or successors arising out of the service of the s	service. In no event shall cardinal be liable for incidental or consequential damages, including winuou, incurrent, and a statistic or structure terrunder by Cardinal, regardless of whether such clark minines or successors arising out for related to the performance of service hereinder by Cardinal, regardless of whether such clark minines or successors arising out for related to the performance of service hereinder by Cardinal, regardless of whether such clark minines or successors arising out for related to the performance of service hereinder by Cardinal, regardless of whether such clark minines or successors arising out for related to the performance of service hereinder by Cardinal, regardless of whether such clark minines of service hereinder by Cardinal, regardless of the service hereinder by Cardina, regardless of the service hereinder by Cardina, reg	r by Cardinal, regardless of whether such claim is bas	sed boon any of the above stated reasons or otherwise Phone Res	Phone Result: Yes No	Add'l Phone #: Add'l Fax #:	
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Page 20 of 21

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Delivered By: (Circle One)	Relinquished By:	antilates or successors arising out of or related Relinquished By:	PLEASE NOTE: Liability and Damages. Cardinal's liability and clent's exclusive remedy for any claim arising whether based in contract or lort, shall be limited to the amount paid by the client for the applicable 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 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 consecuential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred reasons or otherwise.	1151000	. [SIDE	THEN ZOIG AI	-		11 SIDEWIAL #11		Lab I.D. Sa	FOR LAB USE ONLY	Sampler Name:	Project Location:	Project Name:	Project #:	Phone #:	City:	Address:	Project Manager: 304	Company Name: Rolro	(575) 393-2
Rus - Other: 5,7 °	Date:	God of or related to the performance of services hereunder by Gote: Date: Time: Time:	nal's liability and client's exclusive remedy for a ence and any other cause whatsoever shall be incidental or consequental damages, including	which it it is our	WHILE HILD HOW	wei #18 12 out	ALL #14,8' OUT	3	N,	11, #11, 34 out		Sample I.D.					Project Owner:	Fax #:	State:		Jaylor / Na	lindut	(575) 393-2326 FAX (575) 393-2476
Sample Condition Cool Intact	Received By:	of services hereunder by Cardinal regardless of whether such claims to Date: Date: Date: Time:	any claim arising whether based in contract o deemed waived unless made in writing and t g without limitation, business interruptions, lo				2	2		R1 1 1	# CC GRC WAS SOII OIL SLU	DGE	P. MATRIX	L	P	S		A	Zip: A	0	Natalie (Hadder P.O. #	-	H
(Initials)	2 m 2		arising whether based in contract or tort, shall be limited to the amount paid by the client for the waived unless made in writing and received by Cardinal within 30rdays after completion limitation, business interruptions, loss of use, or loss of profits incurred stated reasons or otherwise.	~						10-10-14 CLO		HER : D/BASE: / COOL HER :	PRESERV. SAMPLING	1	Phone #:	State: Zip:	City:	Address:	Attn: Ben Tauls	Company: Burgund	.0. #	BILL TO	
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† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326



October 27, 2014

NATALIE GLADDEN DIVERSIFIED FIELD SERVICES, INC. P. O. BOX 5966 HOBBS, NM 88241

RE: STATE VACUUM UNIT WELL #15

Enclosed are the results of analyses for samples received by the laboratory on 10/21/14 16:10.

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 www.tceq.texas.gov/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.

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



DIVERSIFIED FIELD SERVICES, INC. NATALIE GLADDEN P. O. BOX 5966 HOBBS NM, 88241 Fax To: (575) 393-2981

Received:	10/21/2014	Sampling Date:	10/10/2014
Reported:	10/27/2014	Sampling Type:	Soil
Project Name:	STATE VACUUM UNIT WELL #15	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SW. 12 @ 14' OUT (H403239-01)

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	10/22/2014	ND	1.88	94.1	2.00	3.68	
Toluene*	<0.050	0.050	10/22/2014	ND	1.88	93.8	2.00	3.96	
Ethylbenzene*	<0.050	0.050	10/22/2014	ND	1.88	94.1	2.00	4.16	
Total Xylenes*	<0.150	0.150	10/22/2014	ND	5.50	91.7	6.00	4.24	
Total BTEX	<0.300	0.300	10/22/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 %	61-154							
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/22/2014	ND	400	100	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	10/22/2014	ND	203	101	200	1.94	
DRO >C10-C28	<10.0	10.0	10/22/2014	ND	205	102	200	2.91	
Surrogate: 1-Chlorooctane	114 %	6 47.2-157	,						
Surrogate: 1-Chlorooctadecane	125 %	6 52.1-176	í						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



DIVERSIFIED FIELD SERVICES, INC. NATALIE GLADDEN P. O. BOX 5966 HOBBS NM, 88241 Fax To: (575) 393-2981

Received:	10/21/2014	Sampling Date:	10/10/2014
Reported:	10/27/2014	Sampling Type:	Soil
Project Name:	STATE VACUUM UNIT WELL #15	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SW. 15 @ 4' OUT (H403239-02)

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	10/22/2014	ND	1.88	94.1	2.00	3.68	
Toluene*	<0.050	0.050	10/22/2014	ND	1.88	93.8	2.00	3.96	
Ethylbenzene*	<0.050	0.050	10/22/2014	ND	1.88	94.1	2.00	4.16	
Total Xylenes*	<0.150	0.150	10/22/2014	ND	5.50	91.7	6.00	4.24	
Total BTEX	<0.300	0.300	10/22/2014	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 %	61-154							
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/22/2014	ND	400	100	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	10/22/2014	ND	203	101	200	1.94	
DRO >C10-C28	<10.0	10.0	10/22/2014	ND	205	102	200	2.91	
Surrogate: 1-Chlorooctane	119 %	6 47.2-15	7						
Surrogate: 1-Chlorooctadecane	129 %	52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

Celez 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

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Project Manager: Company Name: H-107239 SW City: Project Location: Store Vocuum Well unit #15 Project Name: Project #: Phone #: Address: Sampler Name: FOR LAB USE ONLY Lab I.D. **Relinquished By** Relinquished B nalyses. All claims ice. In no event shall Car 101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476 T Ben Tenflor NioARI Sample I.D. E Sin USUBBEC Fax #: Project Owner: State: 000 ę Time: Date 21-14 Zip (G)RAB OR (C)OMP 240 Received By: CONTAINERS GROUNDWATER ived B WASTEWATER MATRIX SOIL OIL DUE DUGUE SLUDGE P.O. #: company: Burgund city: Attn: 15en State: Phone #: Address: OTHER Fax #: ACID/BASE PRESERV of use, or loss of profits ed by Cardinal within 30 days after ICE / COOL BILL TO CHECKED BY: 1007 OTHER Zip 10-10-14 1:50 SAMPLING DATE 1Q4 by client, its subsidiaries, Phone Result: Fax Result: TIME Naladene diversifiedtsi.com ecesare diversitied is ... com by the cash Sin KDons@ diversitied to icom ion of the applicable ORIDES NIJ H Ves No Add'l Phone R TEX ANALYSIS REQUEST Lush Sin

Sampler - UPS - Bus - Other: Delivered By: (Circle One)

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 3934326

11.80

Sample Condition Cool Intact Yes Yes

S chanced

as per lutica

Allezbitzlet

Page 5 of 5

DIVERSIFIED FIELD SERVICES, INC.

Project:	Parks	Vacuem	15
Seed and Ibs		15 25	/5016s_

. .

Date Started:	6/17/14
Date Completed:_	10/17/17

Supervisor:_____

Bamert Seed Company Inc. 1897 CR 1018 Muleshoe, TX 79347

BLM # 2 400 bulk pounds

(800) 262-9892

de la

Permit # TX00905 INV54782

Description Germ Dormant Hard Seed Origin Pure Seed Bristlegrass, Plains, "VNS" (Setaria vulpiseta) 1.00% 0.00% тx 45.11% 87.00% Dropseed, Sand, "VNS" (Sporobolus 89.00% 0,00% 20.28% 9.00% cryptandrus) Lovegrass Sand, "Bend" (Eragrostis trichodes) 21,37% 93.00% 0.00% 0.00% ТΧ Purity: 86.76% " Other Crop Seed: 0.13% Wend Seed: 2.13% Inert Matter: 10.98%

Noxious Weeds: None

Test Date: 06/2014

Net Wt 25.00 lbs

Bamert Seed Company Inc.

Muleshoe, TX 79347 (800) 262-9892 Permit # TX00905 INV54024 Hard Seed Origin Pure Seed Germ Dormant 0.00% 0.00% TX VNS" (Sporobolus Airoides) 10.11% 90.00% 5, "VNS" (Atriplex 0.00% NM 15.00% 87.07% 52.00%

2014

nent Matter: 2.79%

Other Crop Seed: 0.01% Weed Seed: 0.01%

Net Wt: 25.80 lbs

BURGUNDY OIL & GAS OF NEW MEXICO, INC.



Ben Taylor

State Vacuum Unit #15

REMEDIATION WORK PLAN

API No. 30-025-02173

Release Date: 08/28/2014

Unit I, Section 32, Township 17 South, Range 34 East

2RP - 3300

September 22, 2014

Prepared by:

Environmental Department Diversified Field Service, Inc. 206 W Snyder Hobbs, NM 88240 Phone: (575)964-8394 Fax: (575)393-8396

BURGUNDY OIL & GAS OF NEW MEXICO, INC.



Tom Oberding, PhD NM Oil Conservation District 1 1625 N. French Drive Hobbs, NM 88240

RE: Burgundy Oil & Gas State Vacuum Unit #015 - Remediation Work Plan

Mr. Oberding,

Burgundy Oil & Gas has retained Diversified Field Services, Inc. (DFSI) to address environmental issues for the site detailed herein.

The leak resulted from a produced water leak which occurred on August 28^{th} , 2014. The source of the leak was due to the line rupturing from the wellhead. A C-141 was submitted to the NMOCD on September 5, 2014 (2RP – 3300).

Site Assessment and Delineation

On September 9, 2014 DFSI personnel obtained surface and delineation samples of the leak area, which included SP1-SP7. SP1 and SP2, were delineated with use of a backhoe and the soil would not permit any further trenching, the remainder of the sample points DFSI was able to obtain samples under the required level allowed by the NMOCD.

Field samples were taken on seven sample points, along with four boreholes, each sample was tested for chlorides levels as well as TPH. The TPH samples were performed using a Mini Rae Photoionization Detector (PID). All clean field samples found under the NMOCD standards, were taken to Cardinal Lab of Hobbs to obtain confirmation samples. And the results confirmed that bottom samples of each sample point were as follows:

SP1: Samples were not taken to the lab due to high field concentration levels.

SP2: 8' - 1300 mg/kg chlorides, <10 mg/kg TPH 8015M

SP3: 5' - 704 mg/kg chlorides, <10 mg/kg TPH 8015M

SP4: 7' – 944 mg/kg chlorides, <10 mg/kg TPH 8015M

SP5: 7' – 992 mg/kg chlorides, <10 mg/kg TPH 8015M

SP6: 7' – 816 mg/kg chlorides, <10 mg/kg TPH 8015M

SP7: 9' – 704 mg/kg chlorides, <10 mg/kg TPH 8015M

DFSI has conducted a groundwater study of the area and has determined that according to the New Mexico Office of the State Engineer, no groundwater was found for this area. Therefore, no eminent danger of groundwater impact or threat to life is anticipated.

Conclusion

Option 1

Excavate the total area of 3,823 sq. ft. of impacted soil to 4', haul the contaminated soil to an approved NMOCD Disposal, line with a 20 mil liner, backfill with imported soil and reseed the entire area with a native vegetation mixture as per the BLM's guidelines for returning the site to its natural state.

Option 2

Excavate the total area of 3,823 sq. ft. of impacted soil to 7'bgs with the exception of SP3 which would be excavated to 5'bgs. The contaminated soil would be then hauled to an approved NMOCD Disposal, the excavated area would be backfilled with imported soil and the site would be reseeded with a native vegetation mixture as per the BLM's guidelines for returning the site to its natural state.

Sidewall samples will be taken during the excavation procedure to ensure that all of contaminates have been remediated. These samples will also be taken to an approved lab for confirmation before backfilling will take place.

Following the approval of one of the above plans, either Option 1 or Option 2 above and after the remediation has taken place, DFSI will submit all proper closure documentation to the NMOCD in accordance to the State and Federal Guidelines set forth.

Please feel free to contact me with any questions concerning this remediation plan request.

Sincerely,

Jalie Gladden

Natalie Gladden Environmental Director Diversified Field Service, Inc. 206 West Snyder Hobbs, NM 88240 Office: (575) 964-8394 Mobile: (575) 602-1786 Fax: (575) 964-8396 Email: ngladden@diversifiedfsi.com Attachments: Initial Form C-141 Site/Sample Map Sample Data Lab Analytical Data

Site Diagram



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.

Release Notification and Corrective Action OPERATOR Initial Report Final Report Name of Company: Burgundy Oil and Gas of New Mexico Contact: Ben Taylor Final Report Address: 401 W Texas Suite 1003 Midland, TX 79701 Telephone No. 432-684-4033 Facility Name: State Vacuum Unit #15 Facility Type: WIW Surface Owner State Mineral Owner State API No. 30-025-02173 API No. 30-025-02173

Unit Letter Section	Township	Range	Feet from the	North/South Line	Feet from	East/West Line	County
I 32	17S	34E	1980	South	680	East	Lea

Latitude: 32.7895034299485 Longitude -103.576372754491

NATURE OF RELEASE

Type of Release: Produced water	Volume of Release 3bbls	Volume Re	ecovered 3bbls			
Source of Release: Flowline	Date and Hour of Occurrence	Date and H	lour of Discovery			
	08-28-14 14:00	08-28-14 1	4:00			
Was Immediate Notice Given?	If YES, To Whom?					
🛛 Yes 🗌 No 🗌 Not Required	NMOCD M Whitaker					
Dr. Whom? Don Toylor	Date and Hour: 08/28/14 14:00					
By Whom? Ben Taylor Was a Watercourse Reached?	If YES, Volume Impacting the Wa	tanaannaa				
\square Yes \square No	If 1 ES, volume impacting the wa	litercourse.				
If a Watercourse was Impacted, Describe Fully.*						
NA						
Describe Cause of Problem and Remedial Action Taken.* A rupture occur	red in an injection line next to the we	ell. DFSI was	retained to repair the line and			
remediate the site.	-		-			
Describe Area Affected and Cleanup Action Taken. Leak traversed 387 ft	south of the well and ran 4ft wide in	pasture area.	DFSI has been retained to			
fully remediate the site according to NMOCD guidelines.		-				
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 no	otifications and perform corrective ac	ctions for relea	ases which 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 remediate						
or the environment. In addition, NMOCD acceptance of a C-141 report do	bes not relieve the operator of respon	sibility for co	mpliance with any other			
federal, state, or local laws and/or regulations.						
	OIL CONSER	VATION I	DIVISION			
Signature: Ben Taylor						
	Approved by Environmental Speciali	st:				
Printed Name: Ben Taylor	Approved by Environmental Specialist.					
Title: Field Foreman	Approval Date:	Expiration D	ate:			
E-mail Address: btaylor.bogi@att.net	Conditions of Approval:		Attached			
Date: 09/02/2014 Phone: 432—557-2684						

* Attach Additional Sheets If Necessary

Diversified Environmental Services

Company Name:	BURGUNDY	SP Date:	9/9/2014
Location Name:	STATE VACUUM WELL #15	Rel Date:	8/28/2014

SP1	CHL	ТРН	SP2	CHL	ТРН	SP3	CHL	ТРН	SP4	CHL	ТРН	SP5	CHL	ТРН
SURFACE	4,615	7.3	SURFACE	7,497	2.4	SURFACE	9,497	2.4	SURFACE	10,871	2.3	SURFACE	13,245	1.9
1'	3,824	2.1	1'	4,523	4	1'	3,873	9.5	1'	1,199	5	1'	5,123	4.9
2'	2224	20.6	2'	1,724	5.2	2'	1,899	2.8	2'	1,824	4.3	2'	4,448	5
3'	1899	9	3'	1,599	2.7	3'	1,399	4.3	3'	1,549	4.2	3'	2124	1.6
4'	2623	8.8	4'	1348	14.6	4'	1.499	1.3	4'	1399	1.8	4'	1499	1.69
5'	3548	9.2	5'	1024	2.2	5'	749	1.2	5'	1149	2	5'	1624	2.1
6'	3548	5.6	6'	1224	8.6	5'	704	<10	6'	1074	1.9	6'	1099	2.8
7'	4248	2.7	7'	1874	10.7	7'			7'	749	2.3	7'	774	2
8'	3523	5.8	7'	1300	<10	8'			7'	944	<10	7'	992	<10
9'	3823	1.2	9'			9'			9'			9'		
10'	1424	1	10'			10'			10'			10'		
11'	1399	0.2	11'			11'			11'			11'		
12'	3099	0.3	12'			12'			12'			12'		
13'	3024	0.8	13'			13'			13'			13'		
14'	3298	1	14'			14'			14'			14'		
15'	2224	0.6	15'			15'			15'			15'		
16'	Backhoe re	efusal	16'			16'			16'			16'		

Lab Confirmation Sample
Field Sampling
Needs Delineation and confirmation samples

Page 1

SP6	CHL	ТРН	SP7	CHL	ТРН	SP8	CHL	TPH	SP9	CHL	ТРН	SP10	CHL	TPH
SURFACE	14,995	2.4	SURFACE	12,621	1.8									
1'	3,498	28.2	1'	1,874	3.4									
2'	2,624	10.7	2'	2,499	2									
3'	3,248	10.1	3'	2,099	1.5									
4'	2624	3.8	4'	1,649	1.2									
5'	2499	2.9	5'	1524	1.5									
6'	1124	2	6'	1474	0.8									
7'	674	0.5	7'	1574	2									
7'	816	<10	8'	1224	1.9									
9'			9'	624	1.8									
10'			<mark>9'</mark>	704	<10									
11'			11'											
12'			12'											
13'			13'											
14'			14'											
15'			15'											
16'			16'											

Lab Confirmation Sample
Field Sampling
Needs Delineation and confirmation samples

Page 2



September 18, 2014

NATALIE GLADDEN DIVERSIFIED FIELD SERVICES, INC. P. O. BOX 5966 HOBBS, NM 88241

RE: STATE VACUUM UNIT WELL #15

Enclosed are the results of analyses for samples received by the laboratory on 09/11/14 15:30.

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 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. Keine

Celey D. Keene Lab Director/Quality Manager



DIVERSIFIED FIELD SERVICES, INC. NATALIE GLADDEN P. O. BOX 5966 HOBBS NM, 88241 Fax To: (575) 393-2981

Received:	09/11/2014	Sampling Date:	09/11/2014
Reported:	09/18/2014	Sampling Type:	Soil
Project Name:	STATE VACUUM UNIT WELL #15	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: SP 2 @ 8' (H402839-01)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1300	16.0	09/12/2014	ND	400	100	400	0.00	
TPH 8015M	mg	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	09/13/2014	ND	189	94.7	200	0.886	
DRO >C10-C28	<10.0	10.0	09/13/2014	ND	220	110	200	0.526	
Surrogate: 1-Chlorooctane	99.8	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	104	63.6-15	4						

Sample ID: SP 3 @ 5' (H402839-02)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	704	16.0	09/12/2014	ND	400	100	400	0.00	
TPH 8015M mg/kg		/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	09/13/2014	ND	189	94.7	200	0.886	
DRO >C10-C28	<10.0	10.0	09/13/2014	ND	220	110	200	0.526	
Surrogate: 1-Chlorooctane	98.9	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	106	% 63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



DIVERSIFIED FIELD SERVICES, INC. NATALIE GLADDEN P. O. BOX 5966 HOBBS NM, 88241 Fax To: (575) 393-2981

Received:	09/11/2014	Sampling Date:	09/11/2014
Reported:	09/18/2014	Sampling Type:	Soil
Project Name:	STATE VACUUM UNIT WELL #15	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: SP 4 @ 7' (H402839-03)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	944	16.0	09/15/2014	ND	416	104	400	8.00	
TPH 8015M	mg,	′kg	Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/13/2014	ND	189	94.7	200	0.886	
DRO >C10-C28	<10.0	10.0	09/13/2014	ND	220	110	200	0.526	
Surrogate: 1-Chlorooctane	104	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	117 9	63.6-15	4						

Sample ID: SP 5 @ 7' (H402839-04)

Chloride, SM4500Cl-B	mg/kg		Analyze	Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	992	16.0	09/16/2014	ND	416	104	400	8.00	
TPH 8015M	mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/13/2014	ND	189	94.7	200	0.886	
DRO >C10-C28	<10.0	10.0	09/13/2014	ND	220	110	200	0.526	
Surrogate: 1-Chlorooctane	109	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	123	% 63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



DIVERSIFIED FIELD SERVICES, INC. NATALIE GLADDEN P. O. BOX 5966 HOBBS NM, 88241 Fax To: (575) 393-2981

Received:	09/11/2014	Sampling Date:	09/11/2014
Reported:	09/18/2014	Sampling Type:	Soil
Project Name:	STATE VACUUM UNIT WELL #15	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: SP 6 @ 7' (H402839-05)

Chloride, SM4500Cl-B	mg/kg		Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	816 16.0		09/18/2014	ND	400	100	400	3.92	
TPH 8015M	mg/kg Analyzed By:			d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/13/2014	ND	189	94.7	200	0.886	
DRO >C10-C28	<10.0	10.0	09/13/2014	ND	220	110	200	0.526	
Surrogate: 1-Chlorooctane	110	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	ecane 127 % 63.6-1		4						

Sample ID: SP 7 @ 9' (H402839-06)

Chloride, SM4500Cl-B	mg/kg		Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	704	16.0	09/18/2014	ND	400	100	400	3.92	
TPH 8015M	mg	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	09/13/2014	ND	189	94.7	200	0.886	
DRO >C10-C28	<10.0	10.0	09/13/2014	ND	220 110		200	0.526	
Surrogate: 1-Chlorooctane	108	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane 124 % 63.6-15		4							

Cardinal Laboratories

*=Accredited Analyte

Celeg 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

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476		
Company Name: Burg und u	BILL TO	ANALYSIS REQUEST
Project Manager: NATALLE QLADDEN	P.O. #Diversified	
Address:	company: Surgurdy	
City: State: Zip:	Attn: Ber Taylor	
Phone #: Fax #:	Address:	
Project #: Project Owner:	city:	
Project Name:	State: Zip:	
Project Location: State Vacuum Unit Well +	#15 Phone #:	
Sampler Name: Folward Cloatred	Fax#:	
	MATRIX PRESERV. SAMPLING	
Lab I.D. Sample I.D. OR (C)OMP. AINERS DWATER	SE: DOL :	
# CONT GROUN	WASTE SOIL OIL SLUDG OTHEF ACID/B ICE / C OTHEF DATE	
12 8 02 A	/ q-11-14	
2 50 5 0 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
50.50	9:15	
5 50, 7 @ 4'	1 1 1:30	
Liability and Damages. Cardinal's liability and client's exclusive re including those for negligence and any other cause whatsoeve which all Cardinal be liable for incidental or consequental damages	her based in contract ends shall be limited to the emount paid by the ellent tor the s made in writing and received by Cardinal within 30 days after could be applicable siness interruptions loss of use, closs of portis incurred by client, its subsidiaries, which is used a stand word the above stand reasons or otherwise.	
Relinquished/By: O Date: -11-14 Received By	Phone Result: Fax Result: REMARKS:	□ Yes □ No Add'I Phone #: □ Yes □ No Add'I Fax #:
Relinquished By: Date: Received By:	Can Print	Ngladden@diversifiedfsi.com
Delivered By: (Circle One)	CHECKED BY:	ecesarco@diversitiedtsi.com
5	Cool Intact (Initials) mburton 2	diversified fsi com
+ Cardinal cannot account vorbal channes Please fax written	Please fax written changes to (575) 393-2326	

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Laboratories

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.

Santa Fe, NM 87505												
Release Notification and Corrective Action												
OPERATOR								Г] Initia	al Report		Final Report
Name of Company: Burgundy Oil and Gas of New Mexico Contac							Contact: Ben Taylor					
Address: 401 W Texas Suite 1003 Midland, TX 79701 Telephone No.								33				
Facility Nat	ne: State V	/acuum Unit	: #15			Facility Typ			_			
Surface Ow	ner State			Mineral C)wner S	tate			API No	. 30-025-0	2173	
LOCATION OF RELEASE												
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from	Enct/W	West Line County			
I I	1 0		South	South Line	680	East	Lea					
*	54	175	3412	1,000	Journ	n 680 East		Last		LNG		
Type of Release: Produced water Source of Release: Flowline Was Immediate Notice Given?						Volume of Date and H 08-28-14 I If YES, To	of Release 3bblsVolume Recovered 0bblsd Hour of OccurrenceDate and Hour of Discovery4 14:0008-28-14 14:00To Whom?					
Yes No Not Required NMOCD M Whitaker By Whom? Ben Taylor Date and Hour: 08/28/14 14:00								•				
By Whom? Ben Taylor Was a Watercourse Reached?						If YES, Volume Impacting the Watercourse.						
Yes X No												
If a Watercourse was Impacted, Describe Fully.* NA												
		em and Reme injection line		n Taken.* e well. DFSI was	retained	to remediate	the site.					
		and Cleanup A remediated to			r Release	es and Spills.	A Closure report	has been	submitted	d with this a	ttached	Final C-141
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												

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

Signature: Br Jugh	OIL CONSERVATION DIVISION					
Printed Name: Ben Taylor	Approved by Environmental Specialist:					
Title: Field Foreman	Approval Date:	Expiration Date:				
E-mail Address: btaylor.bogi@att.net	Conditions of Approval:	Attached				
Date 11/20/2014 Phone: 432-557-2684						

* Attach Additional Sheets If Necessary