
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

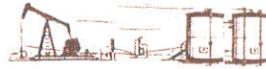
2RP - 3300

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 28th, 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 contaminants 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,



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

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

State of New Mexico
Energy Minerals and Natural Resources

Form C-141
Revised August 8, 2011

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

Initial Report Final Report

Name of Company: Burgundy Oil and Gas of New Mexico	Contact: Ben Taylor
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
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LOCATION OF RELEASE

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 Recovered 3bbls
Source of Release: Flowline	Date and Hour of Occurrence 08-28-14 14:00	Date and Hour of Discovery 08-28-14 14:00
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? NMOCD M Whitaker	
By Whom? Ben Taylor	Date and Hour: 08/28/14 14:00	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*
NA

Describe Cause of Problem and Remedial Action Taken.* A rupture occurred in a injection line next to the well.

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 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.

		<u>OIL CONSERVATION DIVISION</u>	
Signature: <i>Ben Taylor</i>		Approved by Environmental Specialist:	
Printed Name: Ben Taylor			
Title: Field Foreman		Approval Date:	Expiration Date:
E-mail Address: btaylor.bogi@att.net		Conditions of Approval:	
Date: 08/05/14 Phone: 432-557-2684		Attached <input type="checkbox"/>	

* Attach Additional Sheets If Necessary

Site Diagram

Burgundy, State Vacuum Well 15
Sec. 32 T17S R31E
Lea County, NM
Drafted By: Lance Crenshaw, 9-3-14

0 0.00475 0.0095 0.019 Miles

Legend

★ Source

Misc_points

Types

- Electrical Box
- Power Pole
- Headers
- Injection
- Pumpjacks
- Tanks
- Valves
- Other
- sample_pts

Pipeline

Type

- Above Ground Line
- Buried Line

Spill

<all other values>

Spill_Media

- Oil and Produced H2O
- Oil
- Other
- Produced Water



Source: Esri, DigitalGlobe, GeoEye, IGN, swisstopo, and the GIS User Community

Lance Crenshaw
GIS Technician

Soil Remediation and Ground Water Remediation
Environmental Assessments
Regulatory Compliance



Environmental **DFSI** Services

Office: 575-964-8394
Fax: 575-964-8396

Cell: 575-441-2359
Email: lcrenshaw@diversifiedfsi.com

Diversified Environmental Services

Company Name: BURGUNDY
 Location Name: STATE VACUUM WELL #15

SP Date: 9/9/2014
 Rel Date: 8/28/2014

SP1	CHL	TPH	SP2	CHL	TPH	SP3	CHL	TPH	SP4	CHL	TPH	SP5	CHL	TPH
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 refusal		16'			16'			16'			16'		

	Lab Confirmation Sample
	Field Sampling
	Needs Delineation and confirmation samples

Diversified Environmental Services

SP6	CHL	TPH	SP7	CHL	TPH	SP8	CHL	TPH	SP9	CHL	TPH	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'			9'	704	<10									
11'			11'											
12'			12'											
13'			13'											
14'			14'											
15'			15'											
16'			16'											

	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 accredited 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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, flowing "C" and "K".

Celey D. Keene
Lab Director/Quality Manager

Analytical Results For:

 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/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	
<i>Surrogate: 1-Chlorooctane</i>	<i>99.8 %</i>	<i>65.2-140</i>							
<i>Surrogate: 1-Chlorooctadecane</i>	<i>104 %</i>	<i>63.6-154</i>							

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		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	
<i>Surrogate: 1-Chlorooctane</i>	<i>98.9 %</i>	<i>65.2-140</i>							
<i>Surrogate: 1-Chlorooctadecane</i>	<i>106 %</i>	<i>63.6-154</i>							

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 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, SM4500CI-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	
<i>Surrogate: 1-Chlorooctane</i>		<i>104 %</i>	<i>65.2-140</i>						
<i>Surrogate: 1-Chlorooctadecane</i>		<i>117 %</i>	<i>63.6-154</i>						

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

Chloride, SM4500CI-B		mg/kg		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	
<i>Surrogate: 1-Chlorooctane</i>		<i>109 %</i>	<i>65.2-140</i>						
<i>Surrogate: 1-Chlorooctadecane</i>		<i>123 %</i>	<i>63.6-154</i>						

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 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, SM4500CI-B		mg/kg		Analyzed 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: 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	
<i>Surrogate: 1-Chlorooctane</i>		<i>110 %</i>	<i>65.2-140</i>						
<i>Surrogate: 1-Chlorooctadecane</i>		<i>127 %</i>	<i>63.6-154</i>						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	704	16.0	09/18/2014	ND	400	100	400	3.92	
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	
<i>Surrogate: 1-Chlorooctane</i>		<i>108 %</i>	<i>65.2-140</i>						
<i>Surrogate: 1-Chlorooctadecane</i>		<i>124 %</i>	<i>63.6-154</i>						

Cardinal Laboratories

*=Accredited Analyte

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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



Celey D. Keene, Lab Director/Quality Manager

