



Cimarex Red Hills SWD #1

REMEDIATION WORK PLAN

Release Date: 1/08/2015

UL/M Sec 28, T25 south, R33 east, Lea county NM

API # 30-025-35598

February 18, 2015

Prepared by:

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

Tomas Oberding, PhD
1625 N. French Dr.
Hobbs, NM 88240

RE: Cimarex, Red Hills SWD #1 – Remediation Work Plan
UL/M, Section 28, T25S, R33E
API No. 30-025-35598

Dr. Oberding,

Cimarex has retained Diversified Field Service, Inc. (DFSI) to address environmental issues for the site detailed herein.

The site is located south of highway 128 NM, in Lea County. The leak site resulted from a swedge failure. The impacted area is inside an unlined firewall of the battery. Approx. 140 bbls of produced water was released, and 120 bbls recovered. A C-141 was submitted to the NMOCD on January 9th, 2015.

Site Assessment and Delineation

On February 3, 2015 DFSI personnel delineated 8 sample points of the leak area. Each sample was tested for chlorides levels as well as TPH. The TPH samples were performed using a Mini Rae Photoionization Detector (PID). The results are attached.

DFSI has conducted a groundwater study of the area and has determined that according to the New Mexico Office of the State Engineer the average depth to groundwater for this area is 158 foot below ground surface. Therefore, no eminent danger of groundwater impact or threat to life is anticipated.

Conclusion

After careful review DFSI on behalf of Cimarex would like to propose the following:

Remove 6" to 8" bgs of the contaminated soil inside the bermed facility. Haul all contaminated material to an approved NM state disposal. New caliche will be used to backfill the excavated area. Because there is no eminent danger of groundwater impact

or threat to life is anticipated DFSI, on behalf of Cimarex proposes further delineation or removal of soil will occur at the time the facility is abandoned.

Following the approval of the above plan, DFSI will submit all proper closure documentation to the NMOCD and BLM 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,

Michael Burton
Environmental Operations Director
Diversified Field Service, Inc.
206 West Snyder
Hobbs, NM 88240
Office: (575)964-8394
Mobile: (575)390-5454
Fax: (575)964-8396
Email: Mburton@diversifiedfsi.com

cc

Attachments: Initial Form C-141
Site/Sample Map
Sample Data

Site Diagram

Cimarex, Red Hills SWD #1
Sec. 28 T25S R33M
Lea County NM
Drafted By: Lance Crenshaw, 2-19-14

0 0.0025 0.005 0.01 Miles

Spill Area:
2,881 sq. ft.

Legend

Misc_points

Types

- ⚡ Electrical Box
- ⚡ Power Pole
- ◆ Headers
- Injection
- ⬡ Pumpjacks
- Tanks
- Valves
- ⬡ Other
- ▲ sample_pts
- ★ Source

Pipeline

Type

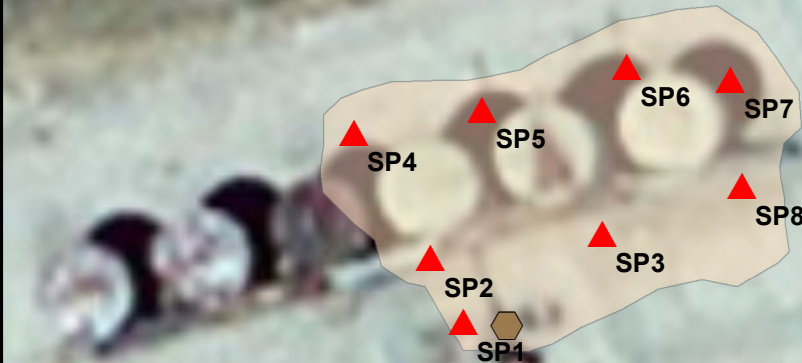
- Above Ground Line
- - - Buried Line

Spill

- <all other values>

Spill_Media

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



Lance Crenshaw
GIS Technician

Soil Remediation and Ground Water Remediation
Environmental Assessments
Regulatory Compliance



Environmental

DFS

Services

Office: 575-964-8394

Fax: 575-964-8396

Cell: 575-441-2359

Email: lcrenshaw@diversifiedfsi.com

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

Diversified Environmental Services

Company Name: cimarex
Location Name: red hills swd #1

SP Date: 2/4/2015
Rel Date: _____

SP1	CHL	PID
surf	874	386.9
1	5798	416.3
2	6647	94.9
3	6772	34.8
4	4748	12.9
5	4773	22.5
6	4998	13.8
7	4623	45.2
8	5448	61.3
9	3998	45.3
10	3623	99.7
11	2674	369.2
12	3174	260.1
13	3423	184.2
14	3298	124.6
15	3248	144.6
16	3298	109.4

SP2	CHL	PID
surf	2799	575.3
1	3373	70.9
2	3673	74.5
3	2999	110.7
4	4623	101.3
5	3698	14.5
6	3673	29.4
7	6098	5.1
8	4673	101.5
9	4623	9.5
10	4848	15.2
11	4448	22.5
12	4373	15.4
13	3873	40.3
14	3773	45.1
15	3598	10.5
16	3074	7.1

SP3	CHL	PID
surf	5598	360.4
1	6847	268.3
2	7347	180.5
3	4823	81.3
4	5748	79.3
5	1824	75.1
6	2799	69.3
7	2324	78.1
8	3573	64.1
9	1899	81.3
10	1974	83.7
11	1999	145.6
12	2624	182.4
13	4098	73.5
14	auger refusal	

SP4	CHL	PID
surf	799	75.4
1	1999	0
2	1749	0
3	4374	0
4	1474	0
5	1649	0
6	1899	0
7	3149	0
8	3224	0
9	3748	0
10	auger refusal	

SP5	CHL	PID
surf	1024	122
1	1749	52
2	3049	22
3	3823	5.4
4	749	0
5	1399	0
6	1499	0
7	2074	0.7
8	1624	0.9
9	3149	1.7
10	1274	1.5
11	1199	0.2
12	1274	0.1
13	1724	1.8
14	auger refusal	

	Lab Confirmation Sample
	Field Sampling
	Needs Delineation and confirmation samples

Diversified Environmental Services

SP6	CHL	PID	SP7	CHL	PID	SP8	CHL	PID	SP9	CHL	PID	SP10	CHL	PID
surf	499	39.8	surf	1699	0.1	surf	1699	20.5						
1	3099	20.6	1	5948	0	1	5948	0						
2	3298	3.9	2	3099	0	2	3099	0						
3	5123	1.4	3	2374	0	3	2374	0						
4	1274	6.7	4	2924	0	4	2924	0						
5	1274	0.1	5	1149	0	5	1149	0						
6	1199	0.8	6	1024	0	6	1024	0						
7	824	0.1	7	524	0	7	524	0						
8	824	0.5	8	1799	0	8	1799	0						
9	1174	26.3	9	1724	0	9	1499	0						
10	1324	0.3	10	1499	0	10	1724	0						
11	1449	0.6	11	1924	0	11	1499	0						
12	1499	11.1	12	1424	0	12	1924	0						
13	1674	0.4	13	1499	0	13	1424	0						
14	1874	0	14	auger refusal		14	auger refusal							
15	auger refusal													

	Lab Confirmation Sample
	Field Sampling
	Needs Delineation and confirmation samples



Red Hills SWD #1

Release Date: 1/08/2015

UL/M Sec 28, T25 south, R33 east, Lea county NM

API # 30-025-35598





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 Cimarex Energy	Contact Christine Alderman
Address 600 N Marienfeld Ste 600 Midland TX	Telephone No. 432-853-7059
Facility Name Red Hills SWD #1	Facility Type SWD

Surface Owner	Mineral Owner	API No.
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
M	28	25S	33E	660	s	660	W	Lea

Latitude 32.09614 Longitude -103.58256

NATURE OF RELEASE

Type of Release produced water	Volume of Release 140 bbls	Volume Recovered 120 bbls
Source of Release tri plex pump	Date and Hour of Occurrence 01/08/2015	Date and Hour of Discovery 01/08/2015 12:00pm
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Doc Oberding/Sol Hughes	
By Whom? Christine Alderman	Date and Hour 01/09/15 2:06 pm	
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.*

Describe Cause of Problem and Remedial Action Taken.*

A swedge failed on the discharge side of the tri-plex pump. All fluids were contained in an unlined earthen berm. Approximately 140 bbls were released, and 120 bbls were recovered.

Describe Area Affected and Cleanup Action Taken.*

119' x 68' bermed containment. An environmental consultant will assess and prepare work plan.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOC 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 NMOC 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, NMOC 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: <i>Christine Alderman</i>	OIL CONSERVATION DIVISION		
Printed Name: Christine Alderman	Approved by Environmental Specialist:		
Title: ESH Supervisor	Approval Date:	Expiration Date:	
E-mail Address: calderman@cimarex.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 1-14-15 Phone: 432-853-7059			

* Attach Additional Sheets If Necessary