



Wigeon 23 Fed Com #2

REMEDIATION WORK PLAN

Release Date: 4/07/2015

UL/H Sec 23, T25 south, R26 east, Eddy county NM

API # 30-015-33684

April 21, 2015

Prepared by:

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

Mike Bratcher
Environmental Specialist
NM Oil Conservation District-Division 2
Artesia, NM 88210

RE: Cimarex, Wigeon 23 Fed Com #2 – Remediation Work Plan
UL/H, Section 23, T25S, R26E
API No. 30-015-33684

Mr. Bratcher,

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

The site is located east of White City NM, in Eddy County. The leak site resulted from a valve being open and a check valve failure. The impacted area is on the back side of the battery west into pasture. Approx. 15 bbls of produced water was released, and 1 bbl recovered. A C-141 was submitted to the NMOCD on April 17th, 2015. The C-141 is attached.

Site Assessment and Delineation

On April 21st, 2015 DFSI personnel delineated 3 sample points of the leak area. Each sample was tested for chlorides levels as well as BTEX. The BTEX samples were performed using a Mini Rae Photoionization Detector (PID). Auger refusal was attained at 4' BGS on all three points. The results are attached. On May 14th, 2015 DFSI personnel drilled the affected area in one auger hole to fully delineate the site. 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 53 + foot below ground surface. According to the BLM this area is a high potential Cave/Karst area.

Conclusion

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

Remove 4' bgs of the contaminated soil on the backside of the bermed facility. Haul all contaminated material to an approved NM state disposal. Because the spill path is narrow we will use the surrounding terrain for backfill. We will re seed using a BLM approved seed mix.

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 Jeff Robertson

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



Wigeon 23 Fed Com #2

PHOTO PAGE





Site Diagram

Cimarex, Wigeon 23 Fed Com 2
UL/H, Sec. 23 T25S R26E
Eddy County, NM
Drafted By: Lance Crenshaw, 4-21-15

0 0.005 0.01 0.02 Miles

Legend



Misc_points

Types


-  Electrical Box
-  Power Pole
-  Headers
-  Injection
-  Pumpjacks
-  Tanks
-  Valves
-  Other
-  Soil Bores
-  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, i-cubed, US
swisstopo, and the GIS User Community

5/14/2015

SP Date: 5/14/2015
Rel Date:

	Lab Confirmation Sample
	Field Sampling
	Needs Delineation and confirmation samples

4/21/2015

SP Date: 4/21/2015
Rel Date:

	Lab Confirmation Sample
	Field Sampling
	Needs Delineation and confirmation samples

May 20, 2015

CHRISTINE ALDERMAN
CIMAREX ENERGY CO.-MIDLAND
600 N. MARIENFELD ST, SUITE 600
MIDLAND, TX 79701

RE: WIGEON 23 FED COM #2

Enclosed are the results of analyses for samples received by the laboratory on 05/14/15 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/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,



Celey D. Keene
Lab Director/Quality Manager

Analytical Results For:

CIMAREX ENERGY CO.-MIDLAND
CHRISTINE ALDERMAN
600 N. MARIENFELD ST, SUITE 600
MIDLAND TX, 79701
Fax To: UNK-NOWN

Received:	05/14/2015	Sampling Date:	05/14/2015
Reported:	05/20/2015	Sampling Type:	Soil
Project Name:	WIGEON 23 FED COM #2	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

Sample ID: SB 1 @ 10' (H501247-01)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/20/2015	ND	1.77	88.3	2.00	0.512	
Toluene*	<0.050	0.050	05/20/2015	ND	1.89	94.5	2.00	0.771	
Ethylbenzene*	<0.050	0.050	05/20/2015	ND	1.79	89.7	2.00	1.34	
Total Xylenes*	<0.150	0.150	05/20/2015	ND	5.33	88.8	6.00	0.885	
Total BTEX	<0.300	0.300	05/20/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	05/15/2015	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	05/18/2015	ND	173	86.6	200	1.90	
DRO >C10-C28	<10.0	10.0	05/18/2015	ND	198	99.0	200	1.16	

Surrogate: 1-Chlorooctane 102 % 47.2-157

Surrogate: 1-Chlorooctadecane 115 % 52.1-176

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

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Cima rex		Project Manager: Mike Burton	
Address:		City:	
Phone #:		State:	
Project #:		Fax #:	
Project Name:		Project Owner:	
Project Location: W'scen 23 Fed can #2		City:	
Sampler Name: Valen Long		State:	
FOR LAB USE ONLY		Phone #:	
Lab I.D.		Fax #:	
Sample I.D.		Company: Cima rex	
Relinquished By: Valen Long		Attn: Christine Heleman	
Date: 5/14/15		Received By: [Signature]	
Time: 4:10		Time:	
Relinquished By:		Received By:	
Date:		Time:	
Time:		Time:	
Delivered By: (Circle One)		Sample Condition	
Sampler - UPS - Bus - Other:		Cool Intact	
-30		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Checked By: [Signature]		Checked By: [Signature]	
Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Phone #:	
Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Fax #:	
REMARKS:		REMARKS:	
in butene @ divers fields			

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

Form C-141
Revised August 8, 2011

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	Wigeon 23 Fed Com 2	Facility Type	Production

Surface Owner	Mineral Owner	API No.	30-015-33684
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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
H	23	25S	26E	1350	N	1300	E	Eddy

Latitude 32.1189 Longitude -104.2591

NATURE OF RELEASE

Type of Release	produced water	Volume of Release	15 bbls	Volume Recovered	1 bbl
Source of Release	flowline	Date and Hour of Occurrence	04/07/2015	Date and Hour of Discovery	04/07/2015
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	Mike Bratcher/Sol Hughes		
By Whom?	Christine Alderman	Date and Hour	4/8/2015 9:53 am		
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 4" poly line at the edge of location is connected to an 8" trunk line. The valve somehow got opened and check valve failed. There was evidence of the line being run over by a truck which may have damaged the check valve.

Describe Area Affected and Cleanup Action Taken.*

Affected an area on the back side of the battery on location. I will have consultant asses, delineate 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 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: <u>Christine Alderman</u>		<u>OIL CONSERVATION DIVISION</u>	
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: 4/17/2015 Phone: 432-853-7059			

* Attach Additional Sheets If Necessary