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COG – MONTANA 1 FEE #003

REMEDIATION PLAN

COG will excavate the spill area as depicted on the following site diagram. The area highlighted in yellow near SP1 and SP2 will be surface scraped (6 inches). The entire site will then be backfilled with clean soil.

All excavated materials will be disposed of at an NMOCD-approved disposal facility.

COG Operating Montana 1 Fee #003





Groundwater Plot

COG Montana 1 Fee #3

County
Eddy

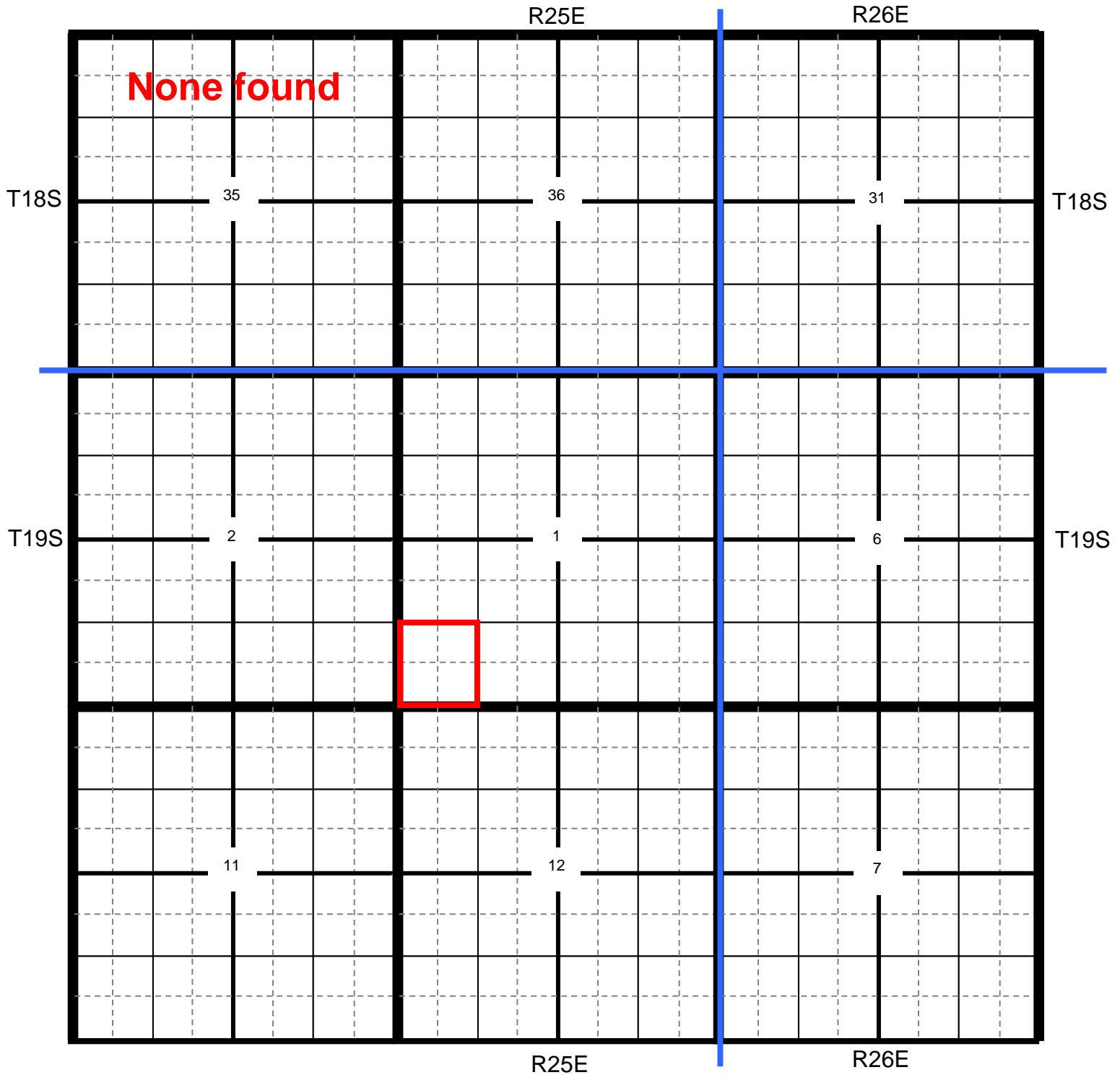
Unit Letter
M

Section
1

Township
19S

Range
25E

Trend Map 100'-125'



★ Location

● OCD

● USGS

● SEO

● All Databases

Section Quarters

COG Montana 1 Fee #3

County Eddy **Unit Letter** M **Section** 1 **Township** 19S **Range** 25E

Trend Map 100'-125"

1		2	
NW/NW None found	NE/NW	NW/NE	NE/NE
Unit Letter D	Unit Letter C	Unit Letter B	Unit Letter A
SW/NW	SE/NW	SW/NE	SE/NE
Unit Letter E	Unit Letter F	Unit Letter G	Unit Letter H
NW/SW	NE/SW	NW/SE	NE/SE
Unit Letter L	Unit Letter K	Unit Letter J	Unit Letter I
SW/SW	SE/SW	SW/SE	SE/SE
Unit Letter M	Unit Letter N	Unit Letter O	Unit Letter P
3		4	

Laboratory Analytical Results Summary
Montana 1 Fee #003

		Sample	S1 @ SURFACE	S1 @ 1'	S1 @ 2'	S1 @ 3'	S1 @ 4'	S1 @ 6'
Analyte	Method	Date	9/20/16	9/20/16	9/20/16	9/20/16	9/20/16	9/20/16
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Toluene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		0.437	<0.150	<0.150	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		0.437	<0.300	<0.300	<0.300	<0.300	<0.300
Chloride	SM4500Cl-B		48	128	48	32	<16.0	<16.0
GRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
DRO	TPH 8015M		243	<10.0	<10.0	<10.0	<10.0	<10.0

		Sample	S2 @ SURFACE	S2 @ 1'	S2 @ 2'	S2 @ 3'	S2 @ 4'	S2 @ 6'
Analyte	Method	Date	9/20/16	9/20/16	9/20/16	9/20/16	9/20/16	9/20/16
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Toluene	BTEX 8021B		0.051	<0.050	<0.050	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Total Xylenes	BTEX 8021B		0.697	<0.150	<0.150	<0.150	<0.150	<0.150
Total BTEX	BTEX 8021B		0.748	<0.300	<0.300	<0.300	<0.300	<0.300
Chloride	SM4500Cl-B		144	80	64	144	544	448
GRO	TPH 8015M		62.5	<10.0	<10.0	<10.0	<10.0	<10.0
DRO	TPH 8015M		1910	<10.0	<10.0	<10.0	<10.0	<10.0

September 27, 2016

DAKOTA NEEL

COG OPERATING

P. O. BOX 1630

ARTESIA, NM 88210

RE: MONTANA FEE

Enclosed are the results of analyses for samples received by the laboratory on 09/21/16 13:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. 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:

COG OPERATING
DAKOTA NEEL
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 09/21/2016
Reported: 09/27/2016
Project Name: MONTANA FEE
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 09/20/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: S1 - SURFACE (H602128-01)

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	09/24/2016	ND	1.82	91.1	2.00	0.992	
Toluene*	<0.050	0.050	09/24/2016	ND	1.84	92.1	2.00	0.714	
Ethylbenzene*	<0.050	0.050	09/24/2016	ND	1.77	88.4	2.00	0.904	
Total Xylenes*	0.437	0.150	09/24/2016	ND	5.32	88.7	6.00	1.05	
Total BTEX	0.437	0.300	09/24/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 118 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	09/26/2016	ND	432	108	400	3.64	

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	09/22/2016	ND	178	89.2	200	7.92	
DRO >C10-C28	243	10.0	09/22/2016	ND	176	88.0	200	8.92	

Surrogate: 1-Chlorooctane 82.8 % 35-147

Surrogate: 1-Chlorooctadecane 98.7 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

COG OPERATING
DAKOTA NEEL
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 09/21/2016
Reported: 09/27/2016
Project Name: MONTANA FEE
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 09/20/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: S1 - 1' (H602128-02)

BTX 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	09/24/2016	ND	1.82	91.1	2.00	0.992	
Toluene*	<0.050	0.050	09/24/2016	ND	1.84	92.1	2.00	0.714	
Ethylbenzene*	<0.050	0.050	09/24/2016	ND	1.77	88.4	2.00	0.904	
Total Xylenes*	<0.150	0.150	09/24/2016	ND	5.32	88.7	6.00	1.05	
Total BTX	<0.300	0.300	09/24/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.8 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	09/23/2016	ND	416	104	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	09/23/2016	ND	178	89.2	200	7.92	
DRO >C10-C28	<10.0	10.0	09/23/2016	ND	176	88.0	200	8.92	

Surrogate: 1-Chlorooctane 76.0 % 35-147

Surrogate: 1-Chlorooctadecane 89.3 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

COG OPERATING
DAKOTA NEEL
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 09/21/2016
Reported: 09/27/2016
Project Name: MONTANA FEE
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 09/20/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: S1 - 2' (H602128-03)

BTX 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	09/24/2016	ND	1.82	91.1	2.00	0.992	
Toluene*	<0.050	0.050	09/24/2016	ND	1.84	92.1	2.00	0.714	
Ethylbenzene*	<0.050	0.050	09/24/2016	ND	1.77	88.4	2.00	0.904	
Total Xylenes*	<0.150	0.150	09/24/2016	ND	5.32	88.7	6.00	1.05	
Total BTX	<0.300	0.300	09/24/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.3 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	09/26/2016	ND	416	104	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	09/23/2016	ND	178	89.2	200	7.92	
DRO >C10-C28	<10.0	10.0	09/23/2016	ND	176	88.0	200	8.92	

Surrogate: 1-Chlorooctane 73.2 % 35-147

Surrogate: 1-Chlorooctadecane 87.0 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

COG OPERATING
DAKOTA NEEL
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 09/21/2016
Reported: 09/27/2016
Project Name: MONTANA FEE
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 09/20/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: S1 - 3' (H602128-04)

BTX 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	09/24/2016	ND	2.26	113	2.00	1.18	
Toluene*	<0.050	0.050	09/24/2016	ND	2.30	115	2.00	1.47	
Ethylbenzene*	<0.050	0.050	09/24/2016	ND	2.20	110	2.00	1.07	
Total Xylenes*	<0.150	0.150	09/24/2016	ND	6.63	110	6.00	1.11	
Total BTX	<0.300	0.300	09/24/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.8 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	09/26/2016	ND	416	104	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	09/23/2016	ND	178	89.2	200	7.92	
DRO >C10-C28	<10.0	10.0	09/23/2016	ND	176	88.0	200	8.92	

Surrogate: 1-Chlorooctane 72.3 % 35-147

Surrogate: 1-Chlorooctadecane 86.3 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

COG OPERATING
DAKOTA NEEL
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 09/21/2016
Reported: 09/27/2016
Project Name: MONTANA FEE
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 09/20/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: S1 - 4' (H602128-05)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/24/2016	ND	2.26	113	2.00	1.18	
Toluene*	<0.050	0.050	09/24/2016	ND	2.30	115	2.00	1.47	
Ethylbenzene*	<0.050	0.050	09/24/2016	ND	2.20	110	2.00	1.07	
Total Xylenes*	<0.150	0.150	09/24/2016	ND	6.63	110	6.00	1.11	
Total BTEx	<0.300	0.300	09/24/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.5 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/26/2016	ND	416	104	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	09/23/2016	ND	202	101	200	5.55	
DRO >C10-C28	<10.0	10.0	09/23/2016	ND	212	106	200	4.06	

Surrogate: 1-Chlorooctane 80.0 % 35-147

Surrogate: 1-Chlorooctadecane 93.0 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

COG OPERATING
DAKOTA NEEL
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 09/21/2016
Reported: 09/27/2016
Project Name: MONTANA FEE
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 09/20/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: S1 - 6' (H602128-06)

BTX 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	09/24/2016	ND	2.26	113	2.00	1.18	
Toluene*	<0.050	0.050	09/24/2016	ND	2.30	115	2.00	1.47	
Ethylbenzene*	<0.050	0.050	09/24/2016	ND	2.20	110	2.00	1.07	
Total Xylenes*	<0.150	0.150	09/24/2016	ND	6.63	110	6.00	1.11	
Total BTX	<0.300	0.300	09/24/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.1 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	09/26/2016	ND	416	104	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	09/23/2016	ND	202	101	200	5.55	
DRO >C10-C28	<10.0	10.0	09/23/2016	ND	212	106	200	4.06	

Surrogate: 1-Chlorooctane 84.4 % 35-147

Surrogate: 1-Chlorooctadecane 102 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

COG OPERATING
DAKOTA NEEL
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 09/21/2016
Reported: 09/27/2016
Project Name: MONTANA FEE
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 09/20/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: S2 - SURFACE (H602128-07)

BTX 8021B		mg/kg	Analyzed By: MS					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/24/2016	ND	2.26	113	2.00	1.18	
Toluene*	0.051	0.050	09/24/2016	ND	2.30	115	2.00	1.47	
Ethylbenzene*	<0.050	0.050	09/24/2016	ND	2.20	110	2.00	1.07	
Total Xylenes*	0.697	0.150	09/24/2016	ND	6.63	110	6.00	1.11	
Total BTX	0.748	0.300	09/24/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 220 % 73.6-140

Chloride, SM4500CI-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	09/26/2016	ND	416	104	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	62.5	50.0	09/23/2016	ND	202	101	200	5.55	
DRO >C10-C28	1910	50.0	09/23/2016	ND	212	106	200	4.06	

Surrogate: 1-Chlorooctane 92.8 % 35-147

Surrogate: 1-Chlorooctadecane 132 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

COG OPERATING
DAKOTA NEEL
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 09/21/2016
Reported: 09/27/2016
Project Name: MONTANA FEE
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 09/20/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: S2 - 1' (H602128-08)

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	09/24/2016	ND	2.26	113	2.00	1.18	
Toluene*	<0.050	0.050	09/24/2016	ND	2.30	115	2.00	1.47	
Ethylbenzene*	<0.050	0.050	09/24/2016	ND	2.20	110	2.00	1.07	
Total Xylenes*	<0.150	0.150	09/24/2016	ND	6.63	110	6.00	1.11	
Total BTEx	<0.300	0.300	09/24/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.1 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	09/26/2016	ND	416	104	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	09/23/2016	ND	202	101	200	5.55	
DRO >C10-C28	<10.0	10.0	09/23/2016	ND	212	106	200	4.06	

Surrogate: 1-Chlorooctane 87.9 % 35-147

Surrogate: 1-Chlorooctadecane 105 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

COG OPERATING
DAKOTA NEEL
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 09/21/2016
Reported: 09/27/2016
Project Name: MONTANA FEE
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 09/20/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: S2 - 2' (H602128-09)

BTX 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	09/24/2016	ND	2.26	113	2.00	1.18	
Toluene*	<0.050	0.050	09/24/2016	ND	2.30	115	2.00	1.47	
Ethylbenzene*	<0.050	0.050	09/24/2016	ND	2.20	110	2.00	1.07	
Total Xylenes*	<0.150	0.150	09/24/2016	ND	6.63	110	6.00	1.11	
Total BTX	<0.300	0.300	09/24/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.2 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	09/26/2016	ND	416	104	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	09/23/2016	ND	202	101	200	5.55	
DRO >C10-C28	<10.0	10.0	09/23/2016	ND	212	106	200	4.06	

Surrogate: 1-Chlorooctane 85.1 % 35-147

Surrogate: 1-Chlorooctadecane 102 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

COG OPERATING
DAKOTA NEEL
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 09/21/2016
Reported: 09/27/2016
Project Name: MONTANA FEE
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 09/20/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: S2 - 3' (H602128-10)

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	09/24/2016	ND	2.26	113	2.00	1.18	
Toluene*	<0.050	0.050	09/24/2016	ND	2.30	115	2.00	1.47	
Ethylbenzene*	<0.050	0.050	09/24/2016	ND	2.20	110	2.00	1.07	
Total Xylenes*	<0.150	0.150	09/24/2016	ND	6.63	110	6.00	1.11	
Total BTEx	<0.300	0.300	09/24/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.0 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	09/26/2016	ND	416	104	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	09/23/2016	ND	202	101	200	5.55	
DRO >C10-C28	<10.0	10.0	09/23/2016	ND	212	106	200	4.06	

Surrogate: 1-Chlorooctane 84.0 % 35-147

Surrogate: 1-Chlorooctadecane 99.8 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

COG OPERATING
DAKOTA NEEL
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 09/21/2016
Reported: 09/27/2016
Project Name: MONTANA FEE
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 09/20/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: S2 - 4' (H602128-11)

BTX 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	09/24/2016	ND	2.26	113	2.00	1.18	
Toluene*	<0.050	0.050	09/24/2016	ND	2.30	115	2.00	1.47	
Ethylbenzene*	<0.050	0.050	09/24/2016	ND	2.20	110	2.00	1.07	
Total Xylenes*	<0.150	0.150	09/24/2016	ND	6.63	110	6.00	1.11	
Total BTX	<0.300	0.300	09/24/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.2 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	544	16.0	09/26/2016	ND	416	104	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	09/23/2016	ND	202	101	200	5.55	
DRO >C10-C28	<10.0	10.0	09/23/2016	ND	212	106	200	4.06	

Surrogate: 1-Chlorooctane 86.4 % 35-147

Surrogate: 1-Chlorooctadecane 103 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

COG OPERATING
DAKOTA NEEL
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 09/21/2016
Reported: 09/27/2016
Project Name: MONTANA FEE
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 09/20/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: S2 - 6' (H602128-12)

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	09/24/2016	ND	2.26	113	2.00	1.18	
Toluene*	<0.050	0.050	09/24/2016	ND	2.30	115	2.00	1.47	
Ethylbenzene*	<0.050	0.050	09/24/2016	ND	2.20	110	2.00	1.07	
Total Xylenes*	<0.150	0.150	09/24/2016	ND	6.63	110	6.00	1.11	
Total BTEx	<0.300	0.300	09/24/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.9 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	448	16.0	09/26/2016	ND	416	104	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	09/23/2016	ND	202	101	200	5.55	
DRO >C10-C28	<10.0	10.0	09/23/2016	ND	212	106	200	4.06	

Surrogate: 1-Chlorooctane 87.1 % 35-147

Surrogate: 1-Chlorooctadecane 101 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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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Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: COG Operating LLC

Project Manager: Dakota Neel

Address: 2208 West Main

City: Artesia

Phone #: 432-215-2783

Project #:

Project Name: Montana Fee

Project Location:

Sample Name: Dakota Neel

P.O. #:

Company: COG Operating LLC

Attn: Robert McNeill

Address: 600 W Illinois

City: Midland

State: TX Zip: 79701

Phone #: (432) 221-0388

Fax #:

FOR LAB USE ONLY

Lab I.D. Sample I.D.

H4002178

S2- Surface

S2-1'

S2-2'

S2-3'

S2-4'

S2-6'

(G)RAB OR (C)OMP.

CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

MATRIX

PRESERV

SAMPLING

DATE TIME

BTEX

TPH

Chloride

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Relinquished By:

Date:

Time:

Relinquished By:

Date:

Time:

Received By:

Received By:

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

Sample Condition
Cool ☒ Intact ☒
Yes ☒ No ☐

CHECKED BY:
(Initials)

REMARKS:

Phone Result: ☐ Yes ☐ No

Fax Result: ☐ Yes ☐ No

Add'l Phone #:

Add'l Fax #:

dneel2@concho.com

5. Please fax written changes to 575-393-2476

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

NM OIL CONSERVATION

ARTESIA DISTRICT

Form C-141
Revised August 8, 2011

DEC 30 2015

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

RECEIVED

Release Notification and Corrective Action

NAB153648194 OPERATOR ☒ Initial Report ☐ Final Report

Name of Company Cimarrex Energy <i>1102683</i>	Contact Christine Alderman	
Address 600 N Marienfeld Ste 600 Midland TX	Telephone No. 432-853-7059	
Facility Name Montana 1 Fee 3	Facility Type production	
Surface Owner	Mineral Owner	API No. 30-015-39616

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
M	01	19S	25E	990	S	330	W	Eddy

Latitude 32.6854 Longitude -104.4459

NATURE OF RELEASE

Type of Release oil/ due to fire	Volume of Release 270 bbls	Volume Recovered 80
Source of Release tank	Date and Hour of Occurrence 12/29/2015	Date and Hour of Discovery 12/29/2015 1:00 pm
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher/Heather Patterson	
By Whom? Christine Alderman	Date and Hour 12/30/2015 10:00 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.*

This well is shut in but the center oil tank blew up and out of the containment. When it did it tore the connecting valve off the oil tank next to it. Some fluids got out of the containment and into the pasture area. A vacuum truck was on location after the fire was put out and recovered what fluid it could.

Describe Area Affected and Cleanup Action Taken.*

Tank battery area and some pasture area. An environmental consulting company will assess the impact and develop a workplan.

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: <i>[Signature]</i>	
Title: ESH Supervisor	Approval Date: 12/30/15	Expiration Date: N/A
E-mail Address: calderman@cimarrex.com	Conditions of Approval: Remediation per O.C.D. Rules & Guidelines <input type="checkbox"/>	
Date: 12/30/2015 Phone: 432-853-7059	SUBMIT REMEDIATION PROPOSAL NO	

* Attach Additional Sheets If Necessary

LATER THAN: *1/31/16*

2RP3468