



DELINEATION WORKPLAN
CHEVRON – NEFF #13 FED 2 CTB
(Leak Date: 05/14/18)
RP # 2RP-4758

This delineation workplan and remediation proposal addresses the release associated with RP # 2RP-4758.

The following information includes:

1. Scaled digital site map with spill area demarcated and leak point identified along with sample point locations and areas of remediation at appropriate depths.
2. GPS information for sample points and sample methodology
3. Depth to groundwater information (i.e., pdf of OSE search results and/or copy of Chevron groundwater trend map).
4. Laboratory analysis results summary table and original laboratory analysis reports
5. A copy of the initial C-141
6. Potentially other pertinent information as necessary for site specific purposes.

Based on the information included in this package and the NMOCD guidelines, the following remediation is proposed:

Chevron will remediate the spill area as depicted on the following site diagram. The entire leak area (yellow shade on diagram) will be excavated to a depth of 2.5 feet.





The entire site will then be backfilled with clean soil and revegetated (if warranted) to the standards of the appropriate regulatory agency or private surface owner.

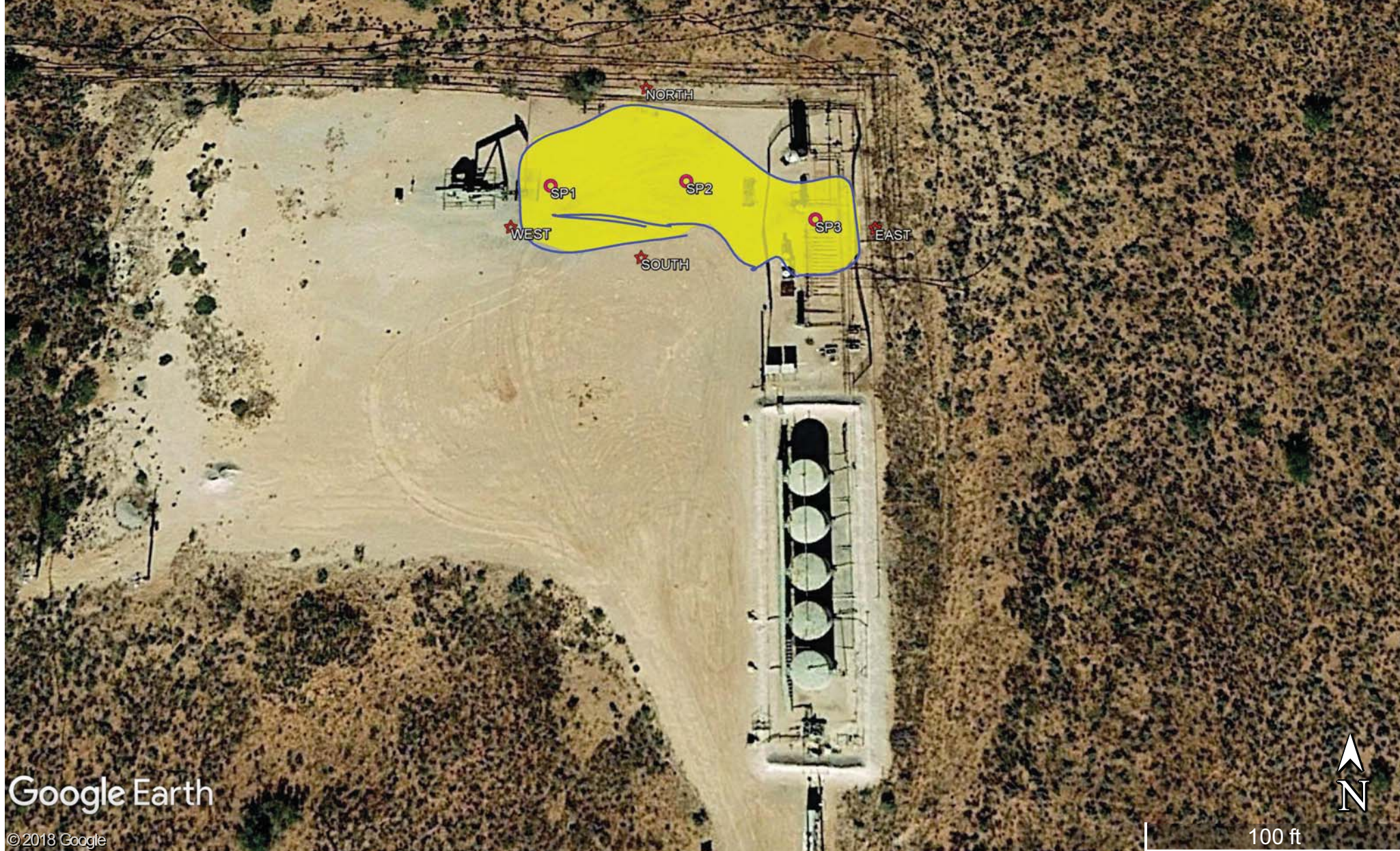
All excavated materials will be disposed of at an NMOCD-approved disposal facility.

Chevron, Neff #13 Fed 2 CTB

Leak date: 05/14/2018
Eddy County, NM
API# 30-015-26165

Legend

-  2.5 ft Excavation
-  Cardinal sample points
-  Leak Area
-  Sample points



Google Earth

© 2018 Google

100 ft

Chevron, Neff #13 Fed 2 CTB

Sample points

SP1, N 32.39332 W-103.72505

SP2, N 32.39332 W-103.72486

SP3, N 32.39327 W-103.72467

NORTH, N 32.39345 W-103.72492

SOUTH, N 32.39323 W-103.72492

EAST, N 32.39326 W-103.72459

WEST, N 32.39326 W-103.72511

Chevron, Federal Neff 13 Battery
U/L H, Section 13, T22S, R31E
Groundwater: 200'





New Mexico Office of the State Engineer **Water Column/Average Depth to Water**

No records found.

UTMNAD83 Radius Search (in meters):

Easting (X): 619913

Northing (Y): 3584748

Radius: 800

Public Land Survey System (PLSS)

☒ Q64: Q16: SE Q4: NE Sec: 13 Tws: 22S Rng: 31E

State Plane Coordinate System - NAD27

☐ X: 0 ft Y: 0 ft Zone:

State Plane Coordinate System - NAD83

☐ X: 0 ft Y: 0 ft Zone:

Degrees/Minutes/Seconds

☐ Longitude (X): Degrees: 0 ° Minutes: 0 ' Seconds: 0 "

Latitude (Y): Degrees: 0 ° Minutes: 0 ' Seconds: 0 "

UTM - NAD27

☐ Easting (X): 0 mtrs Northing (Y): 0 mtrs Zone:

SUBMIT**All Conversion Results are displayed as NAD 1983 UTM Zone 13**Easting (X): 619913.0 mtrsNorthing (Y): 3584748.0 mtrs**~~ Please keep screen open to copy UTM values for Reports. ~~**

Laboratory Analytical Results Summary
Neff #13 Federal 2 CTB

		Sample ID	SP1 @ 1'	SP1 @ 2'	SP1 @ 3'	SP1 @ 4'
Analyte	Method	Date	6/14/18	6/14/18	6/14/18	6/14/18
			mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	n/a	n/a
Toluene	BTEX 8021B		<0.050	<0.050	n/a	n/a
Ethylbenzene	BTEX 8021B		<0.050	<0.050	n/a	n/a
Total Xylenes	BTEX 8021B		<0.150	<0.150	n/a	n/a
Total BTEX	BTEX 8021B		<0.300	<0.300	n/a	n/a
Chloride	SM4500Cl-B		6400	4000	144	80
GRO	TPH 8015M		<10.0	<10.0	n/a	n/a
DRO	TPH 8015M		<10.0	<10.0	n/a	n/a
EXT DRO	TPH 8015M		<10.0	<10.0	n/a	n/a

		Sample ID	SP2 @ 1'	SP2 @ 2'	SP2 @ 3'	SP2 @ 4'
Analyte	Method	Date	6/14/18	6/14/18	6/14/18	6/14/18
			mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	n/a	n/a
Toluene	BTEX 8021B		<0.050	<0.050	n/a	n/a
Ethylbenzene	BTEX 8021B		<0.050	<0.050	n/a	n/a
Total Xylenes	BTEX 8021B		<0.150	<0.150	n/a	n/a
Total BTEX	BTEX 8021B		<0.300	<0.300	n/a	n/a
Chloride	SM4500Cl-B		6800	3120	64	80
GRO	TPH 8015M		<10.0	<10.0	n/a	n/a
DRO	TPH 8015M		<10.0	<10.0	n/a	n/a
EXT DRO	TPH 8015M		<10.0	<10.0	n/a	n/a

		Sample ID	SP3 @ 1'	SP3 @ 2'	SP3 @ 3'	SP3 @ 4'
Analyte	Method	Date	6/14/18	6/14/18	6/14/18	6/14/18
			mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	n/a	n/a
Toluene	BTEX 8021B		<0.050	<0.050	n/a	n/a
Ethylbenzene	BTEX 8021B		<0.050	<0.050	n/a	n/a
Total Xylenes	BTEX 8021B		<0.150	<0.150	n/a	n/a
Total BTEX	BTEX 8021B		<0.300	<0.300	n/a	n/a
Chloride	SM4500Cl-B		6800	1800	96	96
GRO	TPH 8015M		<10.0	<10.0	n/a	n/a
DRO	TPH 8015M		<10.0	<10.0	n/a	n/a
EXT DRO	TPH 8015M		<10.0	<10.0	n/a	n/a

		Sample ID	NORTH @ SURFACE	SOUTH @ SURFACE	EAST @ SURFACE	WEST @ SURFACE
Analyte	Method	Date	6/14/18	6/14/18	6/14/18	6/14/18
			mg/kg	mg/kg	mg/kg	mg/kg
Benzene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050
Toluene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050
Ethylbenzene	BTEX 8021B		<0.050	0.05	<0.050	<0.050
Total Xylenes	BTEX 8021B		0.188	0.255	<0.150	0.224
Total BTEX	BTEX 8021B		<0.300	0.305	<0.300	<0.300
Chloride	SM4500Cl-B		224	256	192	208
GRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0
DRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0
EXT DRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0

June 28, 2018

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: NEFF #13 FEDERAL 2 CTB

Enclosed are the results of analyses for samples received by the laboratory on 06/21/18 17:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-17-10. 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:

BBC International, Inc.
Cliff Brunson
P.O. Box 805
Hobbs NM, 88241
Fax To: (575) 397-0397

Received: 06/21/2018
Reported: 06/28/2018
Project Name: NEFF #13 FEDERAL 2 CTB
Project Number: NONE GIVEN
Project Location: CHEVRON -EDDY CO NM

Sampling Date: 06/14/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SP 1 @ 1' (H801709-01)

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	06/25/2018	ND	1.75	87.3	2.00	0.376	
Toluene*	<0.050	0.050	06/25/2018	ND	1.75	87.4	2.00	0.0841	
Ethylbenzene*	<0.050	0.050	06/25/2018	ND	1.73	86.7	2.00	0.557	
Total Xylenes*	<0.150	0.150	06/25/2018	ND	5.42	90.3	6.00	0.310	
Total BTEX	<0.300	0.300	06/25/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	6400	16.0	06/25/2018	ND	432	108	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	06/22/2018	ND	173	86.7	200	4.52	
DRO >C10-C28*	<10.0	10.0	06/22/2018	ND	177	88.6	200	10.1	
EXT DRO >C28-C36	<10.0	10.0	06/22/2018	ND					

Surrogate: 1-Chlorooctane 90.0 % 41-142

Surrogate: 1-Chlorooctadecane 83.7 % 37.6-147

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*=Accredited Analyte

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Analytical Results For:

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Hobbs NM, 88241
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Received: 06/21/2018
Reported: 06/28/2018
Project Name: NEFF #13 FEDERAL 2 CTB
Project Number: NONE GIVEN
Project Location: CHEVRON -EDDY CO NM

Sampling Date: 06/14/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SP 1 @ 2' (H801709-02)

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	06/25/2018	ND	1.75	87.3	2.00	0.376	
Toluene*	<0.050	0.050	06/25/2018	ND	1.75	87.4	2.00	0.0841	
Ethylbenzene*	<0.050	0.050	06/25/2018	ND	1.73	86.7	2.00	0.557	
Total Xylenes*	<0.150	0.150	06/25/2018	ND	5.42	90.3	6.00	0.310	
Total BTEX	<0.300	0.300	06/25/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	4000	16.0	06/25/2018	ND	432	108	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	06/22/2018	ND	173	86.7	200	4.52	
DRO >C10-C28*	<10.0	10.0	06/22/2018	ND	177	88.6	200	10.1	
EXT DRO >C28-C36	<10.0	10.0	06/22/2018	ND					

Surrogate: 1-Chlorooctane 89.3 % 41-142

Surrogate: 1-Chlorooctadecane 82.7 % 37.6-147

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Received: 06/21/2018
Reported: 06/28/2018
Project Name: NEFF #13 FEDERAL 2 CTB
Project Number: NONE GIVEN
Project Location: CHEVRON -EDDY CO NM

Sampling Date: 06/14/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SP 1 @ 3' (H801709-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	06/25/2018	ND	432	108	400	0.00	

Sample ID: SP 1 @ 4' (H801709-04)

Chloride, SM4500Cl-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	06/25/2018	ND	432	108	400	0.00	

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Received: 06/21/2018
Reported: 06/28/2018
Project Name: NEFF #13 FEDERAL 2 CTB
Project Number: NONE GIVEN
Project Location: CHEVRON -EDDY CO NM

Sampling Date: 06/14/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SP 2 @ 1' (H801709-05)

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	06/25/2018	ND	1.75	87.3	2.00	0.376	
Toluene*	<0.050	0.050	06/25/2018	ND	1.75	87.4	2.00	0.0841	
Ethylbenzene*	<0.050	0.050	06/25/2018	ND	1.73	86.7	2.00	0.557	
Total Xylenes*	<0.150	0.150	06/25/2018	ND	5.42	90.3	6.00	0.310	
Total BTEX	<0.300	0.300	06/25/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	6800	16.0	06/25/2018	ND	432	108	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	06/22/2018	ND	173	86.7	200	4.52	
DRO >C10-C28*	<10.0	10.0	06/22/2018	ND	177	88.6	200	10.1	
EXT DRO >C28-C36	<10.0	10.0	06/22/2018	ND					

Surrogate: 1-Chlorooctane 88.9 % 41-142

Surrogate: 1-Chlorooctadecane 81.8 % 37.6-147

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Received: 06/21/2018
Reported: 06/28/2018
Project Name: NEFF #13 FEDERAL 2 CTB
Project Number: NONE GIVEN
Project Location: CHEVRON -EDDY CO NM

Sampling Date: 06/14/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SP 2 @ 2' (H801709-06)

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	06/25/2018	ND	1.75	87.3	2.00	0.376		
Toluene*	<0.050	0.050	06/25/2018	ND	1.75	87.4	2.00	0.0841		
Ethylbenzene*	<0.050	0.050	06/25/2018	ND	1.73	86.7	2.00	0.557		
Total Xylenes*	<0.150	0.150	06/25/2018	ND	5.42	90.3	6.00	0.310		
Total BTEX	<0.300	0.300	06/25/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3120	16.0	06/25/2018	ND	432	108	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	06/22/2018	ND	173	86.7	200	4.52	
DRO >C10-C28*	<10.0	10.0	06/22/2018	ND	177	88.6	200	10.1	
EXT DRO >C28-C36	<10.0	10.0	06/22/2018	ND					

Surrogate: 1-Chlorooctane 85.5 % 41-142

Surrogate: 1-Chlorooctadecane 80.3 % 37.6-147

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Fax To: (575) 397-0397

Received: 06/21/2018
Reported: 06/28/2018
Project Name: NEFF #13 FEDERAL 2 CTB
Project Number: NONE GIVEN
Project Location: CHEVRON -EDDY CO NM

Sampling Date: 06/14/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SP 2 @ 3' (H801709-07)

Chloride, SM4500Cl-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	06/25/2018	ND	416	104	400	3.77		

Sample ID: SP 2 @ 4' (H801709-08)

Chloride, SM4500Cl-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	06/25/2018	ND	416	104	400	3.77	

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Received: 06/21/2018
Reported: 06/28/2018
Project Name: NEFF #13 FEDERAL 2 CTB
Project Number: NONE GIVEN
Project Location: CHEVRON -EDDY CO NM

Sampling Date: 06/14/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SP 3 @ 1' (H801709-09)

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	06/25/2018	ND	1.75	87.3	2.00	0.376	
Toluene*	<0.050	0.050	06/25/2018	ND	1.75	87.4	2.00	0.0841	
Ethylbenzene*	<0.050	0.050	06/25/2018	ND	1.73	86.7	2.00	0.557	
Total Xylenes*	<0.150	0.150	06/25/2018	ND	5.42	90.3	6.00	0.310	
Total BTEX	<0.300	0.300	06/25/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	6800	16.0	06/25/2018	ND	416	104	400	3.77		

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	06/22/2018	ND	173	86.7	200	4.52	
DRO >C10-C28*	<10.0	10.0	06/22/2018	ND	177	88.6	200	10.1	
EXT DRO >C28-C36	<10.0	10.0	06/22/2018	ND					

Surrogate: 1-Chlorooctane 87.9 % 41-142

Surrogate: 1-Chlorooctadecane 80.7 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

BBC International, Inc.
Cliff Brunson
P.O. Box 805
Hobbs NM, 88241
Fax To: (575) 397-0397

Received: 06/21/2018
Reported: 06/28/2018
Project Name: NEFF #13 FEDERAL 2 CTB
Project Number: NONE GIVEN
Project Location: CHEVRON -EDDY CO NM

Sampling Date: 06/14/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SP 3 @ 2' (H801709-10)

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	06/25/2018	ND	1.75	87.3	2.00	0.376		
Toluene*	<0.050	0.050	06/25/2018	ND	1.75	87.4	2.00	0.0841		
Ethylbenzene*	<0.050	0.050	06/25/2018	ND	1.73	86.7	2.00	0.557		
Total Xylenes*	<0.150	0.150	06/25/2018	ND	5.42	90.3	6.00	0.310		
Total BTEx	<0.300	0.300	06/25/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1800	16.0	06/25/2018	ND	416	104	400	3.77		

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	06/22/2018	ND	173	86.7	200	4.52	
DRO >C10-C28*	<10.0	10.0	06/22/2018	ND	177	88.6	200	10.1	
EXT DRO >C28-C36	<10.0	10.0	06/22/2018	ND					

Surrogate: 1-Chlorooctane 87.0 % 41-142

Surrogate: 1-Chlorooctadecane 79.5 % 37.6-147

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Analytical Results For:

BBC International, Inc.
Cliff Brunson
P.O. Box 805
Hobbs NM, 88241
Fax To: (575) 397-0397

Received: 06/21/2018
Reported: 06/28/2018
Project Name: NEFF #13 FEDERAL 2 CTB
Project Number: NONE GIVEN
Project Location: CHEVRON -EDDY CO NM

Sampling Date: 06/14/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SP 3 @ 3' (H801709-11)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	06/25/2018	ND	416	104	400	3.77		

Sample ID: SP 3 @ 4' (H801709-12)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	06/25/2018	ND	416	104	400	3.77	

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BBC International, Inc.
Cliff Brunson
P.O. Box 805
Hobbs NM, 88241
Fax To: (575) 397-0397

Received: 06/21/2018
Reported: 06/28/2018
Project Name: NEFF #13 FEDERAL 2 CTB
Project Number: NONE GIVEN
Project Location: CHEVRON -EDDY CO NM

Sampling Date: 06/14/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: NORTH @ SURFACE (H801709-13)

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	06/25/2018	ND	1.75	87.3	2.00	0.376		
Toluene*	<0.050	0.050	06/25/2018	ND	1.75	87.4	2.00	0.0841		
Ethylbenzene*	<0.050	0.050	06/25/2018	ND	1.73	86.7	2.00	0.557		
Total Xylenes*	0.188	0.150	06/25/2018	ND	5.42	90.3	6.00	0.310		
Total BTX	<0.300	0.300	06/25/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	224	16.0	06/25/2018	ND	416	104	400	3.77		

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	06/22/2018	ND	173	86.7	200	4.52	
DRO >C10-C28*	<10.0	10.0	06/22/2018	ND	177	88.6	200	10.1	
EXT DRO >C28-C36	<10.0	10.0	06/22/2018	ND					

Surrogate: 1-Chlorooctane 73.2 % 41-142

Surrogate: 1-Chlorooctadecane 65.1 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

BBC International, Inc.
Cliff Brunson
P.O. Box 805
Hobbs NM, 88241
Fax To: (575) 397-0397

Received: 06/21/2018
Reported: 06/28/2018
Project Name: NEFF #13 FEDERAL 2 CTB
Project Number: NONE GIVEN
Project Location: CHEVRON -EDDY CO NM

Sampling Date: 06/14/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: SOUTH @ SURFACE (H801709-14)

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	06/25/2018	ND	1.75	87.3	2.00	0.376	
Toluene*	<0.050	0.050	06/25/2018	ND	1.75	87.4	2.00	0.0841	
Ethylbenzene*	0.050	0.050	06/25/2018	ND	1.73	86.7	2.00	0.557	
Total Xylenes*	0.255	0.150	06/25/2018	ND	5.42	90.3	6.00	0.310	
Total BTEx	0.305	0.300	06/25/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	06/25/2018	ND	416	104	400	3.77	

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	06/23/2018	ND	173	86.7	200	4.52	
DRO >C10-C28*	<10.0	10.0	06/23/2018	ND	177	88.6	200	10.1	
EXT DRO >C28-C36	<10.0	10.0	06/23/2018	ND					

Surrogate: 1-Chlorooctane 76.6 % 41-142

Surrogate: 1-Chlorooctadecane 69.9 % 37.6-147

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Analytical Results For:

BBC International, Inc.
Cliff Brunson
P.O. Box 805
Hobbs NM, 88241
Fax To: (575) 397-0397

Received: 06/21/2018
Reported: 06/28/2018
Project Name: NEFF #13 FEDERAL 2 CTB
Project Number: NONE GIVEN
Project Location: CHEVRON -EDDY CO NM

Sampling Date: 06/14/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: EAST @ SURFACE (H801709-15)

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	06/25/2018	ND	1.75	87.3	2.00	0.376	
Toluene*	<0.050	0.050	06/25/2018	ND	1.75	87.4	2.00	0.0841	
Ethylbenzene*	<0.050	0.050	06/25/2018	ND	1.73	86.7	2.00	0.557	
Total Xylenes*	<0.150	0.150	06/25/2018	ND	5.42	90.3	6.00	0.310	
Total BTEx	<0.300	0.300	06/25/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	06/25/2018	ND	416	104	400	3.77	

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	06/22/2018	ND	175	87.6	200	6.24	
DRO >C10-C28*	<10.0	10.0	06/22/2018	ND	203	102	200	3.32	
EXT DRO >C28-C36	<10.0	10.0	06/22/2018	ND					

Surrogate: 1-Chlorooctane 75.8 % 41-142

Surrogate: 1-Chlorooctadecane 76.1 % 37.6-147

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Analytical Results For:

BBC International, Inc.
Cliff Brunson
P.O. Box 805
Hobbs NM, 88241
Fax To: (575) 397-0397

Received: 06/21/2018
Reported: 06/28/2018
Project Name: NEFF #13 FEDERAL 2 CTB
Project Number: NONE GIVEN
Project Location: CHEVRON -EDDY CO NM

Sampling Date: 06/14/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: WEST @ SURFACE (H801709-16)

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	06/25/2018	ND	1.75	87.3	2.00	0.376		
Toluene*	<0.050	0.050	06/25/2018	ND	1.75	87.4	2.00	0.0841		
Ethylbenzene*	<0.050	0.050	06/25/2018	ND	1.73	86.7	2.00	0.557		
Total Xylenes*	0.224	0.150	06/25/2018	ND	5.42	90.3	6.00	0.310		
Total BTEx	<0.300	0.300	06/25/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	06/25/2018	ND	416	104	400	3.77	

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	06/22/2018	ND	175	87.6	200	6.24	
DRO >C10-C28*	<10.0	10.0	06/22/2018	ND	203	102	200	3.32	
EXT DRO >C28-C36	<10.0	10.0	06/22/2018	ND					

Surrogate: 1-Chlorooctane 84.1 % 41-142

Surrogate: 1-Chlorooctadecane 79.7 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
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



(505) 393-2326 FAX (505) 393-2476

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Relinquished By: <i>[Signature]</i>		Date: <i>6/14/18</i>	Received By: <i>[Signature]</i>	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #: _____
		Time: <i>5:30pm</i>		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #: _____
Relinquished By: <i>[Signature]</i>		Date: <i>6-21-18</i>	Received By: <i>[Signature]</i>	REMARKS:	
		Time: <i>5:05</i>			
Delivered By: (Circle One) <i>3.22</i>			Sample Condition	CHECKED BY:	
Sampler - UPS - Bus - Other: <i>Corrected 3.15</i>			Cool <input type="checkbox"/> Yes <input type="checkbox"/> No	(Initials)	
			Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	<i>TO #15</i>	

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

**ARDINAL LABORATORIES**

101 East Marland, Hobbs, NM 88240

(505) 393-2326 FAX (505) 393-2476

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Relinquished By: <i>[Signature]</i>		Date: <i>6/14/18</i>	Received By: <i>[Signature]</i>	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
		Time: <i>5:30pm</i>		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Relinquished By: <i>[Signature]</i>		Date: <i>6-21-18</i>	Received By: <i>[Signature]</i>	REMARKS:	
		Time: <i>5:05</i>			
Delivered By: (Circle One) <i>3.22</i>		Sample Condition	CHECKED BY:		
Sampler - UPS - Bus - Other: <i>Corrected 3.15</i>		Cool <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	(Initials) <i>TO #75</i>		

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

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

MAY 17 2018

Form C-141
Revised April 3, 2017

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

appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

0AB1814131834 OPERATOR ☒ Initial Report ☐ Final Report

Name of Company: Chevron USA Inc. <u>4323</u>	Contact: Josepha DeLeon
Address: 6301 Deauville Blvd., Midland, TX 79706	Telephone No.: 575-263-0424
Facility Name: Neff #13 Fed 2 CTB	Facility Type: Central Tank Battery
Surface Owner:	Mineral Owner: Federal
API No: 30-015-26165	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	13	22S	31E	1980	North	660	East	Eddy

Latitude 32.3933029 Longitude -103.72509 NAD83

NATURE OF RELEASE

Type of Release: Spill <u>oil/p.w.</u>	Volume of Release: 0.4 Barrel Oil and 7.24 Barrels Produced Water	Volume Recovered: 0.4 Barrel Oil and 7 Barrels produced water
Source of Release: 2 phase separator	Date and Hour of Occurrence: 05/14/2018; 09:42 AM	Date and Hour of Discovery: 05/14/2018; 10:00 AM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour:	
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.* N/A		
Describe Cause of Problem and Remedial Action Taken.* 2 phase separator pressure safety opened causing some fluid to escape vessel. Lease was immediately isolated.		
Describe Area Affected and Cleanup Action Taken.* Fluid spilled onto compacted caliche area within central tank battery production pad. Vacuum truck extracted fluid and recovered 0.40 barrel oil and 7 barrels produced water. Remediation plan will be submitted.		
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>Josepha DeLeon</u>	OIL CONSERVATION DIVISION	
Printed Name: Josepha DeLeon	Approved by Environmental Specialist <u>[Signature]</u>	
Title: HES Specialist – Compliance Support, Environmental	Approval Date: <u>5/17/18</u>	Expiration Date: <u>N/A</u>
E-mail Address: <u>jdx@chevron.com</u>	Conditions of Approval: <u>See attached</u>	
Date: May 17, 2018 Phone: 575-263-0424	Attached <u>2 PD 4758</u>	

* Attach Additional Sheets If Necessary

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 5/17/2018 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 2RP-475B has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC. [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District 2 office in ARTESIA on or before 6/17/2018 . If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

- Nominal detection limits for field and laboratory analyses must be provided.

- Composite sampling is not generally allowed.

- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

- Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

- If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

- Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold

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Bratcher, Mike, EMNRD

From: DeLeon, Josepha <JDxD@chevron.com>
Sent: Thursday, May 17, 2018 10:57 AM
To: Bratcher, Mike, EMNRD; 'Tucker, Shelly'; jamos@blm.gov; Weaver, Crystal, EMNRD
Cc: Lovell, Danny (LOVD); Barnhill, Amy D.; Macurdy, David William; Debeyessey, Svetlana
Subject: Neff 13 CTB Spill
Attachments: Neff 13 CTB.pdf

Attached is a C-141 on a spill that occurred May 14, 2018 at the Neff 13 CTB. Remediation plan to follow by BBC. Final will be submitted when completed and approved.

Josie DeLeon, HES Specialist -

Compliance Support - Environmental

Chevron - MCBU

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