



December 5, 2016

Oil Conservation Division
District 2 – Artesia
811 S. First St.
Artesia, NM 88210

Re: SHINER BOCK 1 FEDERAL COM #027H
Sec. 1, T17S-R31E
Eddy County, NM

Mr. Mike Bratcher,

COG Operating LLC would like to submit for your consideration the enclosed work plan for the above captioned well. The plan is in response to the C-141 Initial report dated August 12, 2016.

Background

This release was caused by a corroded steel flowline resulting in the release of 0.5 bbls Oil; 4.5 bbls PW. Upon discovery, the line was isolated and repaired and a vac truck was dispatched to pick up the standing fluid. The release remained on location.

Groundwater

Based on the information obtained through the use of the Chevron-Texaco Maps, the release area would be classified at a site ranking of **Zero** with depth to groundwater at greater than 100'.

Soil Assessment and Analytical Results

Sample points for the release area are labeled as T1, T2, T3, T4, and T5 on the attached Site Diagram. According to the analytical results obtained, T1 and T3 had an elevated concentration of chloride to a depth of 4' with delineation showing a decrease in concentration. At T4 elevated chlorides were found only at the Surface with delineation showing a decrease in concentration. T2 and T5 showed no elevated chloride concentrations. Copies of the analytical results along with a site diagram and sample summary table are attached for your consideration.

Site Ranking: 0	
Depth to GW per SEO: >100	
T1	Cl-
2'	608
4'	1420
6'	144
7'	496
8'	304
9'	48
T2	Cl-
Surface	48
1'	80
2'	160
T3	Cl-
Surface	7760
2'	384
4'	2960
6'	304
7'	48
8'	160
9'	112
T4	Cl-
Surface	912
2'	208
3'	80
T5	Cl-
1'	32
2'	48

Work Plan

COG Operating LLC proposes the following excavations for remediation of the release area:

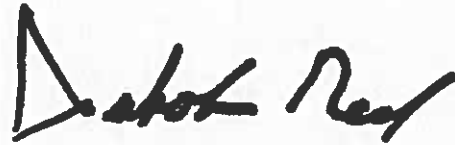
T1 & T3 - Excavate to a depth of approximately 4'. (~1,500 Square Feet)

T4 - Excavate to a depth of approximately 1'. (~750 Square Feet)

T2 & T5- No excavation

If there are no objections or further stipulations, COG Operating LLC would like to begin the remediation process based on approval of this work plan. Please feel free to contact me with any questions or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read "Dakota Neel". The signature is stylized with a large, looped 'D' and a cursive 'Neel'.

Dakota Neel,

Environmental Coordinator

Enclosure(s): Site Diagram
Analytical Results
C-141 Initial (Copy)

SHINER BOCK 1 FEDERAL COM #027H

Shiner Bock 1 Federal Com #027H

Unit M Section 01 Township 17S Range 31E

Released: 0.5 BBLS OIL & 4.5 BBLS PW



100 ft



Legend

■	1' Excavation
■	4' Excavation
■	No Excavation

Site Ranking: 0	
Depth to GW per SEO: >100	
T1	Cl-
2'	608
4'	1420
6'	144
7'	496
8'	304
9'	48
T2	Cl-
Surface	48
1'	80
2'	160
T3	Cl-
Surface	7760
2'	384
4'	2960
6'	304
7'	48
8'	160
9'	112
T4	Cl-
Surface	912
2'	208
3'	80
T5	Cl-
1'	32
2'	48



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

September 09, 2016

DAKOTA NEEL

COG Operating, LLC

500 W. ILLINOIS

Midland, TX 79701

RE: SHINER BOCK 1 FEDERAL COM #027H

Enclosed are the results of analyses for samples received by the laboratory on 09/01/16 10:17.

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/ga/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 fluid and cursive, with the first name "Celey" being more prominent.

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

COG Operating, LLC
DAKOTA NEEL
500 W. ILLINOIS
Midland TX, 79701
Fax To: None

Received: 09/01/2016
Reported: 09/09/2016
Project Name: SHINER BOCK 1 FEDERAL COM #027H
Project Number: NONE GIVEN
Project Location: EDDY COUNTY, NM

Sampling Date: 08/29/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: TRENCH 1 (SURFACE) (H601966-01)

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	09/06/2016	ND	2.13	107	2.00	0.929	
Toluene*	<0.050	0.050	09/06/2016	ND	2.18	109	2.00	1.23	
Ethylbenzene*	<0.050	0.050	09/06/2016	ND	2.11	105	2.00	0.932	
Total Xylenes*	<0.150	0.150	09/06/2016	ND	6.41	107	6.00	0.744	
Total BTEX	<0.300	0.300	09/06/2016	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 97.0 % 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	7280	16.0	09/02/2016	ND	416	104	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	09/02/2016	ND	203	102	200	3.23	
DRO >C10-C28	<10.0	10.0	09/02/2016	ND	223	111	200	3.64	

Surrogate: 1-Chlorooctane 101 % 35-147

Surrogate: 1-Chlorooctadecane 99.1 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

COG Operating, LLC
DAKOTA NEEL
500 W. ILLINOIS
Midland TX, 79701
Fax To: None

Received: 09/01/2016
Reported: 09/09/2016
Project Name: SHINER BOCK 1 FEDERAL COM #027H
Project Number: NONE GIVEN
Project Location: EDDY COUNTY, NM

Sampling Date: 08/29/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: TRENCH 1 (1') (H601966-02)

BTEX 80218		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/06/2016	ND	2.13	107	2.00	0.929	
Toluene*	<0.050	0.050	09/06/2016	ND	2.18	109	2.00	1.23	
Ethylbenzene*	<0.050	0.050	09/06/2016	ND	2.11	105	2.00	0.932	
Total Xylenes*	<0.150	0.150	09/06/2016	ND	6.41	107	6.00	0.744	
Total BTEX	<0.300	0.300	09/06/2016	ND					

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

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	09/02/2016	ND	203	102	200	3.23	
DRO >C10-C28	<10.0	10.0	09/02/2016	ND	223	111	200	3.64	

Surrogate: 1-Chlorooctane 92.2 % 35-147

Surrogate: 1-Chlorooctadecane 111 % 28-171

Sample ID: TRENCH 1 (2') (H601966-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	608	16.0	09/06/2016	ND	416	104	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

COG Operating, LLC
DAKOTA NEEL
500 W. ILLINOIS
Midland TX, 79701
Fax To: None

Received:	09/01/2016	Sampling Date:	08/29/2016
Reported:	09/09/2016	Sampling Type:	Soil
Project Name:	SHINER BOCK 1 FEDERAL COM #027H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: TRENCH 1 (4') (H601966-05)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1420	16.0	09/06/2016	ND	416	104	400	0.00	

Sample ID: TRENCH 1 (6') (H601966-07)

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	09/06/2016	ND	416	104	400	0.00	

Sample ID: TRENCH 1 (7') (H601966-08)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	09/06/2016	ND	416	104	400	0.00	

Sample ID: TRENCH 1 (8') (H601966-09)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	304	16.0	09/06/2016	ND	416	104	400	0.00	

Sample ID: TRENCH 1 (9') (H601966-10)

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	09/06/2016	ND	416	104	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

COG Operating, LLC
DAKOTA NEEL
500 W. ILLINOIS
Midland TX, 79701
Fax To: None

Received: 09/01/2016
Reported: 09/09/2016
Project Name: SHINER BOCK 1 FEDERAL COM #027H
Project Number: NONE GIVEN
Project Location: EDDY COUNTY, NM

Sampling Date: 08/29/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: TRENCH 2 (SURFACE) (H601966-11)
8TEX 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	09/06/2016	ND	2.13	107	2.00	0.929	
Toluene*	<0.050	0.050	09/06/2016	ND	2.18	109	2.00	1.23	
Ethylbenzene*	<0.050	0.050	09/06/2016	ND	2.11	105	2.00	0.932	
Total Xylenes*	<0.150	0.150	09/06/2016	ND	6.41	107	6.00	0.744	
Total BTEX	<0.300	0.300	09/06/2016	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 97.5 % 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	09/06/2016	ND	416	104	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	09/02/2016	ND	203	102	200	3.23	
DRO >C10-C28	<10.0	10.0	09/02/2016	ND	223	111	200	3.64	

Surrogate: 1-Chlorooctane 91.7 % 35-147

Surrogate: 1-Chlorooctadecane 102 % 28-171

Sample ID: TRENCH 2 (1') (H601966-12)
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	09/06/2016	ND	416	104	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

COG Operating, LLC
DAKOTA NEEL
500 W. ILLINOIS
Midland TX, 79701
Fax To: None

Received: 09/01/2016
Reported: 09/09/2016
Project Name: SHINER BOCK 1 FEDERAL COM #027H
Project Number: NONE GIVEN
Project Location: EDDY COUNTY, NM

Sampling Date: 08/29/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: TRENCH 2 (2') (H601966-13)

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	09/06/2016	ND	416	104	400	0.00	

Sample ID: TRENCH 3 (SURFACE) (H601966-16)

BTEX 80218 mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/06/2016	ND	2.13	107	2.00	0.929	
Toluene*	<0.050	0.050	09/06/2016	ND	2.18	109	2.00	1.23	
Ethylbenzene*	<0.050	0.050	09/06/2016	ND	2.11	105	2.00	0.932	
Total Xylenes*	<0.150	0.150	09/06/2016	ND	6.41	107	6.00	0.744	
Total BTEX	<0.300	0.300	09/06/2016	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 97.8 % 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	7760	16.0	09/06/2016	ND	416	104	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	09/02/2016	ND	203	102	200	3.23	
DRO >C10-C28	108	10.0	09/02/2016	ND	223	111	200	3.64	

Surrogate: 1-Chlorooctane 97.4 % 35-147

Surrogate: 1-Chlorooctadecane 111 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

COG Operating, LLC
DAKOTA NEEL
500 W. ILLINOIS
Midland TX, 79701
Fax To: None

Received: 09/01/2016
Reported: 09/09/2016
Project Name: SHINER BOCK 1 FEDERAL COM #027H
Project Number: NONE GIVEN
Project Location: EDDY COUNTY, NM

Sampling Date: 08/29/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: TRENCH 3 (1') (H601966-17)

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	09/06/2016	ND	2.13	107	2.00	0.929	
Toluene*	<0.050	0.050	09/06/2016	ND	2.18	109	2.00	1.23	
Ethylbenzene*	<0.050	0.050	09/06/2016	ND	2.11	105	2.00	0.932	
Total Xylenes*	<0.150	0.150	09/06/2016	ND	6.41	107	6.00	0.744	
Total BTEX	<0.300	0.300	09/06/2016	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 96.8 % 73.6-140

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	09/02/2016	ND	203	102	200	3.23	
DRO >C10-C28	<10.0	10.0	09/02/2016	ND	223	111	200	3.64	

Surrogate: 1-Chlorooctane 95.2 % 35-147

Surrogate: 1-Chlorooctadecane 108 % 28-171

Sample ID: TRENCH 3 (2') (H601966-18)

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	384	16.0	09/06/2016	ND	416	104	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

COG Operating, LLC
DAKOTA NEEL
500 W. ILLINOIS
Midland TX, 79701
Fax To: None

Received:	09/01/2016	Sampling Date:	08/29/2016
Reported:	09/09/2016	Sampling Type:	Soil
Project Name:	SHINER BOCK 1 FEDERAL COM #027H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

Sample ID: TRENCH 3 (4') (H601966-20)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2960	16.0	09/06/2016	ND	416	104	400	0.00	

Sample ID: TRENCH 3 (6') (H601966-22)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	304	16.0	09/06/2016	ND	416	104	400	0.00	

Sample ID: TRENCH 3 (7') (H601966-23)

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	09/06/2016	ND	416	104	400	0.00	

Sample ID: TRENCH 3 (8') (H601966-24)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	09/06/2016	ND	416	104	400	0.00	

Sample ID: TRENCH 3 (9') (H601966-25)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	09/06/2016	ND	416	104	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

COG Operating, LLC
DAKOTA NEEL
500 W. ILLINOIS
Midland TX, 79701
Fax To: None

Received: 09/01/2016
Reported: 09/09/2016
Project Name: SHINER BOCK 1 FEDERAL COM #027H
Project Number: NONE GIVEN
Project Location: EDDY COUNTY, NM

Sampling Date: 08/29/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: TRENCH 4 (SURFACE) (H601966-27)

BTEX 80218		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/06/2016	ND	2.13	107	2.00	0.929	
Toluene*	<0.050	0.050	09/06/2016	ND	2.18	109	2.00	1.23	
Ethylbenzene*	<0.050	0.050	09/06/2016	ND	2.11	105	2.00	0.932	
Total Xylenes*	<0.150	0.150	09/06/2016	ND	6.41	107	6.00	0.744	
Total BTEX	<0.300	0.300	09/06/2016	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 97.3 % 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	912	16.0	09/06/2016	ND	416	104	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	09/02/2016	ND	203	102	200	3.23	
DRO >C10-C28	43.8	10.0	09/02/2016	ND	223	111	200	3.64	

Surrogate: 1-Chlorooctane 93.8 % 35-147

Surrogate: 1-Chlorooctadecane 103 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

COG Operating, LLC
DAKOTA NEEL
500 W. ILLINOIS
Midland TX, 79701
Fax To: None

Received: 09/01/2016
Reported: 09/09/2016
Project Name: SHINER BOCK 1 FEDERAL COM #027H
Project Number: NONE GIVEN
Project Location: EDDY COUNTY, NM

Sampling Date: 08/29/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: TRENCH 4 (1') (H601966-28)
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	09/06/2016	ND	2.13	107	2.00	0.929	
Toluene*	<0.050	0.050	09/06/2016	ND	2.18	109	2.00	1.23	
Ethylbenzene*	<0.050	0.050	09/06/2016	ND	2.11	105	2.00	0.932	
Total Xylenes*	<0.150	0.150	09/06/2016	ND	6.41	107	6.00	0.744	
Total BTEX	<0.300	0.300	09/06/2016	ND					

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

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	09/02/2016	ND	203	102	200	3.23	
DRO >C10-C28	<10.0	10.0	09/02/2016	ND	223	111	200	3.64	

Surrogate: 1-Chlorooctane 91.9 % 35-147

Surrogate: 1-Chlorooctadecane 108 % 28-171

Sample ID: TRENCH 4 (2') (H601966-29)
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	09/06/2016	ND	416	104	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

COG Operating, LLC
DAKOTA NEEL
500 W. ILLINOIS
Midland TX, 79701
Fax To: None

Received: 09/01/2016
Reported: 09/09/2016
Project Name: SHINER BOCK 1 FEDERAL COM #027H
Project Number: NONE GIVEN
Project Location: EDDY COUNTY, NM

Sampling Date: 08/29/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: TRENCH 4 (3') (H601966-30)

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	09/06/2016	ND	416	104	400	0.00	

Sample ID: TRENCH 5 (1') (H601966-34)

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	09/08/2016	ND	2.14	107	2.00	1.19	
Toluene*	<0.050	0.050	09/08/2016	ND	2.18	109	2.00	1.75	
Ethylbenzene*	<0.050	0.050	09/08/2016	ND	2.10	105	2.00	1.92	
Total Xylenes*	<0.150	0.150	09/08/2016	ND	6.36	106	6.00	1.98	
Total BTEX	<0.300	0.300	09/08/2016	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 97.2 % 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	32.0	16.0	09/06/2016	ND	416	104	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	09/02/2016	ND	203	102	200	3.23	
DRO >C10-C28	<10.0	10.0	09/02/2016	ND	223	111	200	3.64	

Surrogate: 1-Chlorooctane 86.0 % 35-147

Surrogate: 1-Chlorooctadecane 99.1 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

COG Operating, LLC
DAKOTA NEEL
500 W. ILLINOIS
Midland TX, 79701
Fax To: None

Received: 09/01/2016
Reported: 09/09/2016
Project Name: SHINER BOCK 1 FEDERAL COM #027H
Project Number: NONE GIVEN
Project Location: EDDY COUNTY, NM

Sampling Date: 08/29/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: TRENCH 5 (2') (H601966-35)

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	09/08/2016	ND	2.14	107	2.00	1.19	
Toluene*	<0.050	0.050	09/08/2016	ND	2.18	109	2.00	1.75	
Ethylbenzene*	<0.050	0.050	09/08/2016	ND	2.10	105	2.00	1.92	
Total Xylenes*	<0.150	0.150	09/08/2016	ND	6.36	106	6.00	1.98	
Total BTEX	<0.300	0.300	09/08/2016	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 97.7 % 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	09/06/2016	ND	416	104	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	09/02/2016	ND	203	102	200	3.23	
DRO >C10-C28	<10.0	10.0	09/02/2016	ND	223	111	200	3.64	

Surrogate: 1-Chlorooctane 90.7 % 35-147

Surrogate: 1-Chlorooctadecane 107 % 28-171

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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

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Celey D. Keene, Lab Director/Quality Manager



Pg 1 of 5

Page 14 of 18



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

pg 2 of 5

Company Name: COG Operating LLC		P.O. #:		BILL TO		ANALYSIS REQUEST	
Project Manager: Dakota Neel		Company: COG Operating LLC					
Address: 2208 West Main		Attn: Robert McNeill					
City: Artesia		Address: 600 W Illinois					
State: NM		City: Midland					
Zip: 88210		State: TX					
Phone #: 432-215-2783		Zip: 79701					
Fax #: Project Owner:		Phone #: (432) 221-0388					
Project #: Project Location:		Fax #:					
Project Name: SHINER BOCK 1 FEDERAL COM #027H							
Sample Name: Eddy Co NM							
FOR LAB USE ONLY							

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							PRESERV.	SAMPLING	ANALYSIS REQUEST						
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE			ICE / COOL	OTHER	BTEX	TPH	Chloride		
11	Track 2 (Surface)	(1')	5																
12		(1')																	
13		(2')																	
14		(3')																	
15		(4')																	
16	Track 3 (Surface)	(1')																	
17		(2')																	
18		(3')																	
19		(4')																	
20		(4')																	

PLEASE NOTE: Laboratory and client's liability and chain of custody for any chain of custody involving samples collected in connection with this request for the analysis. All claims including those for negligence and any other claims whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable analysis. It is agreed that Cardinal has the right to be indemnified or compensated damages, including without limitation, business interruption, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, including the negligence of any of the above named persons or entities.

Relinquished By: [Signature]	Date: 9-1-16	Received By: [Signature]	Date: 9-1-16
Relinquished By: [Signature]	Date: 9-1-16	Received By: [Signature]	Date: 9-1-16
Delivered By: (Circle One)	Sample Condition	CHECKED BY: [Signature]	
Sampler - UPS - Bus - Other:	Cool Intact		
	Yes		
	No		

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



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Pg 3 of 5

Company Name: COG Operating LLC Project Manager: Dakota Neel Address: 2208 West Main City: Artesia State: NM Zip: 88210 Phone #: 432-215-2783 Fax #: Project #: Project Name: SHINER BOCK 1 FEDERAL COM #027H Project Location: Sampler Name:				P.O. #: Company: COG Operating LLC Attn: Robert McNeil Address: 800 W Illinois City: Midland State: TX Zip: 79701 Phone #: (432) 221-0388 Fax #:				BILL TO				ANALYSIS REQUEST																																																																																																																																																																																									
Lab I.D. H101964 Sample I.D.												FOR LAB USE ONLY																																																																																																																																																																																									
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th rowspan="2">Track</th> <th rowspan="2"># CONTAINERS</th> <th colspan="5">MATRIX</th> <th rowspan="2">PRESERV</th> <th rowspan="2">SAMPLING</th> <th rowspan="2">DATE</th> <th rowspan="2">TIME</th> <th rowspan="2">BTX</th> <th rowspan="2">TPH</th> <th rowspan="2">Chloride</th> </tr> <tr> <th>(G/RAB OR (C)OMP.</th> <th>GROUNDWATER</th> <th>WASTEWATER</th> <th>SOIL</th> <th>OIL</th> <th>SLUDGE</th> <th>OTHER</th> <th>ACID/BASE</th> <th>ICE / COOL</th> <th>OTHER</th> </tr> </table>												Track	# CONTAINERS	MATRIX					PRESERV	SAMPLING	DATE	TIME	BTX	TPH	Chloride	(G/RAB OR (C)OMP.	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE / COOL	OTHER	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>21</td> <td>6</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>22</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>23</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>24</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>25</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>26</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>27</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>28</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>29</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>30</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>												21	6														22	1														23															24															25															26															27															28															29															30														
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PLEASE NOTE: Liability and Damages. Customer's liability and third's exclusion liability for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analysis. All claims including those for negligence and any other claims whatsoever shall be deemed waived unless made in writing and received by Client within 30 days after completion of the analysis. In no event shall Client be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or subcontractors arising out of or related to the performance of services hereunder by Client, its subsidiaries, affiliates or subcontractors.												Requisitioned By: <i>[Signature]</i> Date: 4/1/16 Received By: <i>[Signature]</i> Date: 4/1/16 Requisitioned By: <i>[Signature]</i> Date: 4/1/16 Received By: <i>[Signature]</i> Date: 4/1/16 Delivered By: (Circle One) <i>[Signature]</i> Sample Condition: Cool ☒ Intact ☐ CHECKED BY: <i>[Signature]</i> Sampler - UPS - Bus - Other: <i>[Signature]</i> Sample Condition: Cool ☒ Intact ☐ CHECKED BY: <i>[Signature]</i>																																																																																																																																																																																									
Phone Result: ☐ Yes ☐ No Add'l Phone #: Fax Result: ☐ Yes ☐ No Add'l Fax #: REMARKS: Send Results to: dneel2@concho.com																																																																																																																																																																																																					



CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

pg 4 of 5

Company Name: COG Operating LLC

Project Manager: Dakota Neel

Address: 2208 West Main

City: Artesia

Phone #: 432-215-2783

Project #:

Project Name: SHINER BOCK 1 FEDERAL COM #027H

Project Location:

Sampler Name:

FOR LAB USE ONLY

P.O. #:

Company: COG Operating LLC

Attn: Robert McNeill

Address: 600 W Illinois

City: Midland

State: TX Zip: 79701

Phone #: (432) 221-0368

Fax #:

BILL TO

ANALYSIS REQUEST

Lab I.D.

Sample I.D.

H601966

Lab I.D.	Sample I.D.	Trench	Depth	# CONTAINERS	(G)RAB OR (C)OMP.	MATRIX					DATE	TIME	ANALYSIS REQUEST				
						GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE			BTX	TPH	Chloride		
31	Trench 4	(4')	5	1							8/25/14						
32		(5')															
33		(6')															
34	Trench 5	(1')															
35		(2')															
36		(3')															
37		(4')															
38		(5')															
39		(6')															
40		(7')															

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Relinquished By:

Date: 9/1/14

Received By:

Phone Results:

Fax Results:

Add'l Phone #:

Add'l Fax #:

Relinquished By:

Date: 9/1/14

Received By:

Phone Results:

Fax Results:

Add'l Phone #:

Add'l Fax #:

Delivered By: (Circle One)

Date: 9/1/14

Received By:

Phone Results:

Fax Results:

Add'l Phone #:

Add'l Fax #:

Sampler - UPS - Bus - Other:

Date: 9/1/14

Received By:

Phone Results:

Fax Results:

Add'l Phone #:

Add'l Fax #:

FOR CARDINAL

Date: 9/1/14

Received By:

Phone Results:

Fax Results:

Add'l Phone #:

Add'l Fax #:

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

Send Results to:

dneel2@concho.com



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

pg 5 of 5

Company Name: COG Operating LLC

Project Manager: Dakota Neel

Address: 2208 West Main

City: Artesia

Phone #: 432-215-2783

Project #:

Project Name: SHINER BOCK 1 FEDERAL COM #027H

Project Location:

Sampler Name:

BILL TO

P.O. #:

Company: COG Operating LLC

Attn: Robert McNeill

Address: 600 W Illinois

City: Midland

State: TX Zip: 79701

Phone #: (432) 221-0388

Fax #:

ANALYSIS REQUEST

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

Handwritten: H60946

Handwritten: 44

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PLEASE NOTE: Liability and Damages. Cardinal's liability and damage warranty for any data arising from this report is limited to the amount paid by the client for the analysis. All claims including those for negligence and any other claims whatsoever shall be deemed waived unless made by writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruption, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal. Signatures of collector and client to be placed in the space provided for each.

Relinquished By:

Date:

Time:

Received By:

Date:

Time:

Phone Result:

Fax Result:

REMARKS:

Relinquished By:

Date:

Time:

Received By:

Date:

Time:

Phone Result:

Fax Result:

REMARKS:

Delivered By: (Circle One)

Date:

Time:

Received By:

Date:

Time:

Phone Result:

Fax Result:

REMARKS:

Sampler - UPS - Bus - Other:

Date:

Time:

Received By:

Date:

Time:

Phone Result:

Fax Result:

REMARKS:

FORM 0000-0000

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

Send Results to:

dneel2@concho.com

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: COG Operating LLC	Contact: Robert McNeill
Address: 600 West Illinois Avenue, Midland TX 79701	Telephone No. 432-230-0077
Facility Name: SHINER BOCK I FEDERAL COM #027H	Facility Type: Battery
Surface Owner: Federal	Mineral Owner: Federal
API No. 30-015-42022	

LOCATION OF RELEASE

Unit Letter M	Section 01	Township 17S	Range 31E	Feet from the 1160	North/South Line South	Feet from the 170	East/West Line West	County Eddy
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32.8595657,-103.8312531

NATURE OF RELEASE

Type of Release: Oil and Produced Water	Volume of Release: 0.5 bbls Oil ; 4.5 bbls PW	Volume Recovered: 0 bbls Oil ; 3.5 bbls PW
Source of Release: Steel Flowline	Date and Hour of Occurrence: 8/4/2016 unknown	Date and Hour of Discovery: 8/4/2016 10:10 AM
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour:	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

This release was caused by a corroded steel flowline at the well. Vacuum trucks were dispatched to recover standing fluids and the equipment was pressure washed.

Describe Area Affected and Cleanup Action Taken.*

The release remained on location around the wellhead. Concho will have the spill site sampled to delineate any possible contamination from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation work.

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.

OIL CONSERVATION DIVISION

Signature: 	Approved by Environmental Specialist:		
Printed Name: Dakota Neel	Approval Date:		
Title: Environmental Coordinator	Expiration Date:		Attached ☐
E-mail Address: dneel2@concho.com	Conditions of Approval:		
Date: 8/12/2016	Phone: 432-215-2783		

* Attach Additional Sheets If Necessary