

January 11, 2016

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

Re: BKU Central Tank Battery SWD

Sec. 24, T17S-R29E 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 20, 2015.

Background

The release was due to an alarm failure causing the tanks to overflow resulting in the release of 20 barrels of oil and 580 barrels of produced water. The majority of the fluid released was contained within the lined facility of which 10 barrels of oil and 560 barrels of produced water were recovered. The produced water that overflowed the containment impacted the pad, the northside of the lease road, a two track road that ran across a nearby pasture, and a portion of the pad associated with the BKU #315. The attached diagram depicts the area impacted along with approximate sample points.

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 175'.

Soil Assessment and Analytical Results

Sample points were chosen based on proximity to buried hazards such as electrical lines and pipelines as well as overhead powerlines. Below is a summary of the attached analytical results:

S1	CI+
1'	64
2'	32
3'	64
S2	CI-
1'	2400
21	9060
3'	4000
4'	1540
6'	1150
8'	1250
S3	CI-
1'	16
2'	ND

Work Plan

COG Operating LLC proposes that the no excavation be required for the impacted area on the lease road and the pad due to the associated safety hazards with buried electrical lines, gas pipelines, and produced water lines. These hazards pose a high safety concern with respect to sampling and excavation. At a site ranking of Zero, any chorides found on this location from this release or historic releases pose no threat to ground water. The area labeled as S2 would be excavated no greater than a depth of 3' and field titrations will be used to further delineate the area. The area associated with the pipeline right of way (between S1 &S2) would be treated as a minor scrape and any work perform in this area will be done under the supervision of a representative for the respective pipeline. The area labeled as S3 should require no further excavation. An initial scrape was performed in this area upon discovery of the release.

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 at (575) 748-6933.

Sincerely,

Lupe Carrasco

Environmental Coordinator

Enclosure(s): Site Diagram

Analytical Results C-141 Initial (Copy)

BKU Central Tank Battery SWD





November 09, 2015

LUPE CARRASCO

COG OPERATING

P. O. BOX 1630

ARTESIA, NM 88210

RE: BKU CENTRAL TANK BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 10/28/15 11:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab accredited certif.html.

Cardinal Laboratories is accreditated 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.

Celeg D. Keine

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 **LUPE CARRASCO** P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received: Reported: 10/28/2015

11/09/2015

Project Name: Project Number: **BKU CENTRAL TANK BATTERY**

Project Location:

NONE GIVEN

NOT GIVEN

Sampling Date:

Sample Received By:

10/21/2015 Soil

Sampling Type:

Sampling Condition: Cool & Intact

Judy Garcia

Sample ID: S1-1' (H502823-01)

Chloride

Chloride

Chloride

Chloride

mg/kg

Analyzed By: AP

Analyte

64.0

Result

Result

32.0

Result

64.0

Result

2400

16.0

Reporting Limit

Reporting Limit

16.0

Reporting Limit

16.0

Reporting Limit

16.0

11/03/2015

Analyzed

Analyzed

11/03/2015

11/03/2015

11/03/2015

Method Blank ND

Method Blank

ND

BS 432 % Recovery 108

True Value QC 400

RPD Qualifier

7.69

Sample ID: S1-2' (H502823-02)

Analyte

Analyte

Analyte

mg/kg

Analyzed By: AP

B\$

432

% Recovery

108

True Value QC

RPD Qualifier

7.69

Sample ID: S1-3' (H502823-03)

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AP

Analyzed

Method Blank

ND

BS 432 % Recovery 108

True Value QC

400

400

RPD

7.69

Qualifier

Qualifier

Sample ID: S2-1' (H502823-06)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Analyzed

Method Blank

ND

85 432

% Recovery 108

True Value QC 400

RPD 7.69

*=Accredited Analyte

Cardinal Laboratories

int paid by client for analyses. All claims, including those for negligence and nal within thirty (30) days after compl including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidences, affiliates or successors ansing out of or related to the performance of the services hereunder by Cardinal, regardless of whether such

College Themas

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

COG OPERATING **LUPE CARRASCO** P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received: Reported: 10/28/2015

11/09/2015

Project Name:

BKU CENTRAL TANK BATTERY

Project Number:

NONE GIVEN

Project Location:

NOT GIVEN

9060

Result

4000

Result

1540

Result

1150

Result

1250

Sampling Date:

10/21/2015

Sampling Type:

Soil Cool & Intact

Sampling Condition: Sample Received By:

Judy Garcia

Sample ID: S2-2' (H502823-07)

Chloride,	SM4500CI	-B
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Chloride

Chloride

Chloride

Chloride

Chloride

mg/kg

Analyzed By: AP

Analyte

Analyte

Analyte

Analyte

Result Reporting Limit

16.0

Reporting Limit

16.0

Reporting Limit

16.0

16.0

Reporting Limit

16.0

11/03/2015

Analyzed

Analyzed

11/03/2015

Analyzed

11/04/2015

ND

Method Blank

BS % Recovery 432 108

True Value QC 400

RPD Qualifier

7.69

Sample ID: S2-3' (H502823-08)

mg/kg

Analyzed By: AP

Method Blank

BS

432

BS

416

BS

400

400

% Recovery

108

104

True Value QC

400

400

RPD

7.69

Qualifier

Sample ID: S2-4' (H502823-09)

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AP

Method Blank

ND

ND

% Recovery

True Value QC

RPD

0.00

Qualifier

Sample ID: S2-6' (H502823-10) Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Reporting Limit

Analyzed

Method Blank 11/06/2015 ND

% Recovery 100

True Value QC

RPD

Qualifier

Sample ID: S2-8' (H502823-11)

Analyte

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AP

Analyzed 11/09/2015 Method Blank BS

ND

% Recovery

100

400

True Value QC

400

0.00

RPD

0.00

Cardinal Laboratories

*=Accredited Analyte

Qualifier

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Colony To trains

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

COG OPERATING **LUPE CARRASCO** P. O. BOX 1630 ARTESIA NM, 88210 NONE Fax To:

Received:

10/28/2015

Sampling Date:

10/21/2015

Reported:

11/09/2015

Sampling Type:

Soil

Project Name:

BKU CENTRAL TANK BATTERY

Sampling Condition:

Cool & Intact

Project Number: Project Location: NONE GIVEN

Sample Received By:

Judy Garcia

Analyte

NOT GIVEN

Sample ID: S3-1' (H502823-12)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Analyzed

Method Blank

% Recovery

True Value QC

Oualifier

Chloride

Chloride

Result 16.0

11/03/2015 16.0

Reporting Limit

ND

BS 432

108

400

Sample ID: S3-2' (H502823-13)

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AP

Analyte Result Reporting Limit Analyzed <16.0 16.0 11/03/2015

Method Blank ND

85 432 % Recovery 108

True Value QC 400

RPD

7.69

RPD

7.69

Qualifier

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



ND

Notes and Definitions

	• •
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
	Chloride by SM4500CI-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

Analyte NOT DETECTED at or above the reporting limit

Cardinal Laboratories *=Accredited Analyte

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

2

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

(575) 393-2326 FAX (575) 393-2476	476					
ompany Name: COG Operating LLC		BILL TO	100 A	-	ANALYSIS REQ	REQUEST
roject Manager: Lupe Carrasco		P.O. #:				
ddress: 2208 West Main		Company: COG Operating LLC	ating LLC			
듦	Zip 88210	Attn: Robert McNeill	Neill			
0		Address: 600 W Illinois	Illinois			
roject #: Project Owner:	7	City: Midland	<u>a</u>			
Project Name: BKU Central Tank Battery		State: TX Zip: 79701	01			
Project Location:		Phone #: (432) 221-0388	6			
Sampler Name: Lupe Carrasco		Fax #:				
\neg	MATRIX	PRESERVI SAMPLING	ING			
Lab I.D. Sample I.D.	G)RAB OR (C)OMP CONTAINERS GROUNDWATER WASTEWATER SOIL DIL	SLUDGE OTHER: ACID/BASE: ICE / COOL OTHER: DATI	TI ME TEX	ТРН	Chloride	
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Time:	Received By:	wed By: Wed By: What By:	8 11 11		D No Ac	kd'i Phone #: drii Fax #: <u>prn</u> Run untii chlorides fall below 1000 ppm
Delivered By: (Circle One)	O Sample Condition	dition CHECKED BY:				

Sampler - UPS - Bus - Other-FORM-006 R 2.0



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

(310) 000-000	(314) 334-2424 1944 (444)			
Company Name: COG Operating LLC	gLLC	BILL		ANALTOIS NEWOLS
		P.O. #:		
٤ ا		Company: COG Operating LLC	g LLC	
复	State: NM Zip 88210	Attn: Robert McNeill		
9	Fax #:	Address: 600 W Illinois	OE .	
	Project Owner:	City: Midland		
Project Name: BKU Central Tank Battery	Battery	State: TX Zip: 79701		19/10
2		Phone #: (432) 221-0388		11
- 1		Fax#:		
Sampler Name: Lupe Carrasco			-	age of the second
	DR (C)OMP INERS DWATER WATER	SE. 7	(addi
1502823	# CON GROL WAST SOIL OIL	OTHE ACIDA OTHE	BTE	Chlo
S2-1	< >	10/21/15		×
2-22	×	10/21/15		×
600	×	10/21/15		×
0 S2-61	×	10/21/15		>
S2-8'	×	10/21/15		>
PLEASE MOTE: Listally and Durragos. Cardinal's label analyses. All cleans including those for mightywice and a analyses. All cleans and Cardinal be label for included	PLEASE NOTE: Linking and Deminges. Cardina's labely and clears exclusive ramedy for any claim issuing whether based in compact or lost, shall be bristed to the amount paid by the claims for completion of the applicable. PLEASE NOTE: Linking these for mightures and any other cause evaluations what he deemed waters made in writing and recursed by Cardinal with the completion of the applicable. All claims including these for mightures and any other cause evaluations what he deemed waters made in writing and recursed by Cardinal be labely or mightures and any other cause of profits included by claims. It is administration to the control of the c	injust or loft, shall be irrained to the amount pand by og and received by Candrell wither 30 days after or sons, loss of use, or less of profits insurind by che	y the chart for the completion of the applicable of, its automotionest,	
Relinquished By:	Date: Received By:	and BY:	" 등	☐ Yes ☐ No Add'l Phone #:
9	20100	Charles .		corproperty com

CHECKED BY:

atrujillo@concho.com

Run until chlorides fall below 1000 ppm

Ballinguished By:

10

Time:

Delivered By: (Circle One)

282



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST 8

	(575) 393-2326 FAX (575) 393-2476	X (575) 393-247	6	L	ĺ	ŀ	ı												i		2	֡֝֟֝֟֟֝֟֟֟֟֝֟֟֟֟֓֓֟֟֟֟֟֟֟֟֟֟֟֟֟֟֓֓֟֟֟֟֓֓֟֟֟֓֟֟֟֓֓֟֟֟֓֓֟֟֟֓֓֓֟֟֓֓֡	٦					┙	
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Project Manager:	Lupe Carrasco							2	P.O. #:																			_	
Address: 2208 V	2208 West Main							ह	Ð	Company:		COG Operating LLC	o LLC														_		
듰		State: NM	Zip	TI	00	88210		Attn:	5			Robert McNeill	=														_	_	
D	(575) 748-6940	Fax#:						à	Address:	38		600 W Illinois	Ø.						_					_					
		Project Owner:						City:	3			Midfand										_							
ame:	BKU Central Tank Battery	ery						S	State: TX	¥		Zip: 79701												_				_	
Project Location:								P	E E	*	(432	Phone #: (432) 221-0388										_						-	
Sampler Name:	Lupe Carrasco			Ŕ,				Fa	Fax #:																			_	
Lab I.D.	Sample I.D.	.D.	CONTAINERS	ROUNDWATER	ASTEWATER	OIL MATRIX	LUDGE	THER:		CID/BASE: PRESENT OF A COOL OTHER:	THER 2	SAMPLING	Z M	BTEX	трн	Chloride													
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3 53-2'	3-2'		×									10/21/15				×													
											T (80) 17 1 107																		
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Relinquished By:	ed By:	Date:		Received By	믦		- di	-	~ [5	0.0	copinates of whother such darm is based in many of the above straid residence of the control of	Phone Result: Fax Result: REMARKS:	<u> </u>	☐ Yes ☐ Yes QCarrasco	2	8 2 2	Add'l Phone #: Add'l Fax #: COM	# 9 8				1 1 1 2 2		3	1			10.7
Ralinquished By:	Course	8	- F	37	Bet	CE	0	TE	7	-	7	may burea	atrujilo@concho.c	X 200	ho.com	1 19	70	Run until chlorides fall below 1000 ppm	2	욏	ğ	ळ	D		1	8	PSI	5 md	100
		Time.				(1

CHECKED BY:

Sampler - UPS - Bus - Other Tour FORM-006 R 2.0

Delivered By: (Circle One)

Time:

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 8751 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico **Energy Minerals and Natural Resources**

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

Form C-141 Revised August 8, 2011

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

Release Notification and Corrective Action

	OPERATOR ☑ Initial Report ☐ Final Report Name of Company: COG Operating LLC Contact: Robert McNeill									
					Contact: Ro	bert McNeill		•		
Address: 60	0 West III	inois Avenue	, Midlan	1TX 79701	Telephone	No. 432-230-0077				
Facility Na	ne: BKU (Central Tank	Battery S	SWD	Facility Ty	e: Facility			- 150	
Surface Ow	ner: Fee			Mineral Own	er: Fee		API No.	N/A		
				LOCAT	ION OF RE	LEASE				
Unit Letter	Section	Township	Range	The second secon	orth/South Line		East/West Line		Coun	ty
J	24	175	29E	N/A	N/A	N/A	N/A		Eddy	у
				Latitude N32' 49	0.180 Longitud	e W104' 01.569				
T CD 1				NATUI	RE OF REL		111			
Type of Rele Oil & Produc					Volume of	t Retease: & 580 bbls PW	Volume R	ecovered: & 560 bbl	. DIV	
Source of Re						lour of Occurrence:				
Tank Overflo					8/20/2015		8/20/2015	lour of Dis	covery:	:
Was Immedi		Tivon9			If YES, To		0/20/2013	0.50 am		
Was minicul	ate Notice (Yes 📋	No 🗌 Not Requi		cher – OCD				
By Whom?	Amanda 1	rujillo			Date and I	lour: Fri 8/21/2015	5:15 PM			
Was a Water	course Read		=		If YES, V	olume Impacting the	: Watercourse.			
			Yes 🗵	No						
This release	was caused a Affected a occurred in	and Cleanup A within contain possible conta	erflowed of the certain the ce	lue to an alarm failuí	nment and impac	ted the pad and near	by pasture. Concl	no will have		
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: OIL CONSERVATION DIVISION										
Printed Name	: Amanda	Trujillo			Approved by	Environmental Spec	cialist:			
Title: Senior	Environme	ntal Coordinate	οr	_	Approval Da	te:	Expiration D	ate:	_	
E-mail Addre	ss: <u>atrujillo</u>	@concho.com			Conditions o	f Approval:		Attached		
Date: Au Attach Addi	gust 2, 2015			748-6940						