

Closure Report

Site Description

Site Name:	Loving 1 State #003
Company:	COG Operating LLC
Legal Description:	U/L E, Section 1, T24S, R27E
County:	Eddy County, NM
GPS Coordinates:	N 32.24832° W 104.15029°

Release Data

Date of Release:	04/26/2016
Type of Release:	Oil and Produced water
Source of Release:	Produced water tank
Volume of Release:	1 bbl oil, 35 bbls produced water
Volume Recovered:	1 bbl oil, 33 bbls produced water

Remediation Specifications

Remediation Parameters:	During response to the spill, 6 inches of soil was removed. An additional 1 ft will be excavated across the entire leak site for a total removal depth of 1.5 ft. Backfill the site with clean soil.	
Remediation Activities:	09/07/2016 to 09/15/2016	
Plan Sent to OCD:	07/11/2016	Email from Cliff Brunson to Mike Bratcher
OCD Approval of Plan:	07/25/2016	Email from Mike Bratcher to Cliff Brunson
Plan Sent to SLO:	07/11/2016	Email from Cliff Brunson to Amber Groves
BLM Approval of Plan:	08/01/2016	Email from Amber Groves to Cliff Brunson

Supporting Documentation

Initial C-141	Signed 05/06/2016
Final C-141	Signed 09/23/2016
Site Diagram	April 2016
Groundwater Plot	50'-75'
TOPO Maps	June 2016
Lab Summary	05/23/2016
Lab Analysis	05/23/2016
Correspondence	Request and approval of remediation plan via email

Request for Closure

Based on the completion of the remediation plan as agreed upon, BBC International requests closure approval from NMOCD.

Cliff Brunson, President of BBC International Inc.

09/27/2016

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

Form C-141
Revised August 8, 2011

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

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.	432-683-7443
Facility Name:	LOVING 1 STATE #003	Facility Type:	Tank Battery
Surface Owner:	State	Mineral Owner:	API No. 30-015-32446

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	01	24S	27E	1980	North	660	West	Eddy

Latitude 32.6090431 Longitude 104.452919

NATURE OF RELEASE

Type of Release: Oil and Produced Water	Volume of Release: Oil 1bbl Produced Water 35bbls	Volume Recovered: Oil 1bbl Produced Water 33bbls
Source of Release: Produced Water Tank	Date and Hour of Occurrence: 04-26-2016 10:01pm	Date and Hour of Discovery: 04-26-2016 10:01pm
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher - NMOCD / Amber Groves - SLO	
By Whom? Robert Grubbs Jr	Date and Hour: 04-29-2016 12:35pm	
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.*

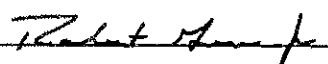
Describe Cause of Problem and Remedial Action Taken.*

This release was caused by a surface casing valve left open to a line that dumped into the water tank causing it to run over. A vacuum truck was dispatched to remove all free standing fluids.

Describe Area Affected and Cleanup Action Taken.*

Initially 1bbl of oil and 35bbls of produced water were released due to a surface casing valve left open to a line that dumped into the water tank causing it to run over. The valve was closed to prevent this from occurring again. 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.

Signature: 	OIL CONSERVATION DIVISION		
Printed Name: Robert Grubbs Jr.	Approved by Environmental Specialist:		
Title: Senior Environmental Coordinator	Approval Date:	Expiration Date:	
E-mail Address: rgrubbs@concho.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 05-06-2016 Phone: 432-683-7443			

* Attach Additional Sheets If Necessary

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State of New Mexico
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1220 South St. Francis Dr.
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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

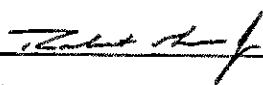
Name of Company: COG Operating LLC	Contact: Robert McNeill
Address: 600 West Illinois Avenue, Midland, TX 79701	Telephone No. 432-230-0077
Facility Name: Loving 1 State #003	Facility Type: Tank Battery
Surface Owner: State	Mineral Owner:
API No. 30-015-32446	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	I	24S	27E	1980	North	660	West	Eddy County, NM

Latitude N 32.60904° Longitude W 104.452919°



NATURE OF RELEASE

Type of Release: Oil and produced water	Volume of Release: 1 bbl oil, 35 bbls produced water	Volume Recovered: 1 bbl oil, 33 bbls produced water
Source of Release: Produced water tank	Date and Hour of Occurrence 04/26/2016 @ 10:01 pm	Date and Hour of Discovery 04/26/2016 @ 10:01 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-NMOCD, Amber Groves-SLO	
By Whom? Robert Grubbs Jr.	Date and Hour: 04/29/2016 @ 12:35 pm	
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 release was caused by a surface casing valve left open to a line that dumped into the water tank causing it to run over. A vacuum truck was dispatched to remove all free standing fluids.		
Describe Area Affected and Cleanup Action Taken.*		
Initially 1 bbl of oil and 35 bbls of produced water were released due to a surface casing valve left open to a line that dumped into the water tank causing it to run over. The valve was closed to prevent this from occurring again. The site was delineated and a remediation plan was developed. The remediation plan was approved by Mike Bratcher of NMOCD via email on 07/25/2016 and approved by Amber Groves of the SLO via email on 08/01/2016. Remediation was completed in accordance with the approved plan.		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		
Signature: 		OIL CONSERVATION DIVISION
Printed Name: Robert Grubbs		Approved by Environmental Specialist:
Title: Senior Environmental Coordinator		Approval Date: Expiration Date:
E-mail Address: rgrubbs@concho.com		Conditions of Approval: Attached <input type="checkbox"/>
Date: September 23, 2016 Phone: (432) 683-7443		

* Attach Additional Sheets If Necessary

Loving 1 State #3

Legend

-  Release Area
-  Sample Points



Google earth

90 ft



Groundwater Plot

Concho Loving 1 State #3

County
Eddy

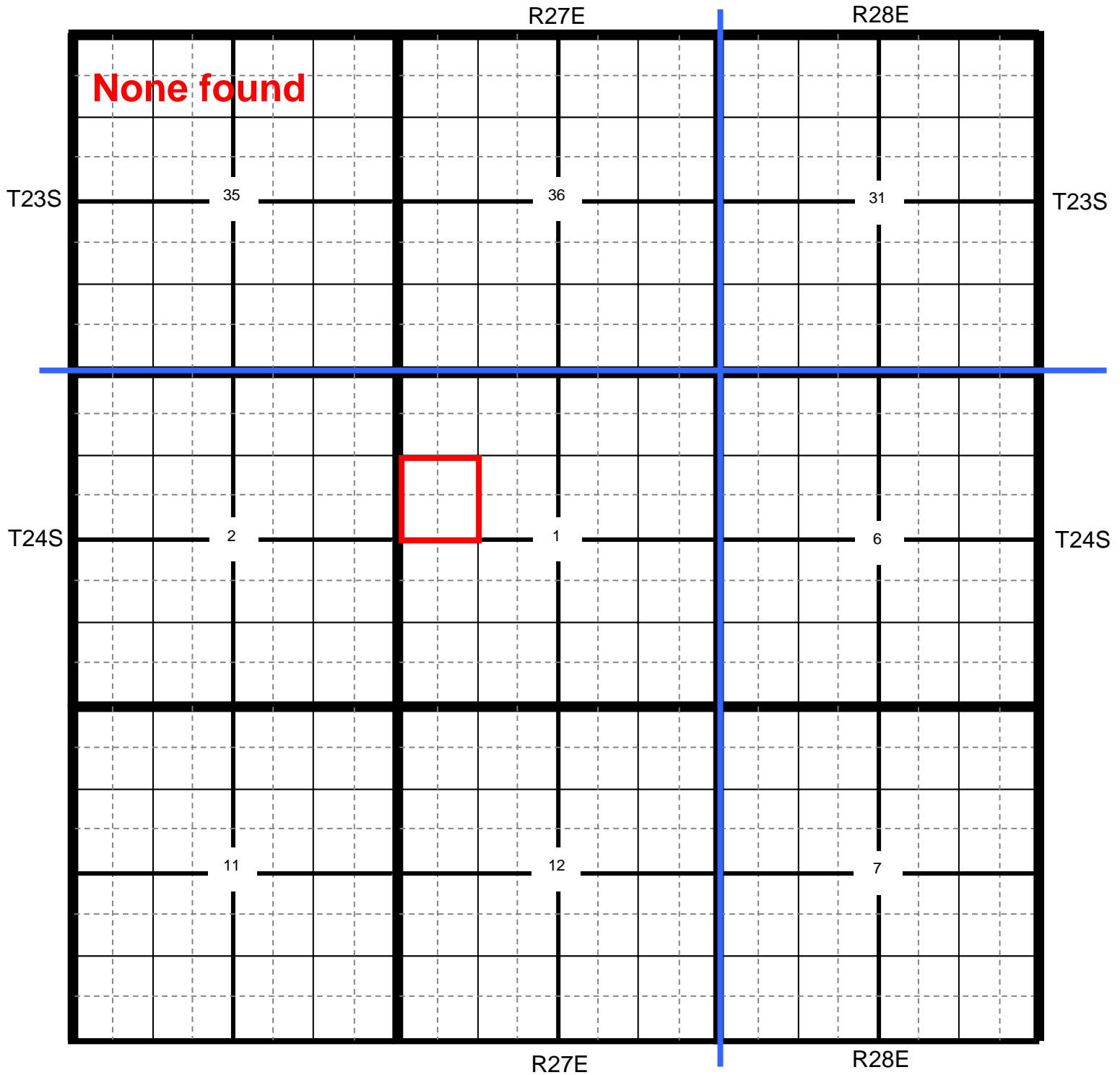
Unit Letter
E

Section
1

Township
24S

Range
27E

Trend Map 50'-75'



📍 Location

● OCD

● USGS

● SEO

● All Databases

Concho Loving 1 State #003

County Eddy **Unit Letter** E **Section** 1 **Township** 24S **Range** 27E

Trend Map 50'-75"

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

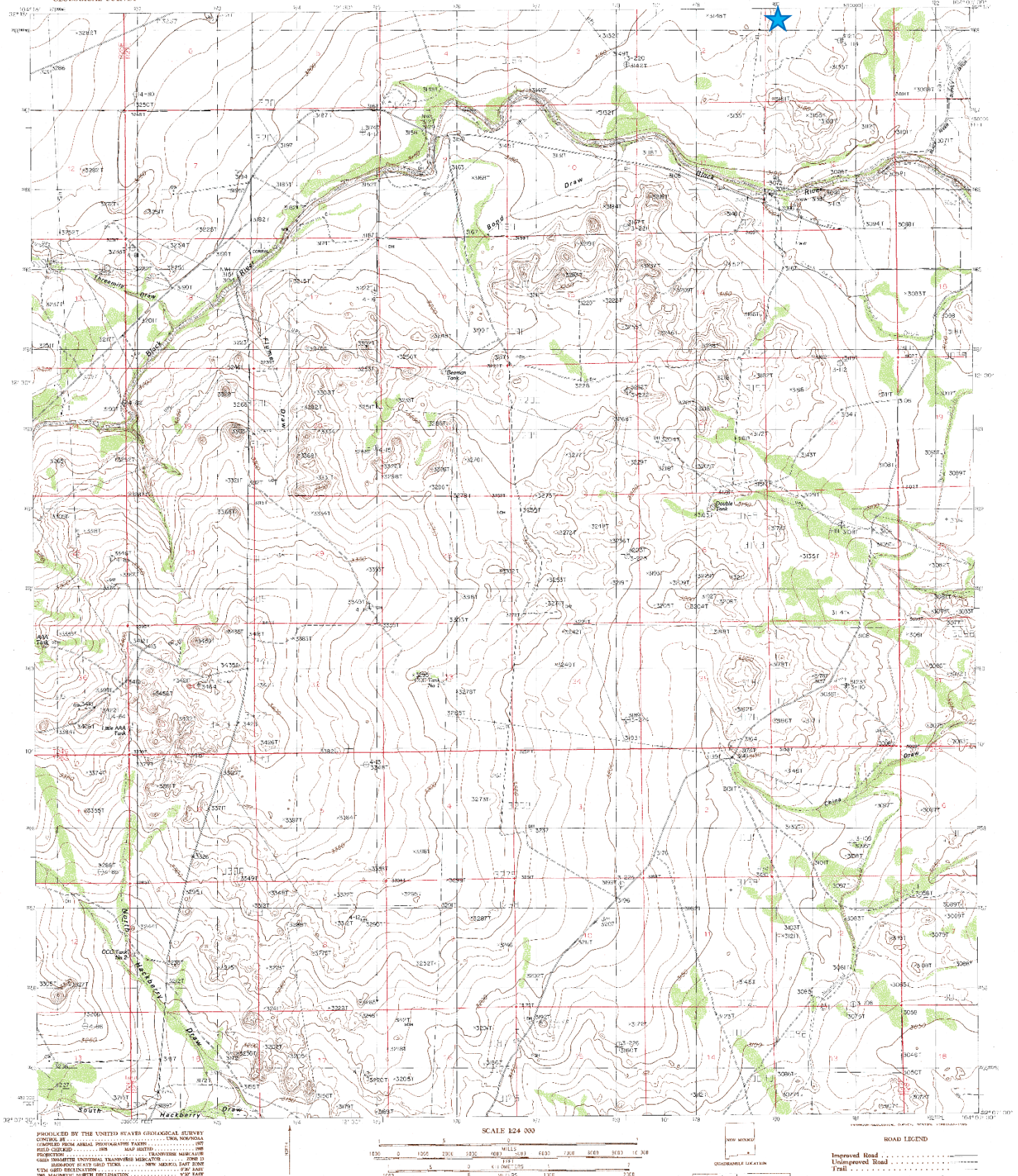
4

Concho

Loving 1 State #3

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

BOND DRAW QUADRANGLE
NEW MEXICO-EDDY CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)



PRODUCED BY THE UNITED STATES GEOLOGICAL SURVEY
CONTROL BY: UNCLASSIFIED FROM AERIAL PHOTOGRAPHIC TAPING
FIELD CHECKED: 1985 MAP DATED: 1985
PROJECTION: TRANSVERSE MERCATOR
GCS: NAD83 DATUM: NAD83
UNIT: METERS
SCALE: 1:24,000
ELEVATION: 1000 FEET
VERTICAL DATUM: NGVD 29
HORIZONTAL DATUM: NAD83
TO PLACE ON THE PREDICTED NORTH AMERICAN DATUM OF 1983
move the projection lines as shown by dashed corner ticks
(5 meters south and 46 meters east)
There may be private inclusions within the boundaries of any
Federal and State Reservations shown on this map.
All material data and lettering generated and positioned by
automated type placement procedure.

PROVISIONAL MAP
Produced from original
manuscript drawings. Information
shown as of date of
field check.

THIS MAP COMPLETES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, WASHINGTON, COLORADO 80535
ON WASHINGTON, VIRGINIA 22092

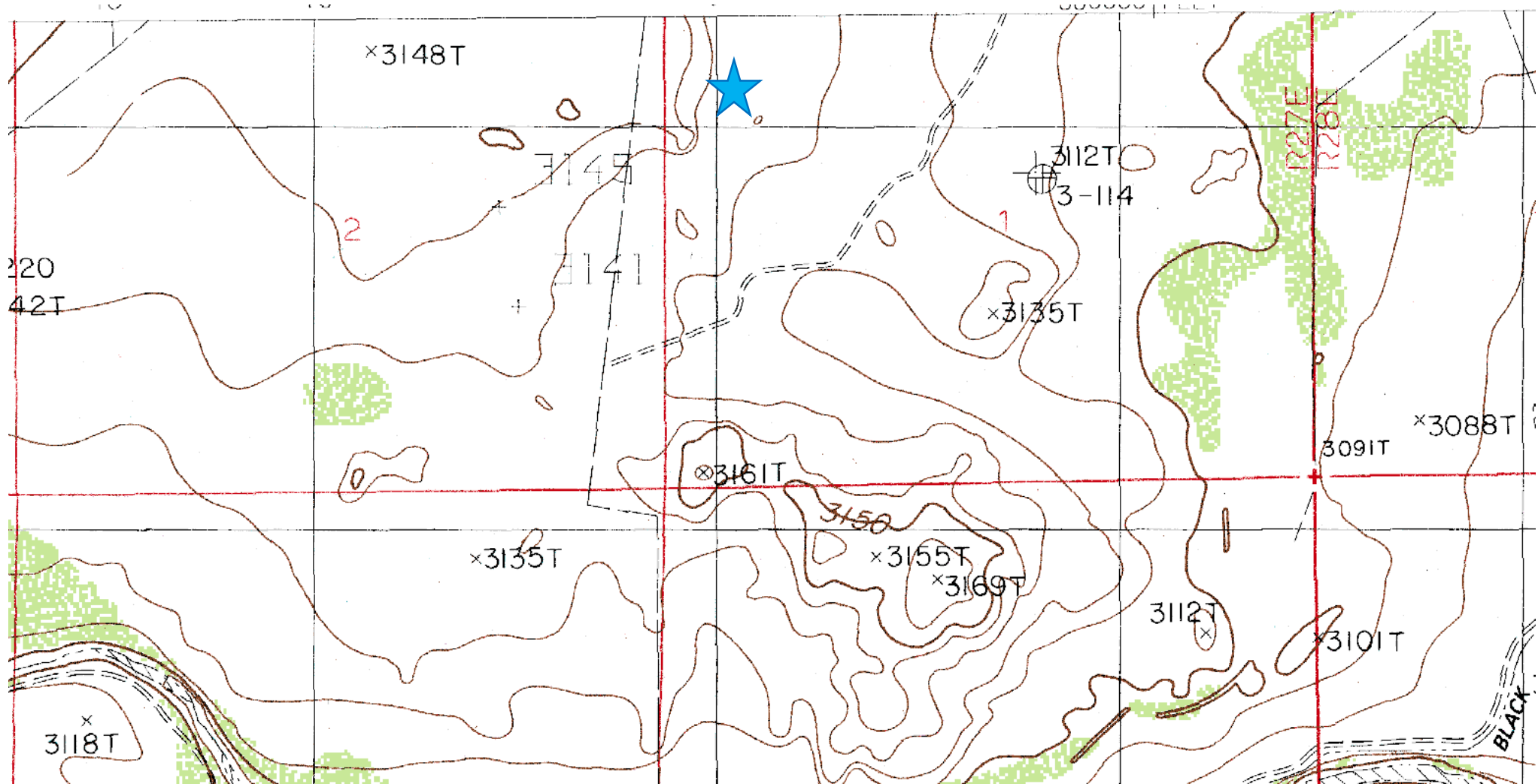
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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ROAD LEGEND
Improved Road
Unimproved Road
Trail
Interstate Route
U.S. Route
State Route

BOND DRAW, NEW MEXICO
PROVISIONAL EDITION 1985
32104-10519-024

Concho

Loving 1 State #3



**Laboratory Analytical Results Summary
Loving 1 State #3**

		Sample	SP1 @ 1'	SP1 @ 2'	SP1 @ 3'	SP1 @ 4'	SP1 @ 6'	SP1 @ 8'
Analyte	Method	Date	5/23/16	5/23/16	5/23/16	5/23/16	5/23/16	5/23/16
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		<0.100	<0.050	<0.050	<0.050	n/a	n/a
Toluene	BTEX 8021B		<0.100	<0.050	<0.050	<0.050	n/a	n/a
Ethylbenzene	BTEX 8021B		2.19	<0.050	<0.050	<0.050	n/a	n/a
Total Xylenes	BTEX 8021B		<0.300	<0.150	<0.150	<0.150	n/a	n/a
Total BTEX	BTEX 8021B		2.19	<0.300	<0.300	<0.300	n/a	n/a
Chloride	SM4500Cl-B		144	<16.0	<16.0	16	16	80
GRO	TPH 8015M		123	<10.0	<10.0	<10.0	n/a	n/a
DRO	TPH 8015M		2240	130	<10.0	<10.0	n/a	n/a

		Sample	SP2 @ 1'	SP2 @ 2'	SP2 @ 3'	SP2 @ 4'	SP2 @ 6'
Analyte	Method	Date	5/23/16	5/23/16	5/23/16	5/23/16	5/23/16
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Benzene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050	n/a
Toluene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050	n/a
Ethylbenzene	BTEX 8021B		<0.050	<0.050	<0.050	<0.050	n/a
Total Xylenes	BTEX 8021B		<0.150	<0.150	<0.150	<0.150	n/a
Total BTEX	BTEX 8021B		<0.300	<0.300	<0.300	<0.300	n/a
Chloride	SM4500Cl-B		1250	336	<16.0	448	32
GRO	TPH 8015M		<10.0	<10.0	<10.0	<10.0	n/a
DRO	TPH 8015M		320	31.4	<10.0	<10.0	n/a



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

May 31, 2016

LUPE CARRASCO

COG OPERATING

P. O. BOX 1630

ARTESIA, NM 88210

RE: LOVING 1 STATE #3

Enclosed are the results of analyses for samples received by the laboratory on 05/25/16 14:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-15-7. 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
LUPE CARRASCO
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 05/25/2016
Reported: 05/31/2016
Project Name: LOVING 1 STATE #3
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 05/23/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: S1 - 1' (H601147-01)

BTEX 8021B		mg/kg		Analyzed By: CK				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	05/27/2016	ND	2.10	105	2.00	1.57	
Toluene*	<0.100	0.100	05/27/2016	ND	2.03	102	2.00	1.53	
Ethylbenzene*	2.19	0.100	05/27/2016	ND	1.83	91.6	2.00	1.98	
Total Xylenes*	<0.300	0.300	05/27/2016	ND	5.67	94.5	6.00	1.49	
Total BTEX	2.19	0.600	05/27/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 150 % 73.6-140

Chloride, SM4500Cl-B			mg/kg					Analyzed By: AP	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	05/26/2016	ND	400	100	400	3.92	

TPH 8015M			mg/kg					Analyzed By: CK	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	123	10.0	05/27/2016	ND	175	87.7	200	2.89	
DRO >C10-C28	2240	10.0	05/27/2016	ND	187	93.4	200	4.53	

Surrogate: 1-Chlorooctane 101 % 35-147

Surrogate: 1-Chlorooctadecane 125 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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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: 05/25/2016
Reported: 05/31/2016
Project Name: LOVING 1 STATE #3
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 05/23/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: S1 - 2' (H601147-02)

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/27/2016	ND	2.10	105	2.00	1.57	
Toluene*	<0.050	0.050	05/27/2016	ND	2.03	102	2.00	1.53	
Ethylbenzene*	<0.050	0.050	05/27/2016	ND	1.83	91.6	2.00	1.98	
Total Xylenes*	<0.150	0.150	05/27/2016	ND	5.67	94.5	6.00	1.49	
Total BTX	<0.300	0.300	05/27/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.1 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	05/26/2016	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/26/2016	ND	203	102	200	3.88	
DRO >C10-C28	130	10.0	05/26/2016	ND	214	107	200	5.72	

Surrogate: 1-Chlorooctane 71.7 % 35-147

Surrogate: 1-Chlorooctadecane 74.7 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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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: 05/25/2016
Reported: 05/31/2016
Project Name: LOVING 1 STATE #3
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 05/23/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: S1 - 3' (H601147-03)

BTX 8021B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/27/2016	ND	2.10	105	2.00	1.57		
Toluene*	<0.050	0.050	05/27/2016	ND	2.03	102	2.00	1.53		
Ethylbenzene*	<0.050	0.050	05/27/2016	ND	1.83	91.6	2.00	1.98		
Total Xylenes*	<0.150	0.150	05/27/2016	ND	5.67	94.5	6.00	1.49		
Total BTX	<0.300	0.300	05/27/2016	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.9 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	05/26/2016	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/26/2016	ND	203	102	200	3.88	
DRO >C10-C28	<10.0	10.0	05/26/2016	ND	214	107	200	5.72	

Surrogate: 1-Chlorooctane 105 % 35-147

Surrogate: 1-Chlorooctadecane 104 % 28-171

Cardinal Laboratories

*=Accredited Analyte

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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: 05/25/2016
Reported: 05/31/2016
Project Name: LOVING 1 STATE #3
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 05/23/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: S1 - 4' (H601147-04)

BTX 8021B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/27/2016	ND	2.10	105	2.00	1.57		
Toluene*	<0.050	0.050	05/27/2016	ND	2.03	102	2.00	1.53		
Ethylbenzene*	<0.050	0.050	05/27/2016	ND	1.83	91.6	2.00	1.98		
Total Xylenes*	<0.150	0.150	05/27/2016	ND	5.67	94.5	6.00	1.49		
Total BTX	<0.300	0.300	05/27/2016	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.7 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	05/26/2016	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/26/2016	ND	203	102	200	3.88	
DRO >C10-C28	<10.0	10.0	05/26/2016	ND	214	107	200	5.72	

Surrogate: 1-Chlorooctane 74.7 % 35-147

Surrogate: 1-Chlorooctadecane 74.8 % 28-171

Sample ID: S1 - 6' (H601147-05)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	05/26/2016	ND	400	100	400	3.92	

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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: 05/25/2016
Reported: 05/31/2016
Project Name: LOVING 1 STATE #3
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 05/23/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: S1 - 8' (H601147-06)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	05/26/2016	ND	400	100	400	3.92	

Sample ID: S2 - 1' (H601147-07)

BTEX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/27/2016	ND	2.10	105	2.00	1.57	
Toluene*	<0.050	0.050	05/27/2016	ND	2.03	102	2.00	1.53	
Ethylbenzene*	<0.050	0.050	05/27/2016	ND	1.83	91.6	2.00	1.98	
Total Xylenes*	<0.150	0.150	05/27/2016	ND	5.67	94.5	6.00	1.49	
Total BTEX	<0.300	0.300	05/27/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.9 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1250	16.0	05/26/2016	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/27/2016	ND	170	85.1	200	5.99	
DRO >C10-C28	320	10.0	05/27/2016	ND	174	87.0	200	9.47	QM-07, QR-03

Surrogate: 1-Chlorooctane 75.7 % 35-147

Surrogate: 1-Chlorooctadecane 112 % 28-171

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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: 05/25/2016
Reported: 05/31/2016
Project Name: LOVING 1 STATE #3
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 05/23/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: S2 - 2' (H601147-08)

BTX 8021B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/27/2016	ND	2.10	105	2.00	1.57		
Toluene*	<0.050	0.050	05/27/2016	ND	2.03	102	2.00	1.53		
Ethylbenzene*	<0.050	0.050	05/27/2016	ND	1.83	91.6	2.00	1.98		
Total Xylenes*	<0.150	0.150	05/27/2016	ND	5.67	94.5	6.00	1.49		
Total BTX	<0.300	0.300	05/27/2016	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.4 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	05/26/2016	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/27/2016	ND	170	85.1	200	5.99	
DRO >C10-C28	31.4	10.0	05/27/2016	ND	174	87.0	200	9.47	

Surrogate: 1-Chlorooctane 75.5 % 35-147

Surrogate: 1-Chlorooctadecane 105 % 28-171

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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: 05/25/2016
Reported: 05/31/2016
Project Name: LOVING 1 STATE #3
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 05/23/2016
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Celey D. Keene

Sample ID: S2 - 3' (H601147-09)

BTEx 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/27/2016	ND	2.10	105	2.00	1.57	
Toluene*	<0.050	0.050	05/27/2016	ND	2.03	102	2.00	1.53	
Ethylbenzene*	<0.050	0.050	05/27/2016	ND	1.83	91.6	2.00	1.98	
Total Xylenes*	<0.150	0.150	05/27/2016	ND	5.67	94.5	6.00	1.49	
Total BTEx	<0.300	0.300	05/27/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.9 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	05/26/2016	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/27/2016	ND	170	85.1	200	5.99	
DRO >C10-C28	<10.0	10.0	05/27/2016	ND	174	87.0	200	9.47	

Surrogate: 1-Chlorooctane 87.0 % 35-147

Surrogate: 1-Chlorooctadecane 116 % 28-171

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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: 05/25/2016
 Reported: 05/31/2016
 Project Name: LOVING 1 STATE #3
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 05/23/2016
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Celey D. Keene

Sample ID: S2 - 4' (H601147-10)

BTX 8021B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/27/2016	ND	2.10	105	2.00	1.57	
Toluene*	<0.050	0.050	05/27/2016	ND	2.03	102	2.00	1.53	
Ethylbenzene*	<0.050	0.050	05/27/2016	ND	1.83	91.6	2.00	1.98	
Total Xylenes*	<0.150	0.150	05/27/2016	ND	5.67	94.5	6.00	1.49	
Total BTX	<0.300	0.300	05/27/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.6 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	448	16.0	05/26/2016	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/27/2016	ND	170	85.1	200	5.99	
DRO >C10-C28	<10.0	10.0	05/27/2016	ND	174	87.0	200	9.47	

Surrogate: 1-Chlorooctane 75.3 % 35-147

Surrogate: 1-Chlorooctadecane 86.7 % 28-171

Sample ID: S2 - 6' (H601147-11)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	05/31/2016	ND	416	104	400	3.77	

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside if 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



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[†] Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: COG Operating LLC

Project Manager: Lupe Carrasco

Address: 2208 West Main

City: Artesia

Phone #: (575) 748-6940

Project #:

Project Name: Loving 1 State #3

Project Location:

Sampler Name: Lupe Carrasco

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

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	ANALYSIS REQUEST									
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :			BTEX	TPH	Chloride							
HAQ0147-7	8	8	X							5/24/16		X	X	X							
	9	9	X							5/24/16		X	X	X							
	10	10	X							5/24/16		X	X	X							
	11	11	X							5/24/16		X	X	X							

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Relinquished By:

Date:

Received By:

Phone Result:

Yes ☐ No ☐

Add'l Phone #:

Relinquished By:

Date:

Received By:

Fax Result:

Yes ☐ No ☐

Add'l Fax #:

Relinquished By:

Date:

Received By:

REMARKS:

gcarrasco@concho.com

atrullillo@concho.com

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

FORM-006 R.2.0

Sample Condition

CHECKED BY:

Cool ☒ Intact ☒

Yes ☒ No ☒

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476

Kathy Purvis

From: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>
Sent: Monday, July 25, 2016 10:01 AM
To: Cliff Brunson
Cc: Robert Grubbs; Patterson, Heather, EMNRD; Ken Swinney; Jennifer Gilkey; Kathy Purvis; 'agroves@slo.state.nm.us'
Subject: RE: COG Loving 1 State #3 - Remediation Plan

RE: COG * Loving 1-3 * **2RP-3681** * DOR: 4/26/16

Cliff,

Your proposal for remediation of the above referenced release is approved. Please advise once remedial activities have been scheduled.

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

If you have any questions or concerns, and for notification, please contact me.

Mike Bratcher
NMOCD District 2
811 S. First Street
Artesia, NM 88210
O: 575-748-1283 X108
C: 575-626-0857
F: 575-748-9720

From: Cliff Brunson [mailto:cbrunson@bbcinternational.com]
Sent: Monday, July 11, 2016 5:22 PM
To: Bratcher, Mike, EMNRD
Cc: Robert Grubbs; Patterson, Heather, EMNRD; Ken Swinney; Jennifer Gilkey; Kathy Purvis
Subject: COG Loving 1 State #3 - Remediation Plan

Mike,

This e-mail is to confirm our discussion concerning the remediation plan for the COG Loving 1 State #3 release. I have attached the information packet that we used in our discussion with a cover page describing the remediation plan that we agreed upon.

If you would please reply back via e-mail with your concurrence on this plan, it would be greatly appreciated.

Thanks, Cliff

President
BBC International, Inc.
World-Wide Environmental Specialists
Mailing Address:
P. O. Box 805
Hobbs, NM 88241-0805 USA
Shipping Address:
1324 W. Marland St.
Hobbs, NM 88240 USA
Phone: (575) 397-6388
Fax: (575) 397-0397
E-Mail: cbrunson@bbcinternational.com

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From: [Cliff Brunson](#)
To: [Amber Groves](#)
Cc: [Robert Grubbs](#); [Ken Swinney](#); [Jennifer Gilkey](#); [Kathy Purvis](#)
Subject: COG Loving 1 State #3 - Remediation Plan
Date: Monday, July 11, 2016 5:47:30 PM
Attachments: [Remediation Plan, Loving 1 State 3.pdf](#)

Amber,

This e-mail is to confirm our discussion concerning the remediation plan for the COG Loving 1 State #3 release. I have attached the information packet that we used in our discussion with a cover page describing the remediation plan that we agreed upon.

If you would please reply back via e-mail with your concurrence on this plan, it would be greatly appreciated.

Thanks, Cliff

Cliff P. Brunson, CEI, CRS
President
BBC International, Inc.
World-Wide Environmental Specialists
Mailing Address:
P. O. Box 805
Hobbs, NM 88241-0805 USA
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