

# Closure Report

## Site Description

Site Name:	VT 36 State #001H
Company:	COG Operating LLC
Legal Description:	U/L D, Section 36, T19S, R25E
County:	Eddy County, NM
GPS Coordinates:	N 32.62279° W 103.44295°

## Release Data

Date of Release:	07/06/2016
Type of Release:	Produced water
Source of Release:	Faulty 4" Balon valve
Volume of Release:	40 bbls
Volume Recovered:	0 bbls

## Remediation Specifications

Remediation Parameters:	Excavate the area around T-1 to a depth of 4 feet or deeper to accommodate the new pipeline. Place a liner in the excavation. Excavate the area near T-2 and T-3 to a depth of 2 feet. Obtain field titration samples for sidewall boundaries and bottom delineation in T-1. Backfill the site with clean soil.	
Remediation Activities:	12/19/2016-12/23/2016	
Plan Sent to OCD:	12/14/2016	Email from Cliff Brunson to Mike Bratcher
OCD Approval of Plan:	12/15/2016	Email from Mike Bratcher to Cliff Brunson
Plan Sent to SLO:	12/14/2016	Email from Cliff Brunson to Amber Groves
SLO Approval of Plan:	12/21/2016	Email from Amber Groves to Cliff Brunson

## Supporting Documentation

Initial C-141	Signed 07/15/2016
Final C-141	Signed 01/03/2017
Site Diagram	July 2016
Groundwater Plot	125'
TOPO Maps	November 2016
Lab Summary	10/11/2016
Lab Analysis	10/11/2016
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.

04/21/2016

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

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.	432-683-7443
Facility Name:	VT 36 STATE #001H	Facility Type:	Flowline
Surface Owner:	State	Mineral Owner:	API No. 30-015-37690

### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	36	19S	25E	480'	North	330'	West	Eddy

Latitude 32.6227913 Longitude 104.4456329

### NATURE OF RELEASE

Type of Release:	Produced Water	Volume of Release:	40bbls of Produced Water	Volume Recovered:	0bbls of Produced Water
Source of Release:	4" Balon valve	Date and Hour of Occurrence:	07-06-2016 08:00am	Date and Hour of Discovery:	07-06-2016 08:00am
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:	7/12/2016 1:36 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.\*

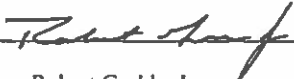
Describe Cause of Problem and Remedial Action Taken.\*

4" Balon valve corroded due to age. The valve was replaced with a new one,

Describe Area Affected and Cleanup Action Taken.\*

This release impacted a 200'x 80' area in the pasture. 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:   
Printed Name: Robert Grubbs Jr.  
Title: Senior Environmental Coordinator  
E-mail Address: rgrubbs@concho.com  
Date: July 15, 2016 Phone: 432-683-7443

### OIL CONSERVATION DIVISION

Approved by Environmental Specialist:

Approval Date: Expiration Date:

Conditions of Approval:

Attached ☐

\* Attach Additional Sheets If Necessary

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: VT 36 State #001H	Facility Type: Flow line	
Surface Owner: State	Mineral Owner:	API No. 30-015-37690

#### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	36	19S	25E	480	North	330	West	Eddy County, NM

Latitude N 32.62279° Longitude W 104.44295°

#### NATURE OF RELEASE

Type of Release: Produced water	Volume of Release: 40 bbls	Volume Recovered: 0 bbls
Source of Release: 4" Balon valve	Date and Hour of Occurrence 07/06/2016 @ 8:00 am	Date and Hour of Discovery 07/06/2016 @ 8:00 am
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: 07/12/2016 @ 1:36 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.*  A 4" Balon valve corroded due to age. The valve was replaced with a new one.		
Describe Area Affected and Cleanup Action Taken.*  This release impacted a 200' x 80' area in the pasture. The site was delineated and a remediation plan was sent to NMOCD and the SLO. The remediation plan was approved by Mike Bratcher of NMOCD via email on 12/15/2016 and approved by Amber Groves of the SLO via email on 12/21/2016. 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: 		<b>OIL CONSERVATION DIVISION</b>
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: January 3, 2017	Phone: (432) 683-7443	

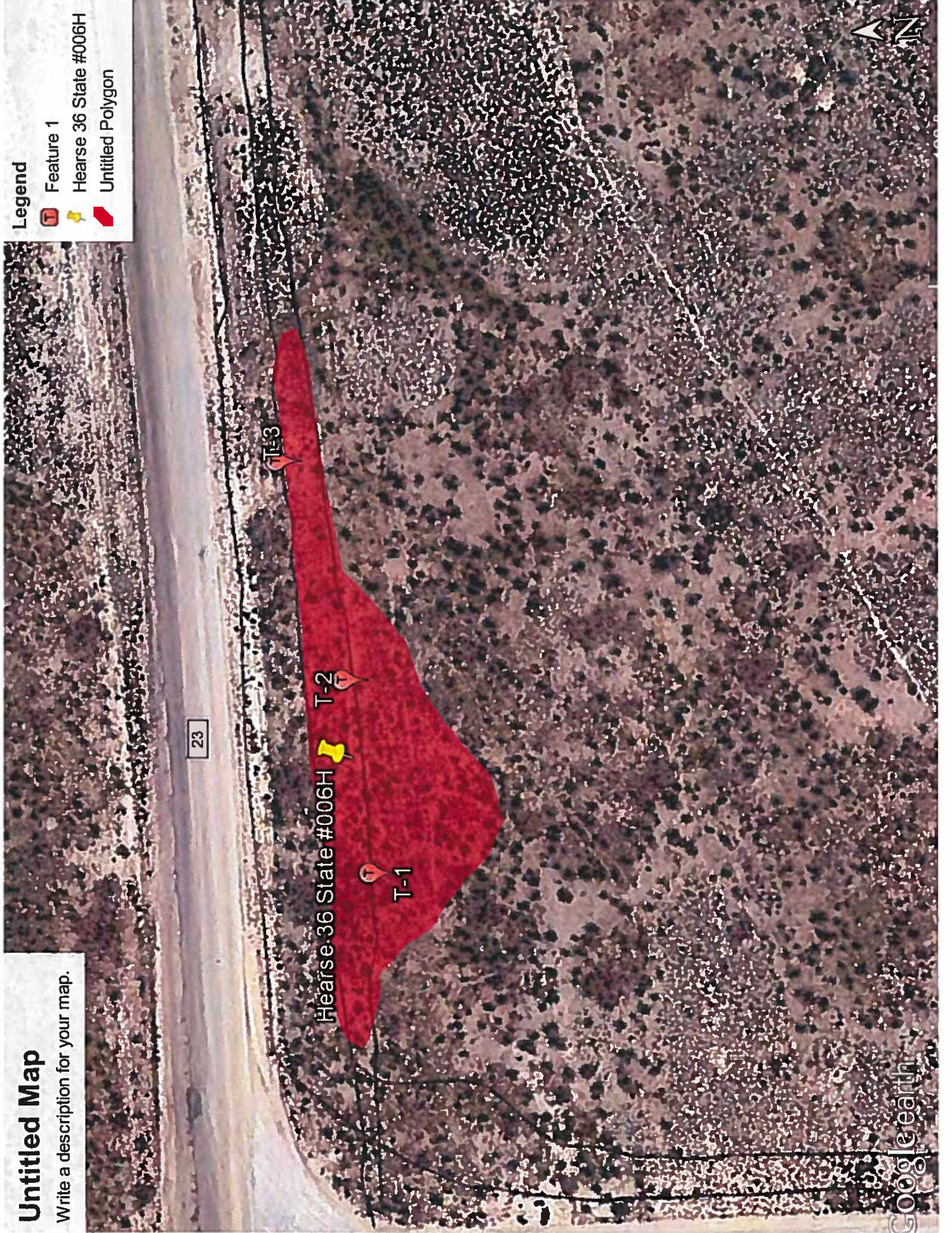
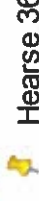
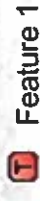
\* Attach Additional Sheets If Necessary



# Untitled Map

Write a description for your map.

## Legend







# Groundwater Plot

COG VT 36 State #001H

County  
Eddy

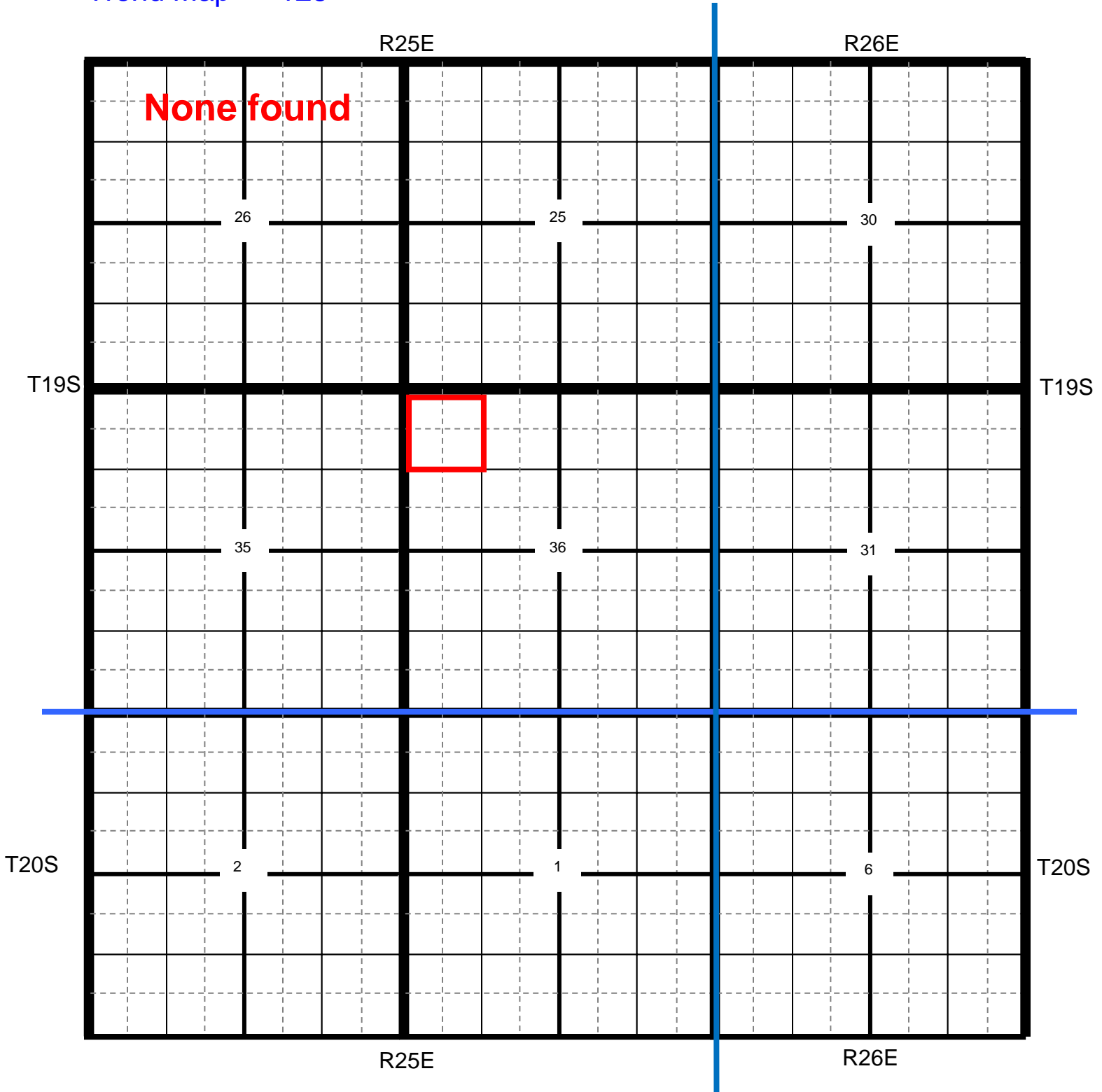
Unit Letter  
D

Section  
36

Township  
19S

Range  
25E

Trend Map 125'



★ Location

● OCD

● USGS

● SEO

● All Databases

## COG Operating, LLC VT 36 State #001H

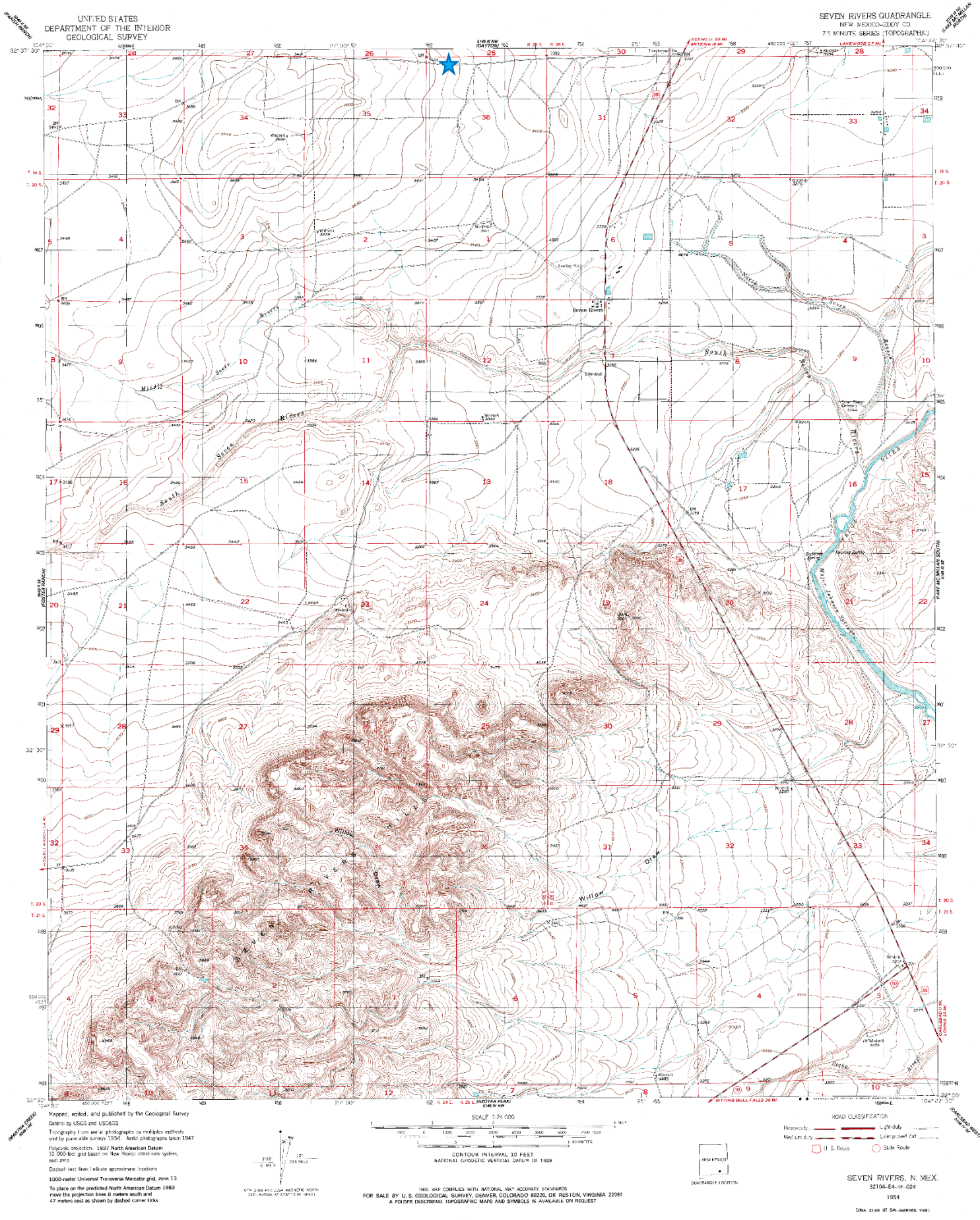
<b>County</b>	<b>Unit Letter</b>	<b>Section</b>	<b>Township</b>	<b>Range</b>
Eddy	D	36	19S	25E

Trend Map 125'

1		2	
NW/NW	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	

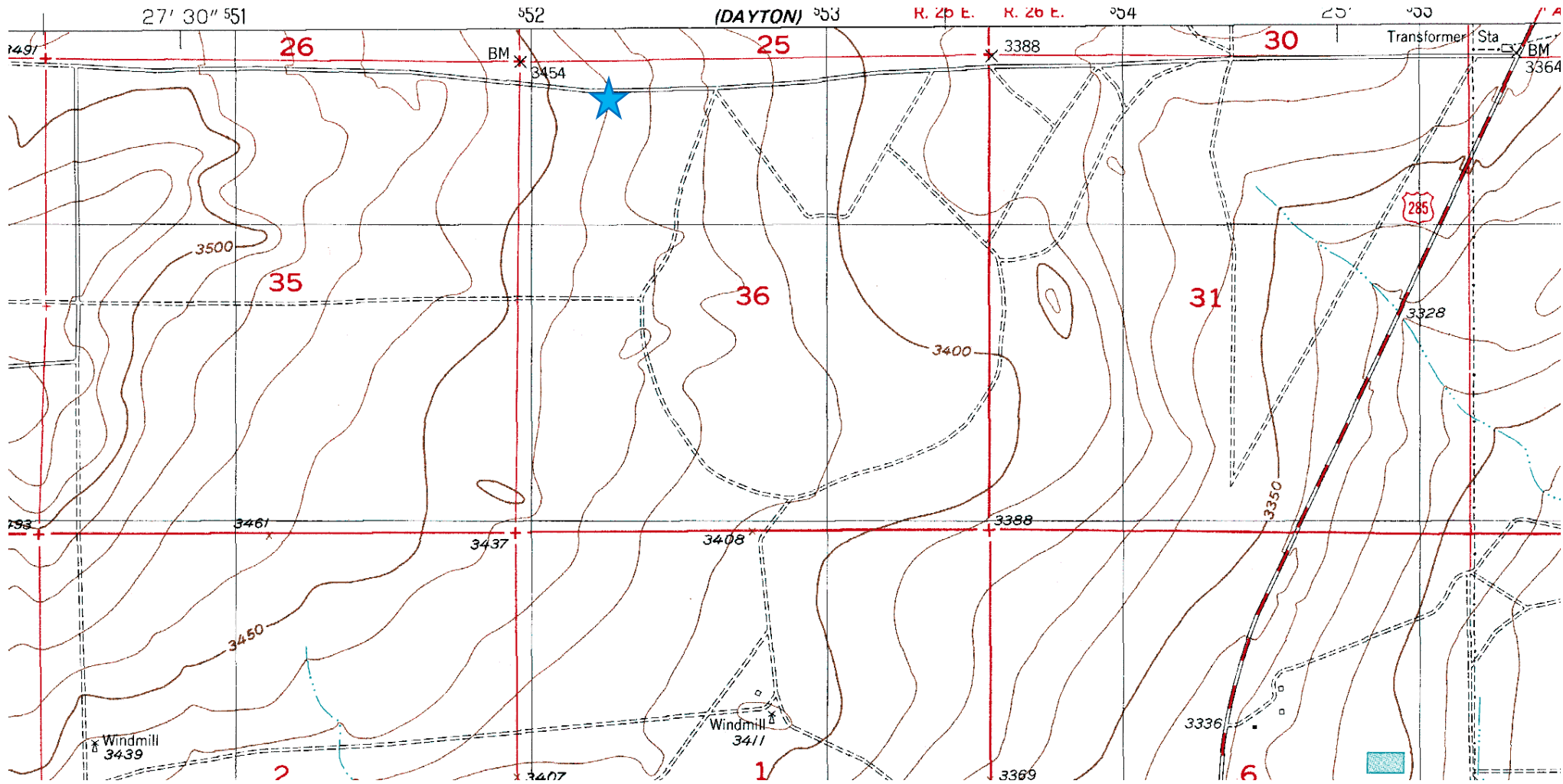
# COG

## VT 36 State #001H



# COG

## VT 36 State #001H





**Laboratory Analytical Results Summary**  
**VT 36 State #001H**

		Sample	T1 @ 0-1'	T1 @ 2'	T1 @ 4'	T1 @ 6'	T1 @ 8'	T1 @ 10'	T1 @ 12'
Analyte	Method	Date	10/11/16	10/11/16	10/11/16	10/11/16	10/11/16	10/11/16	10/11/16
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
<b>Benzene</b>	BTEX 8021B		<0.050	<0.050	n/a	n/a	n/a	n/a	n/a
<b>Toluene</b>	BTEX 8021B		<0.050	<0.050	n/a	n/a	n/a	n/a	n/a
<b>Ethylbenzene</b>	BTEX 8021B		<0.050	<0.050	n/a	n/a	n/a	n/a	n/a
<b>Total Xylenes</b>	BTEX 8021B		<0.150	<0.150	n/a	n/a	n/a	n/a	n/a
<b>Total BTEX</b>	BTEX 8021B		<0.300	<0.300	n/a	n/a	n/a	n/a	n/a
<b>Chloride</b>	SM4500Cl-B		<b>3760</b>	<b>3880</b>	<b>3760</b>	<b>4640</b>	<b>3560</b>	<b>3040</b>	<b>2960</b>
<b>GRO</b>	TPH 8015M		<10.0	<10.0	n/a	n/a	n/a	n/a	n/a
<b>DRO</b>	TPH 8015M		<10.0	<10.0	n/a	n/a	n/a	n/a	n/a

		Sample	T2 @ 0-1'	T2 @ 2'	T2 @ 4'	T2 @ 6'
Analyte	Method	Date	10/11/16	10/11/16	10/11/16	10/11/16
			mg/Kg	mg/Kg	mg/Kg	mg/Kg
<b>Benzene</b>	BTEX 8021B		<0.050	<0.050	n/a	n/a
<b>Toluene</b>	BTEX 8021B		<0.050	<0.050	n/a	n/a
<b>Ethylbenzene</b>	BTEX 8021B		<0.050	<0.050	n/a	n/a
<b>Total Xylenes</b>	BTEX 8021B		<0.150	<0.150	n/a	n/a
<b>Total BTEX</b>	BTEX 8021B		<0.300	<0.300	n/a	n/a
<b>Chloride</b>	SM4500Cl-B		<b>1720</b>	<b>1360</b>	<b>544</b>	<b>64</b>
<b>GRO</b>	TPH 8015M		<10.0	<10.0	n/a	n/a
<b>DRO</b>	TPH 8015M		<10.0	<10.0	n/a	n/a

		Sample	T3 @ 0-1'	T3 @ 2'	T3 @ 4'
Analyte	Method	Date	10/11/16	10/11/16	10/11/16
			mg/Kg	mg/Kg	mg/Kg
<b>Benzene</b>	BTEX 8021B		<0.050	<0.050	<0.050
<b>Toluene</b>	BTEX 8021B		<0.050	<0.050	<0.050
<b>Ethylbenzene</b>	BTEX 8021B		<0.050	<0.050	<0.050
<b>Total Xylenes</b>	BTEX 8021B		<0.150	<0.150	<0.150
<b>Total BTEX</b>	BTEX 8021B		<0.300	<0.300	<0.300
<b>Chloride</b>	SM4500Cl-B		<b>6000</b>	<b>5600</b>	<b>224</b>
<b>GRO</b>	TPH 8015M		<10.0	<10.0	<10.0
<b>DRO</b>	TPH 8015M		<10.0	<10.0	<10.0

October 20, 2016

ROBERT GRUBBS, JR

COG OPERATING

P. O. BOX 1630

ARTESIA, NM 88210

RE: HEARSE 36 STATE #006H

Enclosed are the results of analyses for samples received by the laboratory on 10/12/16 11:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://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  
ROBERT GRUBBS, JR  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 10/12/2016  
Reported: 10/20/2016  
Project Name: HEARSE 36 STATE #006H  
Project Number: NONE GIVEN  
Project Location: EDDY COUNTY, NM

Sampling Date: 10/11/2016  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Angela Cabrera

**Sample ID: T-1 0-1' (H602305-01)**

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	10/13/2016	ND	2.29	114	2.00	0.988	
Toluene*	<0.050	0.050	10/13/2016	ND	2.39	119	2.00	1.16	
Ethylbenzene*	<0.050	0.050	10/13/2016	ND	2.31	116	2.00	1.50	
Total Xylenes*	<0.150	0.150	10/13/2016	ND	6.99	116	6.00	1.41	
Total BTX	<0.300	0.300	10/13/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 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	3760	16.0	10/13/2016	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	10/13/2016	ND	183	91.7	200	0.933	
DRO >C10-C28	<10.0	10.0	10/13/2016	ND	193	96.7	200	0.574	

Surrogate: 1-Chlorooctane 95.0 % 35-147

Surrogate: 1-Chlorooctadecane 98.6 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

COG OPERATING  
ROBERT GRUBBS, JR  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 10/12/2016  
Reported: 10/20/2016  
Project Name: HEARSE 36 STATE #006H  
Project Number: NONE GIVEN  
Project Location: EDDY COUNTY, NM

Sampling Date: 10/11/2016  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Angela Cabrera

**Sample ID: T-1 2' (H602305-02)**

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	10/13/2016	ND	2.29	114	2.00	0.988	
Toluene*	<0.050	0.050	10/13/2016	ND	2.39	119	2.00	1.16	
Ethylbenzene*	<0.050	0.050	10/13/2016	ND	2.31	116	2.00	1.50	
Total Xylenes*	<0.150	0.150	10/13/2016	ND	6.99	116	6.00	1.41	
Total BTX	<0.300	0.300	10/13/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.3 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3880	16.0	10/13/2016	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	10/13/2016	ND	183	91.7	200	0.933	
DRO >C10-C28	<10.0	10.0	10/13/2016	ND	193	96.7	200	0.574	

Surrogate: 1-Chlorooctane 91.6 % 35-147

Surrogate: 1-Chlorooctadecane 96.0 % 28-171

**Sample ID: T-1 4' (H602305-03)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3760	16.0	10/18/2016	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  
 ROBERT GRUBBS, JR  
 P. O. BOX 1630  
 ARTESIA NM, 88210  
 Fax To: NONE

 Received: 10/12/2016  
 Reported: 10/20/2016  
 Project Name: HEARSE 36 STATE #006H  
 Project Number: NONE GIVEN  
 Project Location: EDDY COUNTY, NM

 Sampling Date: 10/11/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Angela Cabrera

**Sample ID: T-1 6' (H602305-04)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4640	16.0	10/19/2016	ND	416	104	400	3.77	

**Sample ID: T-1 8' (H602305-05)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3560	16.0	10/20/2016	ND	432	108	400	3.77	

**Sample ID: T-1 10' (H602305-06)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3040	16.0	10/20/2016	ND	432	108	400	3.77	

**Sample ID: T-1 12' (H602305-07)**

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	10/20/2016	ND	432	108	400	3.77	

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

COG OPERATING  
ROBERT GRUBBS, JR  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 10/12/2016  
Reported: 10/20/2016  
Project Name: HEARSE 36 STATE #006H  
Project Number: NONE GIVEN  
Project Location: EDDY COUNTY, NM

Sampling Date: 10/11/2016  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Angela Cabrera

**Sample ID: T-2 0-1' (H602305-08)**

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	10/13/2016	ND	2.29	114	2.00	0.988	
Toluene*	<0.050	0.050	10/13/2016	ND	2.39	119	2.00	1.16	
Ethylbenzene*	<0.050	0.050	10/13/2016	ND	2.31	116	2.00	1.50	
Total Xylenes*	<0.150	0.150	10/13/2016	ND	6.99	116	6.00	1.41	
Total BTX	<0.300	0.300	10/13/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.0 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1720	16.0	10/13/2016	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	10/13/2016	ND	184	91.8	200	5.61	
DRO >C10-C28	<10.0	10.0	10/13/2016	ND	191	95.7	200	5.61	

Surrogate: 1-Chlorooctane 77.0 % 35-147

Surrogate: 1-Chlorooctadecane 84.4 % 28-171

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

COG OPERATING  
ROBERT GRUBBS, JR  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 10/12/2016  
Reported: 10/20/2016  
Project Name: HEARSE 36 STATE #006H  
Project Number: NONE GIVEN  
Project Location: EDDY COUNTY, NM

Sampling Date: 10/11/2016  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Angela Cabrera

**Sample ID: T-2 2' (H602305-09)**

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	10/13/2016	ND	2.29	114	2.00	0.988		
Toluene*	<0.050	0.050	10/13/2016	ND	2.39	119	2.00	1.16		
Ethylbenzene*	<0.050	0.050	10/13/2016	ND	2.31	116	2.00	1.50		
Total Xylenes*	<0.150	0.150	10/13/2016	ND	6.99	116	6.00	1.41		
Total BTX	<0.300	0.300	10/13/2016	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1360	16.0	10/13/2016	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	10/13/2016	ND	184	91.8	200	5.61	
DRO >C10-C28	<10.0	10.0	10/13/2016	ND	191	95.7	200	5.61	

Surrogate: 1-Chlorooctane 87.9 % 35-147

Surrogate: 1-Chlorooctadecane 100 % 28-171

**Sample ID: T-2 4' (H602305-10)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	544	16.0	10/18/2016	ND	416	104	400	3.77	QM-07, QR-03

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

COG OPERATING  
ROBERT GRUBBS, JR  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 10/12/2016  
Reported: 10/20/2016  
Project Name: HEARSE 36 STATE #006H  
Project Number: NONE GIVEN  
Project Location: EDDY COUNTY, NM

Sampling Date: 10/11/2016  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Angela Cabrera

**Sample ID: T-2 6' (H602305-11)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	10/19/2016	ND	416	104	400	3.77	

**Sample ID: T-3 0-1' (H602305-13)**

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	10/14/2016	ND	2.35	118	2.00	0.427	
Toluene*	<0.050	0.050	10/14/2016	ND	2.44	122	2.00	0.401	
Ethylbenzene*	<0.050	0.050	10/14/2016	ND	2.37	118	2.00	0.470	
Total Xylenes*	<0.150	0.150	10/14/2016	ND	7.18	120	6.00	0.363	
Total BTEx	<0.300	0.300	10/14/2016	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 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	6000	16.0	10/13/2016	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	10/13/2016	ND	184	91.8	200	5.61	
DRO >C10-C28	<10.0	10.0	10/13/2016	ND	191	95.7	200	5.61	

Surrogate: 1-Chlorooctane 94.7 % 35-147

Surrogate: 1-Chlorooctadecane 103 % 28-171

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

COG OPERATING  
ROBERT GRUBBS, JR  
P. O. BOX 1630  
ARTESIA NM, 88210  
Fax To: NONE

Received: 10/12/2016  
Reported: 10/20/2016  
Project Name: HEARSE 36 STATE #006H  
Project Number: NONE GIVEN  
Project Location: EDDY COUNTY, NM

Sampling Date: 10/11/2016  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Angela Cabrera

**Sample ID: T-3 2' (H602305-14)**

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	10/14/2016	ND	2.35	118	2.00	0.427		
Toluene*	<0.050	0.050	10/14/2016	ND	2.44	122	2.00	0.401		
Ethylbenzene*	<0.050	0.050	10/14/2016	ND	2.37	118	2.00	0.470		
Total Xylenes*	<0.150	0.150	10/14/2016	ND	7.18	120	6.00	0.363		
Total BTEx	<0.300	0.300	10/14/2016	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.7 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	5600	16.0	10/13/2016	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	10/13/2016	ND	184	91.8	200	5.61	
DRO >C10-C28	<10.0	10.0	10/13/2016	ND	191	95.7	200	5.61	

Surrogate: 1-Chlorooctane 77.2 % 35-147

Surrogate: 1-Chlorooctadecane 83.6 % 28-171

**Sample ID: T-3 4' (H602305-15)**

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	10/18/2016	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.
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



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Page 10 of 11



**(575) 393-2326 FAX (575) 393-2476**  
**COG Operating LLC**

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**From:** Groves, Amber  
**To:** [Bratcher, Mike, EMNRD](#); [Cliff Brunson](#)  
**Cc:** [Robert Grubbs](#); [Ken Swinney](#); [Jennifer Gilkey](#); [Kathy Purvis](#); [Patterson, Heather, EMNRD](#); [Weaver, Crystal, EMNRD](#)  
**Subject:** RE: COG VT 36 State #001H - Remediation Plan  
**Date:** Wednesday, December 21, 2016 10:49:29 AM  
**Attachments:** [image001.png](#)  
[image002.png](#)

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Cliff,

I apologize about the delay on a follow up e-mail on this one, however this is to confirm that I gave verbal approval. Please send in your re-vegetation plan when you can.

Thank you,

**Amber Groves**

*Remediation Specialist*

*Field Operations Division*

(575)392-3697

(575)263-3209 cell

New Mexico State Land Office

2827 N. Dal Paso Suite 117

Hobbs, NM 88260

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**From:** Bratcher, Mike, EMNRD [mailto:mike.bratcher@state.nm.us]  
**Sent:** Thursday, December 15, 2016 7:54 AM  
**To:** Cliff Brunson <cbrunson@bbcinational.com>; Groves, Amber <agroves@slo.state.nm.us>  
**Cc:** Robert Grubbs <RGrubbs@concho.com>; Ken Swinney <kswinney@bbcinational.com>; Jennifer Gilkey <jgilkey@bbcinational.com>; Kathy Purvis <kathy@bbcinational.com>; Patterson, Heather, EMNRD <Heather.Patterson@state.nm.us>; Weaver, Crystal, EMNRD <Crystal.Weaver@state.nm.us>  
**Subject:** RE: COG VT 36 State #001H - Remediation Plan



RE: COG \* VT 36 St 1 \* **2RP-3781** \* DOR: 7/6/16

Cliff,

Your proposal for remediation of the above referenced release is approved. You may proceed on your schedule.

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, please contact me.

Mike Bratcher  
NMOCD District 2  
811 S. First St.  
Artesia NM 88210  
575-748-1283 Ext 108  
[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)

---

**From:** Cliff Brunson [<mailto:cbrunson@bbcinternational.com>]

**Sent:** Wednesday, December 14, 2016 6:18 PM

**To:** Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>; Amber Groves  
<[agroves@slo.state.nm.us](mailto:agroves@slo.state.nm.us)>

**Cc:** Robert Grubbs <[RGrubbs@concho.com](mailto:RGrubbs@concho.com)>; Ken Swinney <[kswinney@bbcinternational.com](mailto:kswinney@bbcinternational.com)>;  
Jennifer Gilkey <[jgilkey@bbcinternational.com](mailto:jgilkey@bbcinternational.com)>; Kathy Purvis <[kathy@bbcinternational.com](mailto:kathy@bbcinternational.com)>

**Subject:** COG VT 36 State #001H - Remediation Plan

Mike and Amber,

This e-mail is to confirm our discussion concerning the remediation plan for the COG VT 36 State #001H 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.

COG and I appreciate the both of you rushing this acceptance of the plan due to the pipeline installation project. Amber, as we discussed, I will get you a revegetation plan for this site later.

If you would please reply 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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1324 W. Marland St.  
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