

# Closure Report

## Site Description

Site Name:	Willow 17 State SWD #001
Company:	COG Operating LLC
Legal Description:	U/L P, Section 17, T25S, R28E
County:	Eddy County, NM
GPS Coordinates:	N 32.12498° W 104.10342°

## Release Data

Date of Release:	05/27/2016
Type of Release:	Produced water
Source of Release:	Flowline leak
Volume of Release:	15 bbls
Volume Recovered:	0 bbls

## Remediation Specifications

Remediation Parameters:	Excavate the entire leak to a depth of 1 foot. Backfill the site with clean soil.	
Remediation Activities:	11/28/2016 to 11/29/2016	
Plan Sent to OCD:	11/04/2016	Email from Cliff Brunson to Mike Bratcher
OCD Approval of Plan:	11/10/2016	Email from Mike Bratcher to Cliff Brunson
Plan Sent to BLM:	n/a	n/a
BLM Approval of Plan:	n/a	n/a

## Supporting Documentation

Initial C-141	Signed 06/06/2016
Final C-141	Signed 11/30/2016
Site Diagram	October 2016
Groundwater Plot	50'-100'
TOPO Maps	October 2016
Lab Summary	08/31/2016
Lab Analysis	08/31/2016
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.

12/08/2016

**NM OIL CONSERVATION**  
ARTESIA DISTRICT

JUN 07 2016

Form C-141  
Revised August 8, 2011

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

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

RECEIVED

**Release Notification and Corrective Action**

0AB16160541652

**OPERATOR**

Initial Report  Final Report

Name of Company: COG Operating LLC 229137	Contact: Robert McNeill
Address: 600 West Illinois Avenue, Midland TX 79701	Telephone No. 432-230-0077
Facility Name: WILLOW 17 STATE SWD #001	Facility Type: SWD

Surface Owner: State	Mineral Owner:	API No. 30-015-41806
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**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	17	35S	28E	660'	South	660'	East	Eddy

Latitude 32.1243935 Longitude -104.1029892

**NATURE OF RELEASE**

Type of Release: Produced Water	Volume of Release: 15 bbls PW	Volume Recovered: 0 bbls PW
Source of Release: Flowline	Date and Hour of Occurrence: 5/27/2016 Unknown	Date and Hour of Discovery: 5/27/2016 2:00 pm
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour:	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*  
This release was caused by a check valve on a poly flowline. The broken check valve was replaced.

Describe Area Affected and Cleanup Action Taken.\*  
This release occurred in the pasture on the north edge of the facility and is approximately 0.1 acre in size. 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: <i>Robert McNeill</i>	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Robert McNeill	Signed By: <i>Mike Bernier</i> Approved by Environmental Specialist:	
Title: Environmental Manager	Approval Date: 6/8/16	Expiration Date: N/A
E-mail Address: rmcneill@concho.com	Conditions of Approval: Remediation per O.C.D. Rules & Guidelines <input checked="" type="checkbox"/>	
Date: June 6, 2016 Phone: 432-230-0077	SUBMIT REMEDIATION PROPOSAL NO	

\* Attach Additional Sheets If Necessary

LATER THAN: 1/19/16 2RP-3721

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: Willow 17 State SWD #001	Facility Type: Battery
Surface Owner: State	Mineral Owner:
API No. 30-015-41806	

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	17	25S	28E	660	South	660	East	Eddy County, NM

Latitude N 32.12498° Longitude W 104.10342°

**NATURE OF RELEASE**

Type of Release: Produced water	Volume of Release: 80 bbls	Volume Recovered: 0 bbls
Source of Release: Hose connecting to the load line	Date and Hour of Occurrence 07/24/2016 @ 8:00 am	Date and Hour of Discovery 07/24/2016 @ 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	
By Whom? Robert Grubbs Jr.	Date and Hour: 07/25/2016 @ 9:28 am	
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.\*

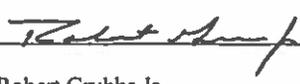
Describe Cause of Problem and Remedial Action Taken.\*

A truck was unloading when his hose disconnected from the load line. Make sure the hose connect is secure before unloading.

Describe Area Affected and Cleanup Action Taken.\*

This release occurred when the hose connection failed going to a load line on the pad. A 5 x 5 area went off in the pasture next to the location. The spill was delineated and a remediation plan was created. Remediation was completed in accordance with the remediation plan approved by Mike Bratcher of NMOCD via email on 09/28/2016.

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:	
Date: November 30, 2016 Phone: (432) 683-7443		Attached <input type="checkbox"/>	

\* Attach Additional Sheets If Necessary



# Groundwater Plot

## COG Willow 17 State SWD #001

County  
Eddy

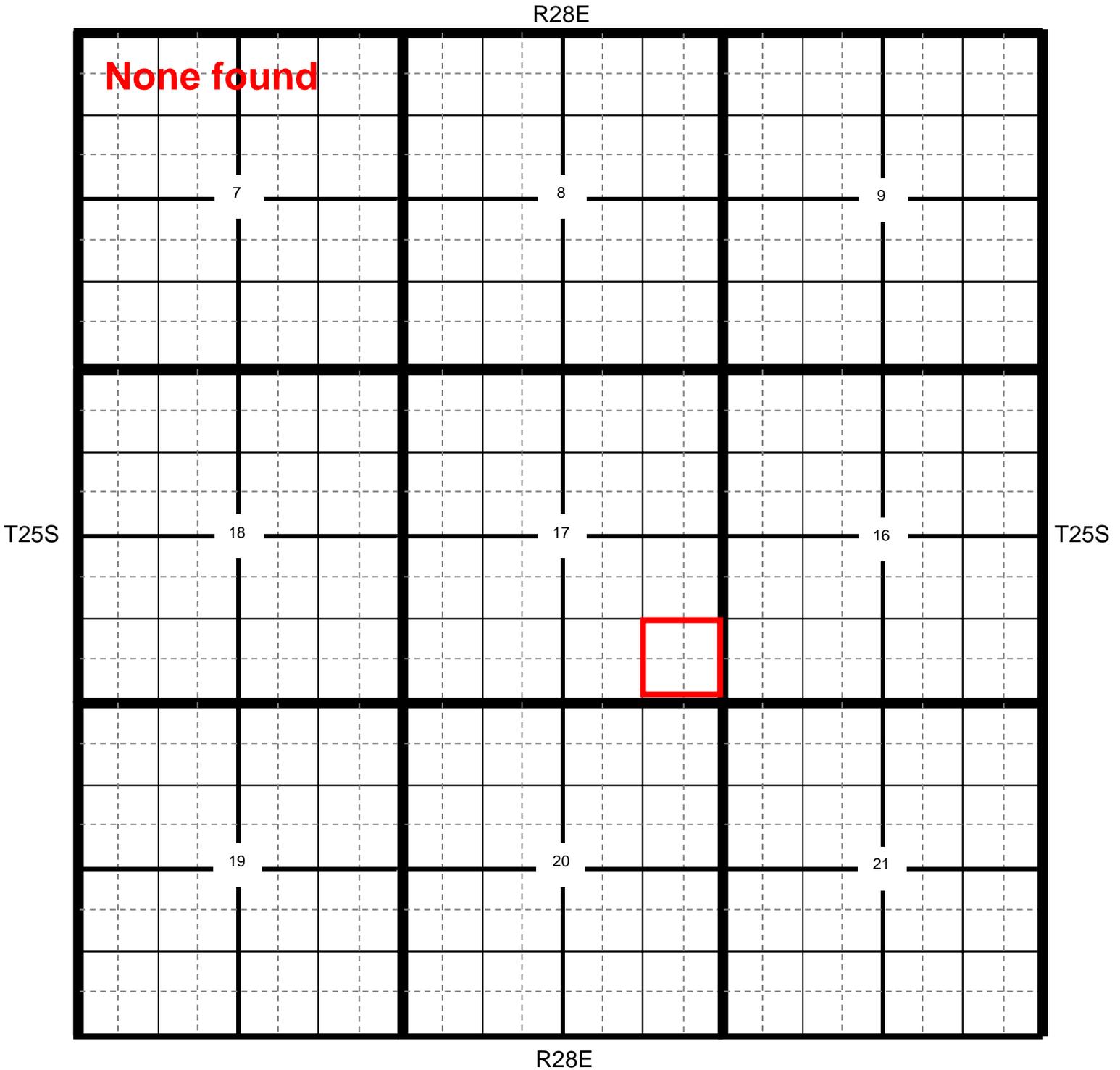
Unit Letter  
P

Section  
17

Township  
T25S

Range  
R28E

Trend Map 50'-100'



📍 Location

● OCD

● USGS

● SEO

● All Databases



COG Operating LLC

Willow 17 State SWD #001 (5/27/16)

Leak Area

1' Excavation  
across entire leak area

Poly lines

SP1  
65' x 65'

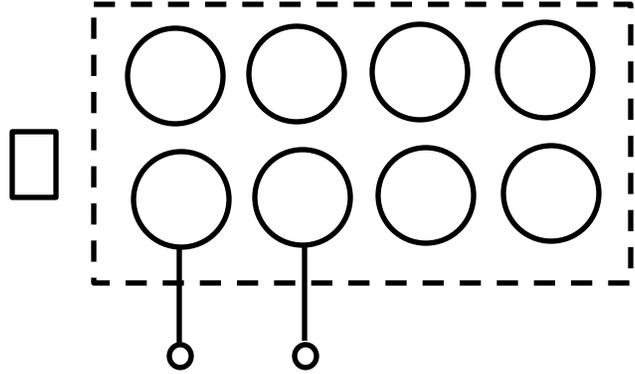
65' x 18'

SP2

SP3

Fence

Road



U/L P, Section 17, T25S, R28E

Eddy County, NM

N 32.12498° W 104.10342°

API# 30-015-41806

Location

**BBC International, Inc.**

**COG**

**Willow 17 State SWD #001**

Date: 10/12/2016

DRWG by: K. Purvis

NOT TO SCALE

File: COG 2016

Section Quarters

COG Willow 17 State SWD #001

County Eddy      Unit Letter P      Section 17      Township 25S      Range 28E

Trend Map 50'-100'

1

2

NW/NW <b>None found</b>	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	<b>SE/SE</b>
Unit Letter M	Unit Letter N	Unit Letter O	Unit Letter P

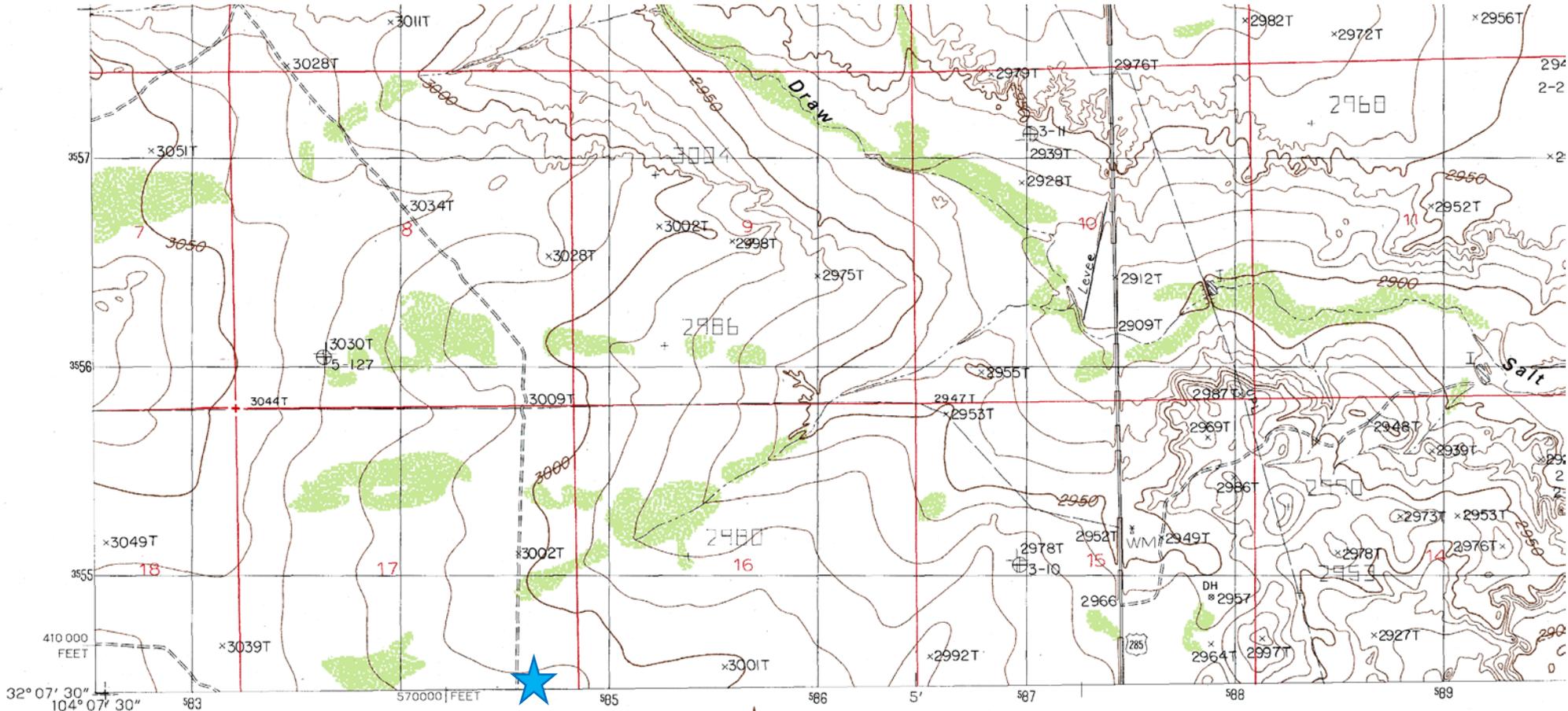
3

4

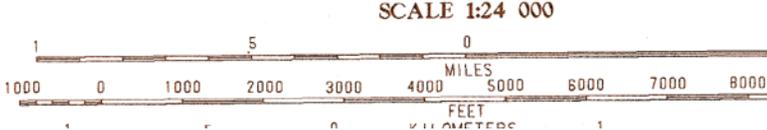


# COG

## Willow 17 State SWD #001



PRODUCED BY THE UNITED STATES GEOLOGICAL SURVEY  
 CONTROL BY ..... USGS, NOS/NOAA  
 COMPILED FROM AERIAL PHOTOGRAPHS TAKEN ..... 1977  
 FIELD CHECKED ..... 1978    MAP EDITED ..... 1985  
 PROJECTION ..... TRANSVERSE MERCATOR  
 GRID: 1000-METER UNIVERSAL TRANSVERSE MERCATOR ..... ZONE 13  
 1000-METER STATE GRID TICKS ..... NEW MEXICO, EAST ZONE



**Laboratory Analytical Results Summary**  
**Willow 17 State SWD #001**

		Sample	SP1 @ SURFACE	SP1 @ 1'	SP1 @ 2'	SP1 @ 3'	SP1 @ 4'	SP1 @ 6'
Analyte	Method	Date	8/31/16	8/31/16	8/31/16	8/31/16	8/31/16	8/31/16
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
<b>Chloride</b>	SM4500Cl-B		<b>11600</b>	<b>4560</b>	<b>32</b>	<b>80</b>	<b>144</b>	<b>112</b>

		Sample	SP2 @ 1'	SP2 @ 2'	SP2 @ 3'	SP2 @ 4'	SP2 @ 6'
Analyte	Method	Date	8/31/16	8/31/16	8/31/16	8/31/16	8/31/16
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
<b>Chloride</b>	SM4500Cl-B		<b>6320</b>	<b>32</b>	<b>80</b>	<b>224</b>	<b>224</b>

		Sample	SP3 @ SURFACE	SP3 @ 1'	SP3 @ 2'	SP3 @ 3'	SP3 @ 4'	SP3 @ 6'
Analyte	Method	Date	8/31/16	8/31/16	8/31/16	8/31/16	8/31/16	8/31/16
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
<b>Chloride</b>	SM4500Cl-B		<b>10400</b>	<b>528</b>	<b>64</b>	<b>64</b>	<b>128</b>	<b>496</b>



September 27, 2016

DAKOTA NEEL  
COG OPERATING  
P. O. BOX 1630  
ARTESIA, NM 88210

RE: WILLOW 17 STATE SWD

Enclosed are the results of analyses for samples received by the laboratory on 09/21/16 13:00.

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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene  
Lab Director/Quality Manager

**Analytical Results For:**

 COG OPERATING  
 DAKOTA NEEL  
 P. O. BOX 1630  
 ARTESIA NM, 88210  
 Fax To: NONE

Received:	09/21/2016	Sampling Date:	08/31/2016
Reported:	09/27/2016	Sampling Type:	Soil
Project Name:	WILLOW 17 STATE SWD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	NOT GIVEN		

**Sample ID: S1 - SURFACE (H602124-01)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>11600</b>	16.0	09/26/2016	ND	432	108	400	0.00	

**Sample ID: S1 - 1' (H602124-02)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>4560</b>	16.0	09/26/2016	ND	432	108	400	0.00	

**Sample ID: S1 - 2' (H602124-03)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>32.0</b>	16.0	09/26/2016	ND	432	108	400	3.64	

**Sample ID: S1 - 3' (H602124-04)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>80.0</b>	16.0	09/26/2016	ND	432	108	400	3.64	

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 COG OPERATING  
 DAKOTA NEEL  
 P. O. BOX 1630  
 ARTESIA NM, 88210  
 Fax To: NONE

 Received: 09/21/2016  
 Reported: 09/27/2016  
 Project Name: WILLOW 17 STATE SWD  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 08/31/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Celey D. Keene

**Sample ID: S1 - 4' (H602124-05)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	09/26/2016	ND	432	108	400	3.64	

**Sample ID: S1 - 6' (H602124-06)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	09/26/2016	ND	432	108	400	3.64	

**Sample ID: S2 - 1' (H602124-07)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6320	16.0	09/26/2016	ND	432	108	400	3.64	

**Sample ID: S2 - 2' (H602124-08)**

Chloride, SM4500CI-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	09/26/2016	ND	432	108	400	3.64	

**Sample ID: S2 - 3' (H602124-09)**

Chloride, SM4500CI-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	09/26/2016	ND	432	108	400	3.64	

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 COG OPERATING  
 DAKOTA NEEL  
 P. O. BOX 1630  
 ARTESIA NM, 88210  
 Fax To: NONE

 Received: 09/21/2016  
 Reported: 09/27/2016  
 Project Name: WILLOW 17 STATE SWD  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 08/31/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Celey D. Keene

**Sample ID: S2 - 4' (H602124-10)**

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	09/26/2016	ND	432	108	400	3.64	

**Sample ID: S2 - 6' (H602124-11)**

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	09/26/2016	ND	432	108	400	3.64	

**Sample ID: S3 - SURFACE (H602124-12)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10400	16.0	09/26/2016	ND	432	108	400	3.64	

**Sample ID: S3 - 1' (H602124-13)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	528	16.0	09/26/2016	ND	432	108	400	3.64	

**Sample ID: S3 - 2' (H602124-14)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	09/26/2016	ND	432	108	400	3.64	

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 COG OPERATING  
 DAKOTA NEEL  
 P. O. BOX 1630  
 ARTESIA NM, 88210  
 Fax To: NONE

 Received: 09/21/2016  
 Reported: 09/27/2016  
 Project Name: WILLOW 17 STATE SWD  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 08/31/2016  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Celey D. Keene

**Sample ID: S3 - 3' (H602124-15)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>64.0</b>	16.0	09/26/2016	ND	432	108	400	3.64	

**Sample ID: S3 - 4' (H602124-16)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>128</b>	16.0	09/26/2016	ND	432	108	400	3.64	

**Sample ID: S3 - 6' (H602124-17)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>496</b>	16.0	09/26/2016	ND	432	108	400	3.64	

Cardinal Laboratories

\*=Accredited Analyte

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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



---

Celey D. Keene, Lab Director/Quality Manager



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

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

1 of 1

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 Owner:  
 Project #: Willow 17 State SWD  
 Project Location: Project Name: Willow 17 State SWD  
 Sampler Name: Dakota Neel  
 FOR LAB USE ONLY

**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 #:

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.	SAMPLING	DATE	TIME	BTEX	TPH	Chloride	Add'l Phone #:	Add'l Fax #:
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :									
H602124	S1-Surface										8/31/16	11:00 a.m.	X					
1	S1-1'										8/31/16	11:00 a.m.	X					
2	S1-2'										8/31/16	11:00 a.m.	X					
3	S1-3'										8/31/16	11:00 a.m.	X					
4	S14'										8/31/16	11:00 a.m.	X					
5	S1-6'										8/31/16	11:00 a.m.	X					
6																		

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in 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 interruptions, 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, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: DNA Date: 9-21-16 Received By: Dakota Neel  
 Time: 13:00

Delivered By: (Circle One) UPS 3.80c Sample Condition:  Intact  Cool  Yes  No  
 Checked By: [Signature]

FORM 000-R-20  
 5. Please fax written changes to 575-393-2476  
 #75



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

10F3

ANALYSIS REQUEST

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 Owner:  
 Project Name: Willow 17 State SWD  
 Project Location:  
 Sampler Name: Dakota Neel  
 P.O. #:   
 Company: COG Operating LLC  
 Attn: Robert McNeill  
 Address: 600 W Illinois  
 City: Midland  
 State: TX Zip: 79701  
 Phone #: (432) 221-0388  
 Fax #:

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.			DATE	TIME	BTEX	TPH	Chloride
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :					
H1602124																	
7	S2-1'											8/31/16	11:00 a.m.				X
8	S2-2'											8/31/16	11:00 a.m.				X
9	S2-3'											8/31/16	11:00 a.m.				X
10	S2-4'											8/31/16	11:00 a.m.				X
11	S2-6'											8/31/16	11:00 a.m.				X

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Relinquished By:   
 Date: 8/21/16 Time: 1:30:00  
 Received By: *[Signature]*  
 Date:   
 Time:   
 Phone Result:  Yes  No Add'l Phone #:   
 Fax Result:  Yes  No Add'l Fax #:   
 REMARKS:   
[dneel2@concho.com](mailto:dneel2@concho.com)

Delivered By: (Circle One)   
 Sampler - UPS - Bus - Other:   
 Sample Condition   
 Cool  Intact    
 Yes  No    
 Checked By: *[Signature]*

FORM 000 R-20  
 s. Please fax written changes to 575-393-2476  
 #75



**From:** Bratcher, Mike, EMNRD  
**To:** [Cliff Brunson](#)  
**Cc:** [Patterson, Heather, EMNRD](#); [Robert Grubbs](#); [Ken Swinney](#); [Jennifer Gilkey](#); [Kathy Purvis](#); [Weaver, Crystal, EMNRD](#)  
**Subject:** RE: COG - Willow 17 State SWD #001 - Remediation Plan  
**Date:** Thursday, November 10, 2016 8:56:02 AM

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RE: COG \* Willow 17 St SWD 1 \* **2RP-3721** \* DOR: 5/27/16

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**

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**From:** Cliff Brunson [mailto:[cbrunson@bbcinternational.com](mailto:cbrunson@bbcinternational.com)]  
**Sent:** Friday, November 04, 2016 1:56 PM  
**To:** Bratcher, Mike, EMNRD  
**Cc:** Patterson, Heather, EMNRD; Robert Grubbs; Ken Swinney; Jennifer Gilkey; Kathy Purvis  
**Subject:** COG - Willow 17 State SWD #001 - Remediation Plan

Mike,

This e-mail is to confirm our discussion concerning the remediation plan for the COG Willow 17 State SWD #001 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  
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E-Mail: [cbrunson@bbcinternational.com](mailto:cbrunson@bbcinternational.com)



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