

Closure Report

Site Description

Site Name:	Cirrus Federal Com Oil Battery
Company:	COG Operating LLC
Legal Description:	U/L J, Section 8, T19S, R32E
County:	Lea County, NM
GPS Coordinates:	N 32.66744° W 103.79521°

Release Data

Date of Release:	11/13/2016
Type of Release:	Produced water
Source of Release:	Poly flow line
Volume of Release:	8 bbls
Volume Recovered:	7 bbls

APPROVED

By Olivia Yu at 9:58 am, May 15, 2017

Remediation Specifications

Remediation Parameters:	Excavate the entire area to a depth of 5 feet. Obtain sidewall and bottom confirmation samples. Backfill the site with clean soil. <div>NMOCD approves 1RP-4522 for closure. Like approval from BLM required.</div>	
Remediation Activities:	04/24/2017 to 05/01/2017	
Plan Sent to OCD:	02/07/2017	Email from Cliff Brunson to Olivia Yu
OCD Approval of Plan:	03/02/2017	Email from Olivia Yu to Cliff Brunson
Plan Sent to BLM:	02/05/2017	Email from Cliff Brunson to Arthur Arias
BLM Approval of Plan:	03/08/2017	Email from Arthur Arias to Cliff Brunson

Supporting Documentation

Initial C-141	Signed 11/15/2016
Final C-141	Signed 05/09/2017
Site Diagram	December 2016
Groundwater Plot	450' trend map
TOPO Maps	December 2016
Lab Summary	01/10/2017 and 04/27/2017
Lab Analysis	01/10/2017 and 04/27/2017
Correspondence	Request and approval of remediation plan via email

Request for Closure

Based on the completion of the remediation plan as agreed upon, COG Operating, LLC requests closure approval from NMOCD.

Cliff Brunson, BBC International Inc.

05/11/2016

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:	Cirrus Federal Corn Oil Battery	Facility Type:	Flowline
Surface Owner:	Federal	Mineral Owner:	API No. 30-025-38420

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	8	19S	32E	1980	South	1980	East	Lea

Latitude Longitude

NATURE OF RELEASE

Type of Release:	Produced Water	Volume of Release:	8 bbls	Volume Recovered:	7 bbls
Source of Release:	Poly Flowline	Date and Hour of Occurrence:	11/13/2016 12:40 am	Date and Hour of Discovery:	11/13/2016 12:40 am
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input checked="" 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.* Check valve on the poly flowline had a hole in the bottom. Replaced the check valve.					
Describe Area Affected and Cleanup Action Taken.* The release occurred within a pasture. Free standing fluids were removed via vacuum truck. Concho will have the spill site evaluated for any possible impact from the release and will present remediation work plan to the NMOCD for approval prior to any significant remediation activities.					
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>Rebecca Haskell</i>	OIL CONSERVATION DIVISION		
Printed Name: Rebecca Haskell	Approved by Environmental Specialist:		
Title: Senior HSE Coordinator	Approval Date:	Expiration Date:	
E-mail Address: rhaskell@concho.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: November 15, 2016	Phone: 432-683-7443		

* Attach Additional Sheets If Necessary

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
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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. 432-683-7443
Facility Name: Cirrus Federal Com Oil Battery	Facility Type: Flowline

Surface Owner: Federal	Mineral Owner:	API No. 30-025-38420
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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
J	8	19S	32E	1980	South	1980	East	Lea County, NM

Latitude N 32.66744° Longitude W 103.79521°

NATURE OF RELEASE

Type of Release: Produced water	Volume of Release: 8 bbls	Volume Recovered: 7 bbls
Source of Release: Poly flowline	Date and Hour of Occurrence 11/13/2016 @ 12:40 am	Date and Hour of Discovery 11/13/2016 @ 12:40 am
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" 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.*

Check valve on the poly flowline had a hole in the bottom. Replaced the check valve.

Describe Area Affected and Cleanup Action Taken.*

This release occurred in the pasture. A vacuum truck was dispatched to remove all free-standing fluid. The site was delineated and a remediation plan was agreed upon. Remediation was completed in accordance with the remediation plan approved by Olivia Yu of NMOCD via email on 03/02/2017 and approved by Arthur Arias of the BLM via email on 03/08/2017.

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>Rebecca Haskell</i>		OIL CONSERVATION DIVISION	
Printed Name: Rebecca Haskell		Approved by Environmental Specialist: <i>my</i>	
Title: Senior HSE Coordinator	Approval Date: 5/15/2017	Expiration Date: xx/xx/xxxx	
E-mail Address: rhaskell@concho.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: <i>May 9, 2017</i> Phone: (432) 683-7443	NMOCD approves 1RP-4522 for closure.		

* Attach Additional Sheets If Necessary








COG, Cirrus Federal Com Oil Battery

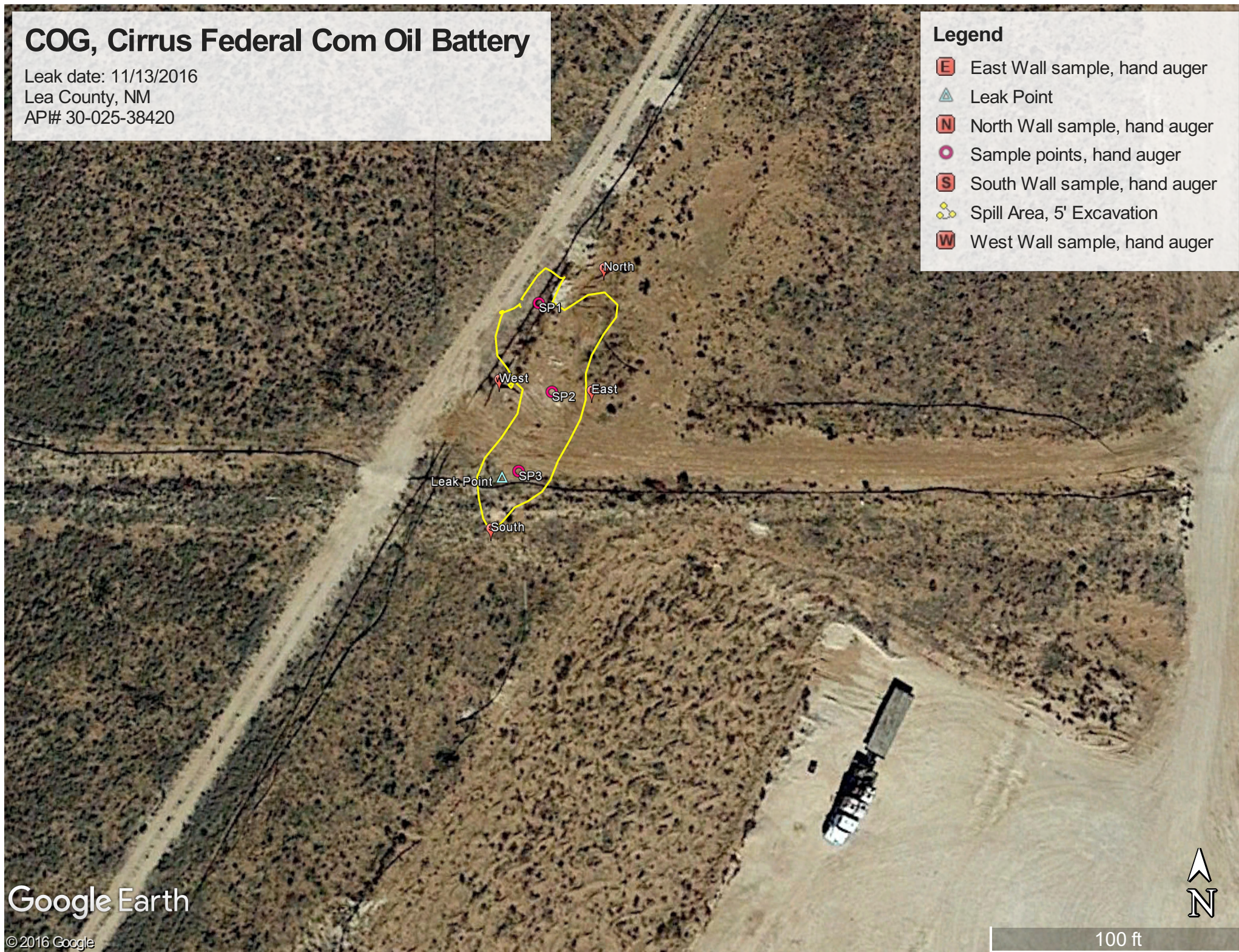
Leak date: 11/13/2016

Lea County, NM

API# 30-025-38420

Legend

-  East Wall sample, hand auger
-  Leak Point
-  North Wall sample, hand auger
-  Sample points, hand auger
-  South Wall sample, hand auger
-  Spill Area, 5' Excavation
-  West Wall sample, hand auger



COG, Cirrus Federal Com Oil Battery

Sample points, Hand auger

SP1, N 32.66755 W-103.79522

SP2, N 32.66745 W-103.79520

SP3, N 32.66736 W-103.79525

NORTH WALL, N 32.66758 W-103.79514

SOUTH WALL, N 32.66729 W-103.79528

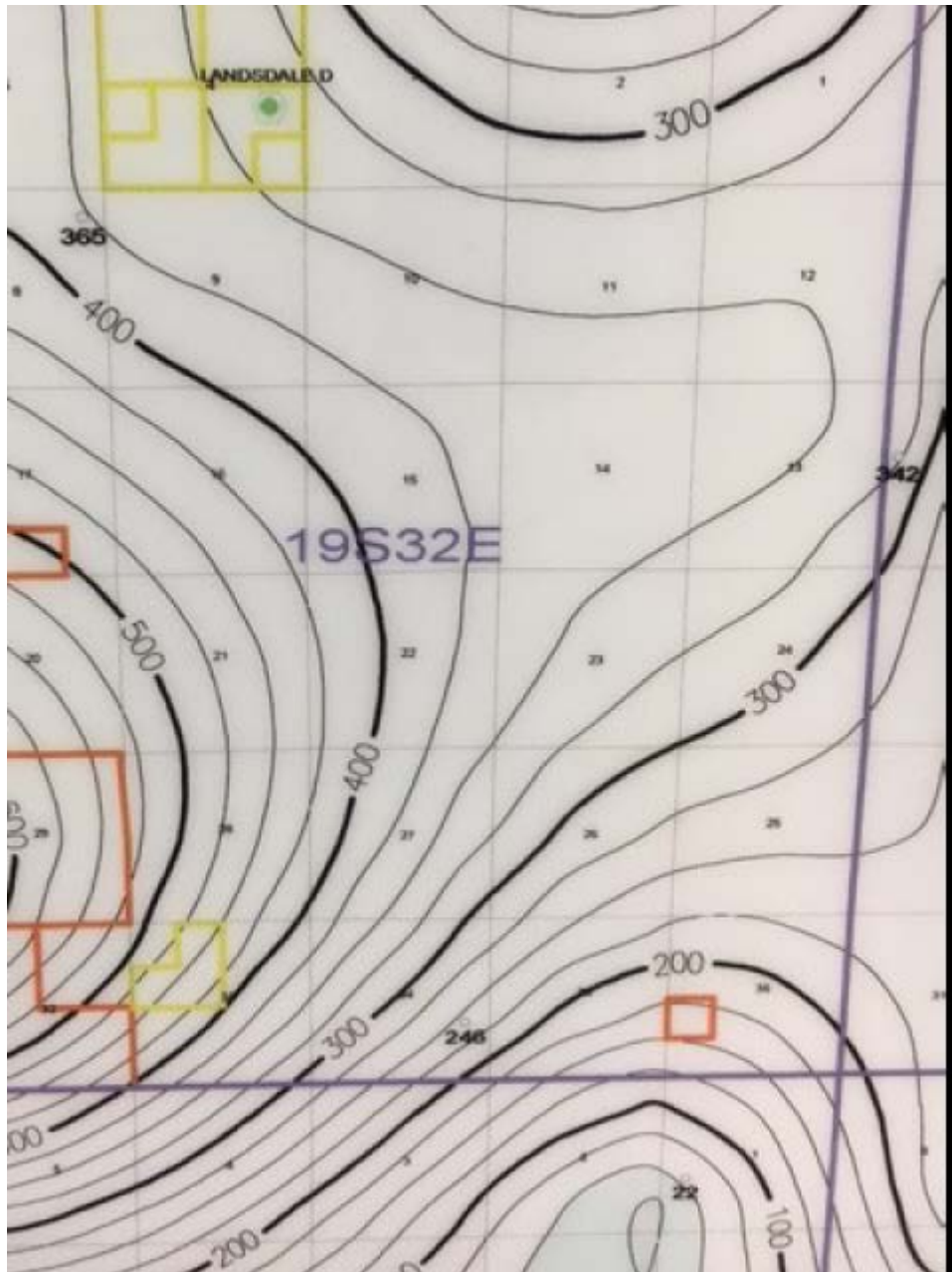
EAST WALL, N 32.66744 W-103.79515

WEST WALL, N 32.66745 W-103.79527

COG, Cirrus Fed Com Oil Battery

U/L D, Section 17, T19S, R32E

Groundwater: 450'





New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced,
O=orphaned,
C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
CP 01656 POD1		CP	LE	3	4	3	17	19S	32E	613368	3613646	<input type="text"/>	1327	70	

Average Depth to Water: --

Minimum Depth: --

Maximum Depth: --

Record Count: 1

UTMNAD83 Radius Search (in meters):

Easting (X): 613809

Northing (Y): 3614899

Radius: 1700

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

5/11/17 3:24 PM

WATER COLUMN/ AVERAGE DEPTH TO
WATER

Public Land Survey System (PLSS)

Q64:Q16: NWQ4: NESec: 17Tws: 19SRng: 32E

State Plane Coordinate System - NAD27

X:ftY:ftZone:

State Plane Coordinate System - NAD83

X:ftY:ftZone:

Degrees/Minutes/Seconds

Longitude (X):Degrees: °Minutes: 'Seconds: "

Latitude (Y):Degrees: °Minutes: 'Seconds: "

UTM - NAD27

Easting (X):mtrs Northing (Y):mtrs Zone:

SUBMIT

All Conversion Results are displayed as NAD 1983 UTM Zone 13

Easting (X):613809.0mtrsNorthing (Y):3614899.0mtrs

~~ Please keep screen open to copy UTM values for Reports. ~~



Groundwater Plot

COG Cirrus Federal Com Oil Battery

County
Lea

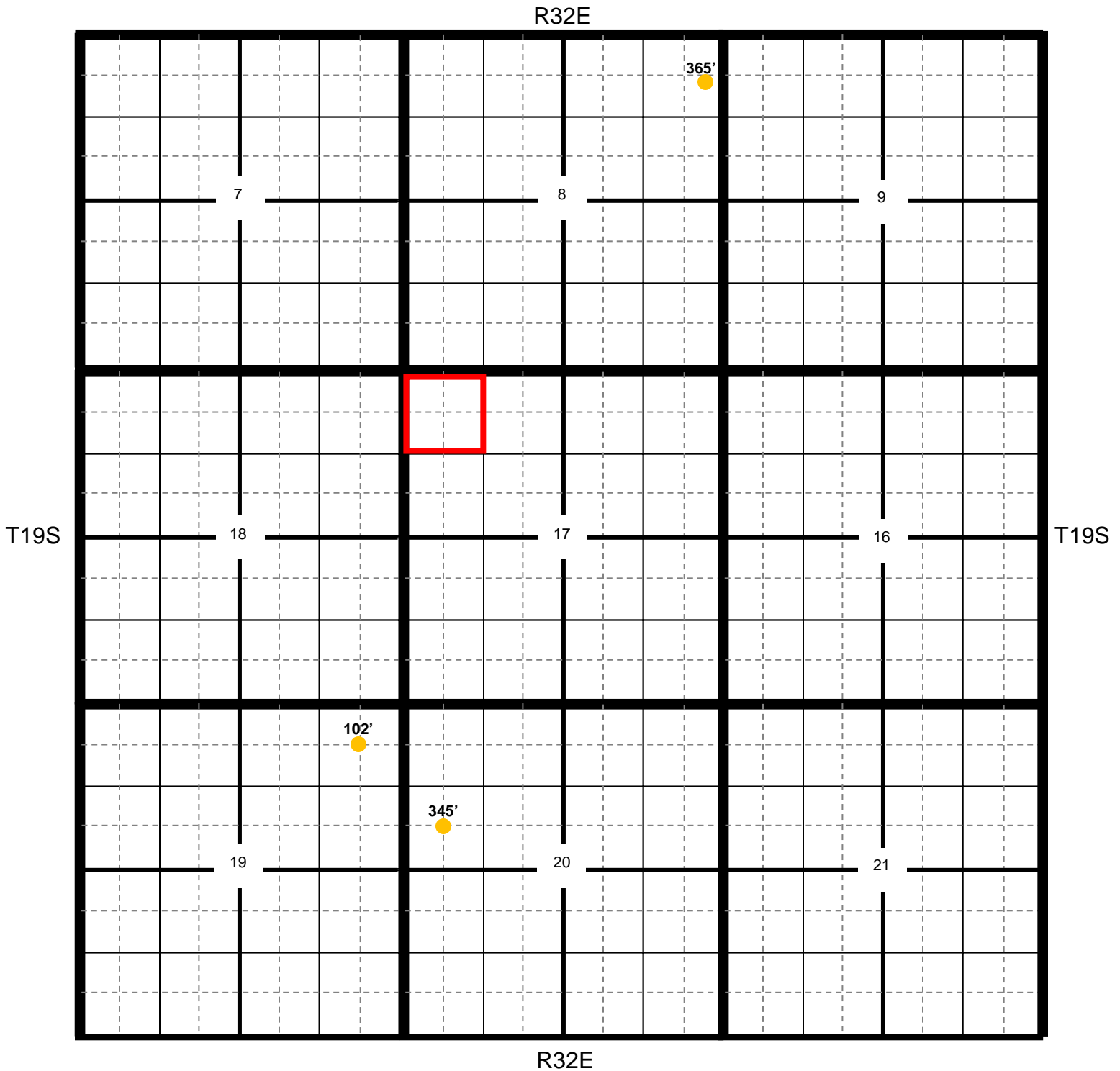
Unit Letter
D

Section
17

Township
19S

Range
32E

Trend Map 450'



★ Location

● OCD

● USGS

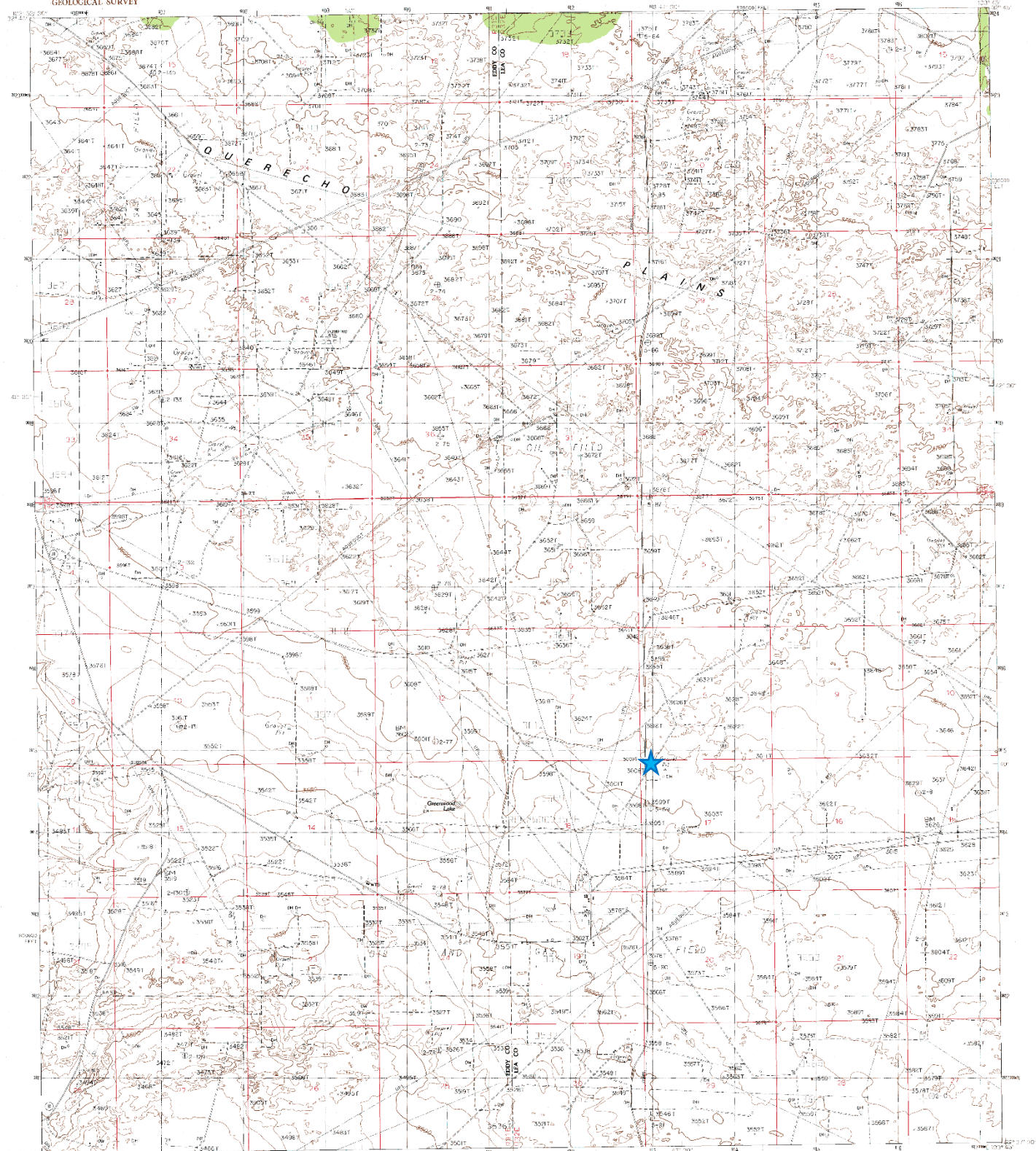
● SEO

● All Databases

Cirrus Federal Com Oil Battery

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

GREENWOOD LAKE QUADRANGLE
NEW MEXICO
7.5 MINUTE SERIES (TOPOGRAPHIC)



PRODUCED BY THE UNITED STATES GEOLOGICAL SURVEY
CONTROL BY THE NATIONAL PHOTOGRAPHIC AGENCY
JULIO CHIRINO DEN MAP EXTENDED 1961
PRODUCTION UNIVERSAL TRANSVERSE MERCATOR ZONE 12
GEOGRAPHIC EAST GRID TIE NEW MEXICO, EAST CORNER
UTM 1000000 1000000 1000000
NAD 83 MAGNETIC NORTH DECLINATION W 34° EAST
VERTICAL DATUM NATIONAL GEODESIC VERTICAL DATUM OF 1983
UTM 1000000 1000000 1000000
To place on the predicted North American Datum of 1983,
move the projection lines as shown by dashed corner ticks
(9 meters north and 46 meters east)

There may be private inclusions within the standard of any
of the data on this map.

All marginal data and lettering generated and positioned by
automated type placement procedures

PROVISIONAL MAP
Produced from original
manuscript drawings. Infor-
mation shown as of date of
field check. 3

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225
OR RESTON, VIRGINIA 22092

1	2	3	1 Yous Yills
			2 Midjourn
4		5	3 Ong Lake
			4 Blackberry Lake
			5 Laguna Ontario NW
6	7	8	6 Town: Hill North
			7 Williams Rd
			8 Laguna Ontario

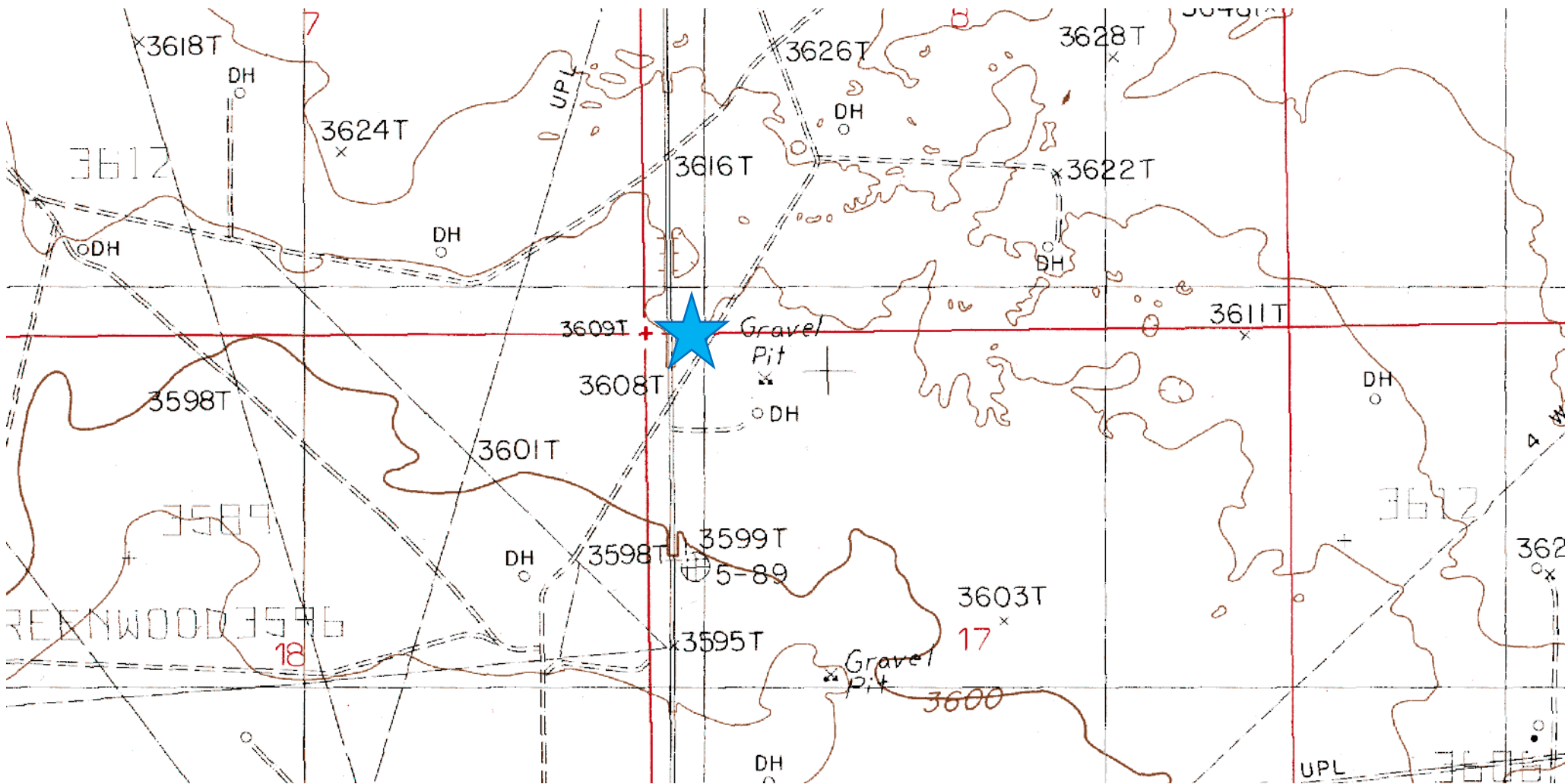
ROAD LEGEND

Improved Road
Unimproved Road
Trail

○ Interstate Route □ U.S. Route ○ State Route

GREENWOOD LAKE, NEW MEXICO
PROVISIONAL EDITION 1985
3203-F7-TF-024

Cirrus Federal Com Oil Battery



Laboratory Analytical Results Summary
COG, Cirrus Federal Com Oil Battery

		Sample	SP1 @ 1'	SP1 @ 3'	SP1 @ 5'	SP1 @ 7'
Analyte	Method	Date	1/10/17	1/10/17	1/10/17	1/10/17
			mg/Kg	mg/Kg	mg/Kg	mg/Kg
Chloride	SM4500Cl-B		4720	7730	800	96

		Sample	SP2 @ 1'	SP2 @ 3'	SP2 @ 5'	SP2 @ 7'
Analyte	Method	Date	1/10/17	1/10/17	1/10/17	1/10/17
			mg/Kg	mg/Kg	mg/Kg	mg/Kg
Chloride	SM4500Cl-B		4000	7200	1330	96

		Sample	SP3 @ 1'	SP3 @ 3'	SP3 @ 5'	SP3 @ 7'
Analyte	Method	Date	1/10/17	1/10/17	1/10/17	1/10/17
			mg/Kg	mg/Kg	mg/Kg	mg/Kg
Chloride	SM4500Cl-B		4130	7730	1360	80

		Sample	NORTH @ 1'
Analyte	Method	Date	1/10/17
			mg/Kg
Chloride	SM4500Cl-B		32

		Sample	EAST @ 1'
Analyte	Method	Date	1/10/17
			mg/Kg
Chloride	SM4500Cl-B		32

		Sample	SOUTH @ 1'
Analyte	Method	Date	1/10/17
			mg/Kg
Chloride	SM4500Cl-B		16

		Sample	WEST @ 1'
Analyte	Method	Date	1/10/17
			mg/Kg
Chloride	SM4500Cl-B		32

Laboratory Analytical Results Summary
Cirrus Fed Com Oil Battery

Confirmation		Sample	SP1 @ 5'
Analyte	Method	Date	4/27/17
			mg/Kg
Chloride	SM4500CI-B		96

Confirmation		Sample	SP2 @ 5'
Analyte	Method	Date	4/27/17
			mg/Kg
Chloride	SM4500CI-B		96

Confirmation		Sample	SP3 @ 5'
Analyte	Method	Date	4/27/17
			mg/Kg
Chloride	SM4500CI-B		80

		Sample	West Wall
Analyte	Method	Date	4/27/17
			mg/Kg
Chloride	SM4500CI-B		96

		Sample	East Wall
Analyte	Method	Date	4/27/17
			mg/Kg
Chloride	SM4500CI-B		112

		Sample	South Wall
Analyte	Method	Date	4/27/17
			mg/Kg
Chloride	SM4500CI-B		96

		Sample	North Wall
Analyte	Method	Date	4/27/17
			mg/Kg
Chloride	SM4500CI-B		112

January 17, 2017

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: CIRRUS FED COM

Enclosed are the results of analyses for samples received by the laboratory on 01/13/17 10:50.

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.

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:

BBC International, Inc.
Cliff Brunson
P.O. Box 805
Hobbs NM, 88241
Fax To: (575) 397-0397

Received:	01/13/2017	Sampling Date:	01/10/2017
Reported:	01/17/2017	Sampling Type:	Soil
Project Name:	CIRRUS FED COM	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - LEA COUNTY, NM		

Sample ID: SP 1 @ 1' (H700091-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4720	16.0	01/16/2017	ND	432	108	400	0.00	

Sample ID: SP 1 @ 3' (H700091-02)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7730	16.0	01/16/2017	ND	432	108	400	0.00	

Sample ID: SP 1 @ 5' (H700091-03)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	800	16.0	01/16/2017	ND	432	108	400	0.00	

Sample ID: SP 1 @ 7' (H700091-04)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	01/16/2017	ND	432	108	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 BBC International, Inc.
 Cliff Brunson
 P.O. Box 805
 Hobbs NM, 88241
 Fax To: (575) 397-0397

Received:	01/13/2017	Sampling Date:	01/10/2017
Reported:	01/17/2017	Sampling Type:	Soil
Project Name:	CIRRUS FED COM	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - LEA COUNTY, NM		

Sample ID: SP 2 @ 1' (H700091-05)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4000	16.0	01/16/2017	ND	432	108	400	0.00	

Sample ID: SP 2 @ 3' (H700091-06)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	7200	16.0	01/16/2017	ND	432	108	400	0.00		

Sample ID: SP 2 @ 5' (H700091-07)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1330	16.0	01/16/2017	ND	432	108	400	0.00	

Sample ID: SP 2 @ 7' (H700091-08)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	01/16/2017	ND	432	108	400	0.00	

Sample ID: SP 3 @ 1' (H700091-09)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4130	16.0	01/16/2017	ND	432	108	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

BBC International, Inc.
Cliff Brunson
P.O. Box 805
Hobbs NM, 88241
Fax To: (575) 397-0397

Received:	01/13/2017	Sampling Date:	01/10/2017
Reported:	01/17/2017	Sampling Type:	Soil
Project Name:	CIRRUS FED COM	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - LEA COUNTY, NM		

Sample ID: SP 3 @ 3' (H700091-10)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7730	16.0	01/16/2017	ND	432	108	400	0.00	

Sample ID: SP 3 @ 5' (H700091-11)

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	01/16/2017	ND	432	108	400	0.00	

Sample ID: SP 3 @ 7' (H700091-12)

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	01/16/2017	ND	432	108	400	0.00		

Sample ID: NORTH @ 1' (H700091-13)

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	01/16/2017	ND	432	108	400	3.64		

Sample ID: EAST @ 1' (H700091-14)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	01/16/2017	ND	432	108	400	3.64	

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

BBC International, Inc.
Cliff Brunson
P.O. Box 805
Hobbs NM, 88241
Fax To: (575) 397-0397

Received:	01/13/2017	Sampling Date:	01/10/2017
Reported:	01/17/2017	Sampling Type:	Soil
Project Name:	CIRRUS FED COM	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - LEA COUNTY, NM		

Sample ID: SOUTH @ 1' (H700091-15)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	01/16/2017	ND	432	108	400	3.64		

Sample ID: WEST @ 1' (H700091-16)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	01/16/2017	ND	432	108	400	3.64	

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager



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

May 05, 2017

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: CIRRUS FED COM OIL BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 04/28/17 10:45.

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.

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:

BBC International, Inc.
Cliff Brunson
P.O. Box 805
Hobbs NM, 88241
Fax To: (575) 397-0397

Received:	04/28/2017	Sampling Date:	04/27/2017
Reported:	05/05/2017	Sampling Type:	Soil
Project Name:	CIRRUS FED COM OIL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - MALJAMAR		

Sample ID: SP1 @ 5 (H701145-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	05/01/2017	ND	432	108	400	0.00	

Sample ID: SP2 @ 5 (H701145-02)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	05/01/2017	ND	432	108	400	0.00	

Sample ID: SP3 @ 5 (H701145-03)

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	05/01/2017	ND	432	108	400	0.00	

Sample ID: SP4 @ WW (H701145-04)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	05/01/2017	ND	432	108	400	0.00	

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

BBC International, Inc.
Cliff Brunson
P.O. Box 805
Hobbs NM, 88241
Fax To: (575) 397-0397

Received:	04/28/2017	Sampling Date:	04/27/2017
Reported:	05/05/2017	Sampling Type:	Soil
Project Name:	CIRRUS FED COM OIL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	COG - MALJAMAR		

Sample ID: SP5 @ EW (H701145-05)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	05/01/2017	ND	432	108	400	0.00		

Sample ID: SP6 @ SW (H701145-06)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	05/01/2017	ND	432	108	400	0.00	

Sample ID: SP7 @ NW (H701145-07)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	05/01/2017	ND	432	108	400	0.00	

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

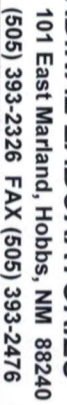
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Celey D. Keene, Lab Director/Quality Manager



Company Name: BBC International, Inc.

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

From: Yu, Olivia, EMNRD
To: [Cliff Brunson](#); [Houston, Kristen, EMNRD](#); [Tucker, Shelly](#)
Cc: [Oberding, Tomas, EMNRD](#); ["Rebecca Haskell"](#); ["Ken Swinney"](#); ["Jennifer Gilkey"](#); ["Kathy Purvis"](#)
Subject: RE: COG Cirrus Federal Com Oil Battery
Date: Thursday, March 2, 2017 9:23:32 AM
Attachments: [Reviewed 1RP4522 Remediation Packet Cirrus Federal Com Oil Battery.pdf](#)

Dear Mr. Brunson:

NMOCD approves the delineation workplan for 1RP-4522. Please see the attachment for your records.

Olivia

From: Cliff Brunson [mailto:cbrunson@bbcinternational.com]
Sent: Wednesday, March 1, 2017 10:41 AM
To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>; Houston, Kristen, EMNRD <Kristen.Houston@state.nm.us>
Cc: Oberding, Tomas, EMNRD <Tomas.Oberding@state.nm.us>; 'Rebecca Haskell' <RHaskell@concho.com>; 'Ken Swinney' <kswinney@bbcinternational.com>; 'Jennifer Gilkey' <jgilkey@bbcinternational.com>; 'Kathy Purvis' <kathy@bbcinternational.com>
Subject: RE: COG Cirrus Federal Com Oil Battery

Olivia,

Please see the following responses to the conditions below:

1. Excavation will be to 5 ft. bgs and confirmatory bottom and sidewall samples will be obtained.
2. Samples were collected by hand auger.
3. SP1 was collected by hand auger next to the poly pipe that is on the surface and SP3 was collected by hand auger in a dirt road.
4. A scaled digital map and documentation of depth to groundwater will be included in the final report.

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
Shipping Address:
1324 W. Marland St.
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Phone: (575) 397-6388
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E-Mail: cbrunson@bbcinternational.com



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From: Yu, Olivia, EMNRD [<mailto:Olivia.Yu@state.nm.us>]

Sent: Wednesday, February 22, 2017 12:02 PM

To: Cliff Brunson <cbrunson@bbcinternational.com>; Lynch, Kristen, EMNRD
<Kristen.Lynch@state.nm.us>

Cc: Oberding, Tomas, EMNRD <Tomas.Oberding@state.nm.us>; 'Rebecca Haskell'
<RHaskell@concho.com>; Ken Swinney <kswinney@bbcinternational.com>; Jennifer Gilkey
<jgilkey@bbcinternational.com>; Kathy Purvis <kathy@bbcinternational.com>

Subject: RE: COG Cirrus Federal Com Oil Battery

Dear Mr. Brunson:

The workplan for 1RP-4522 is approved with the following conditions. Please confirm.

- 1) Excavate to 5 ft. bgs and obtain confirmatory bottom and sidewall samples.
- 2) Provide a description of the sample methodology.
- 3) Where and how were SP1 and SP3 sampled? On the drawing, these sample locations are directly over a poly line and road, respectively.
- 4) A scaled digital map and documentation of depth to GW is required in the closure report.

Thanks,

Olivia Yu
Environmental Specialist
NMOCD, District I
Olivia.yu@state.nm.us
575-393-6161 x113

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.

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

Sent: Tuesday, February 7, 2017 4:01 PM

To: Lynch, Kristen, EMNRD <Kristen.Lynch@state.nm.us>

Cc: Oberding, Tomas, EMNRD <Tomas.Oberding@state.nm.us>; Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>; 'Rebecca Haskell' <RHaskell@concho.com>; Ken Swinney <kswinney@bbcinternational.com>; Jennifer Gilkey <jgilkey@bbcinternational.com>; Kathy Purvis <kathy@bbcinternational.com>

Subject: COG Cirrus Federal Com Oil Battery

Kristen,

This e-mail is to confirm our discussion concerning the remediation plan for the COG Cirrus Federal Com Oil Battery release. I have attached the information packet that we used in our discussion on 1/25/17 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
Shipping Address:
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Phone: (575) 397-6388
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E-Mail: cbrunson@bbcinternational.com



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From: Arias, Arthur
To: [Cliff P. Brunson](#); olivia.yu@state.nm.us
Cc: [Oberding, Tomas, EMNRD](#); [Rebecca Haskell](#); [Ken Swinney](#); [Jennifer Gilkey](#); [Kathy Purvis](#)
Subject: COG Cirrus Federal Com Oil Battery, Work plan for 1RP-4522
Date: Wednesday, March 8, 2017 8:06:23 AM

BLM approves the delineation plan for the location. Thank you.....

Arthur Arias
aaarias@blm.gov
Environmental Protection Specialist
Bureau Of Land Management, Carlsbad Field Office
575-234-6230 Cell 575-499-3378













