CONCHO

October 12, 2020

Oil Conservation Division, District I
1625 N. French Drive
Hobbs, New Mexico 88240

Bureau of Land Management, CFO
620 E. Green St.
Carlsbad, NM 88220

Re: Closure Report
Coronado 35 Federal 001H (6.29.20)
Tracking#: NRM2019955119
GPS: 32.0934, -103.3432
Unit Letter D, Section 35, Township 25 South, Range 35 East
Lea County, New Mexico

To Whom it May Concern,

COG Operating, LLC (COG) is pleased to submit the following closure report in response to a release that occurred on June 29, 2020 at the Coronado 35 Federal 001H, located in Unit Letter D, Section 35, Township 25 South, Range 35 East Lea County, New Mexico. The spill site coordinates are 32.0934, -103.3432.

BACKGROUND

The release was discovered on June 29, 2020. An initial C-141 was submitted and accepted by the New Mexico Oil Conservation Division (NMOCD). The release was caused by internal corrosion. The release was in the pasture. A vacuum truck was dispatched to remove all freestanding fluids. Approximately eleven (11) barrels of produced water was released. The initial C-141 and final C-141 are attached in Appendix A.

GROUNDWATER AND REGULATORY

A search of a groundwater database maintained by The New Mexico Office of the State Engineer (NMOSE) was conducted to determine the average depth to groundwater within a one (1) Mile radius of the Release Site and identify any registered water wells within a 1/2 Mile of the Release Site. One water well was found within a ½ mile of the Release site; therefore, COG remediated the site to the standards shown in Table I of 19.15.29.12 NMAC for an average depth to water of >100 feet.

A risk-based evaluation and site determinations were performed in accordance to the New Mexico Oil Conservation Division (NMOCD) Rule (Title 19 Chapter 15 Part 29) for releases on oil and gas development and production in New Mexico (effective August 14, 2018). According to the site characterization evaluation, the affected area has low potential for cave and karst, and no other receptors (water wells, playas, water course, lake beds or ordinance boundaries) were located within each specific boundaries or distance from the site. The delineation and closure criteria are listed below:

General Site Characterization and Groundwater:

Site Characterization	Average Groundwater Depth (ft.)	Water well within ½ Mile
Low Karst	>100 ft	Yes

Delineation and Closure Criteria:

Remedial Action Levels (RALs)	
Chlorides	20,000 mg/kg
TPH (GRO and DRO and MRO)	2,500 mg/kg
GRO+DRO	1,000 mg/kg
Benzene	10 mg/kg
Total BTEX	50 mg/kg

INITIAL ASSESMENT

- This remediation was done at risk. The release was excavated to access and repair the riser and the point of release. Field screens were used to guide the excavation.

REMEDIAL ACTIONS

- Once excavated, confirmation samples were collected from the excavation bottom (North 1 and North 2) and sidewalls (North, South, East, and West). Table 1 shows the sample depths and analytical results.
- Confirmation soil samples were taken from bottom and sidewalls of the excavation per NMAC 19.15.29.
- All the excavated material was hauled to an NMOCD approved solid waste disposal facility.
- The site was backfilled with clean "like" material.
- The analytical data shown in Table 1 show that the release area meets NMOCD closure criteria (NMAC 19.15.29.12(E) Table I) and NMAC 19.15.29.13(D)(1).

SAMPLING AND BACKFILLING

Once excavated, soil samples were collected from the bottom and sidewalls to confirm the removal of impacted soil. Composite sidewall samples were collected every 200 square feet. Once completed, the excavated area was backfilled with non-contaminated material with concentrations below 600 mg/kg of chlorides.

CLOSURE REQUEST

COG Operating, LLC respectfully requests that the New Mexico Oil Conservation Division and the Bureau of Land Management grant closure approval for the Coronado 35 Federal 001H that occurred on June 29, 2020 (Tracking # NRM2019955119).

Should you have any questions or concerns on the closure report, please do not hesitate to contact me.

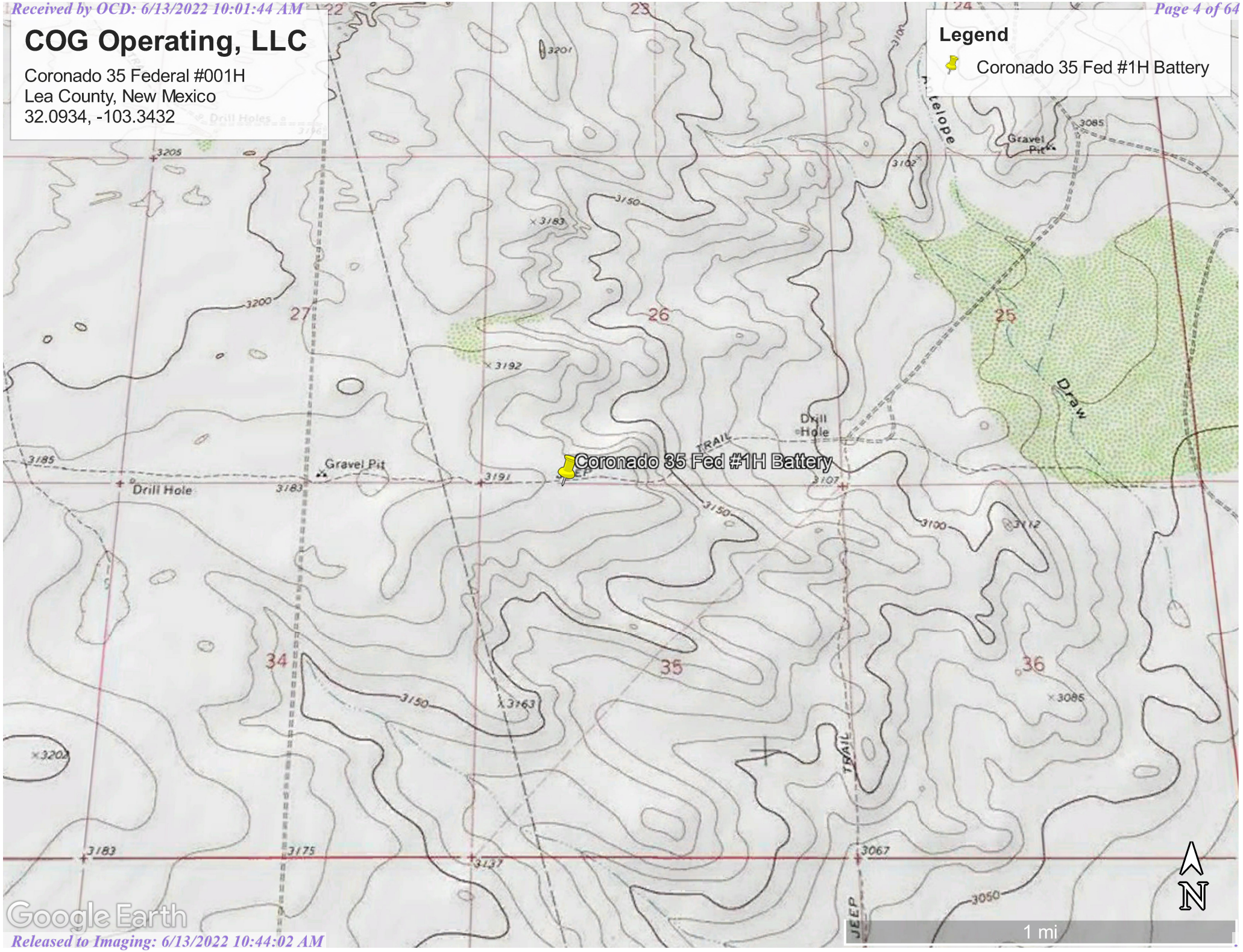
Sincerely,

Jacqui Harris
Senior HSE Coordinator
Jharris2@concho.com

Maps

COG Operating, LLC

Coronado 35 Federal #001H
Lea County, New Mexico
32.0934, -103.3432



COG Operating LLC.

Coronado 35 Federal #1H Battery
Lea County, New Mexico
32.093904 -103.34300

Legend

- Confirmation Sample Points
- Remediation Area

Table of Analytical Data

Table 1
COG Operating LLC.
Coronado 35 Federal 001H (6.29.20)
Lea County, New Mexico

Sample ID	Sample Date	Excavation Depth (ft)	Soil Status		TPH (mg/kg)							Benzene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	*Total*	GRO	DRO	*Total*			
Average Depth to Groundwater (ft) - >100'														
NMOCD RAL Limits (mg/kg)					**-**	**-**	**-**	**2,500**	**-**	**-**	**1,000**	**10**	**50**	**20,000**
Confirmation North Side Wall	7/23/2020	-	X		<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	7.26
Confirmation South Side Wall	7/17/2020	-	X		<49.8	<49.8	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	569
Confirmation East Side Wall	7/23/2020	-	X		<49.9	<49.9	<49.9	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	6.34
Confirmation West Side Wall	7/23/2020	-	X		<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	6.41
Confirmation North Bottom Hole-1 4'	7/17/2020	4'	X		<49.9	<49.9	<49.9	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	50.4
Confirmation North Bottom Hole-2 4'	7/17/2020	4'	X		<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	43.9
Confirmation South Bottom Hole-1 3'	7/17/2020	3'	X		<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	570
Confirmation South Bottom Hole-2 3'	7/17/2020	3'	X		<49.9	<49.9	<49.9	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	512

Not Analyzed

Appendix A

C-141

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 Department

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

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # *(assigned by OCD)*
Contact mailing address	

Location of Release Source

Latitude _____ Longitude _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Site Type
Date Release Discovered	API# *(if applicable)*

Unit Letter	Section	Township	Range	County

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☐ Private (*Name:* _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
Cause of Release		

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

☐ The source of the release has been stopped.
☐ The impacted area has been secured to protect human health and the environment.
☐ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☐ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name _____ Title: _____

Signature:  Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	_____ (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☐ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☐ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☐ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☐ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☐ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☐ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☐ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☐ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☐ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

- ☐ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☐ Field data
- ☐ Data table of soil contaminant concentration data
- ☐ Depth to water determination
- ☐ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☐ Boring or excavation logs
- ☐ Photographs including date and GIS information
- ☐ Topographic/Aerial maps
- ☐ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name: _____ Title: _____

Signature: Jacqui Harris _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☐ Description of 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 OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: _____ Title: _____

Signature: Jacqui Harris _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

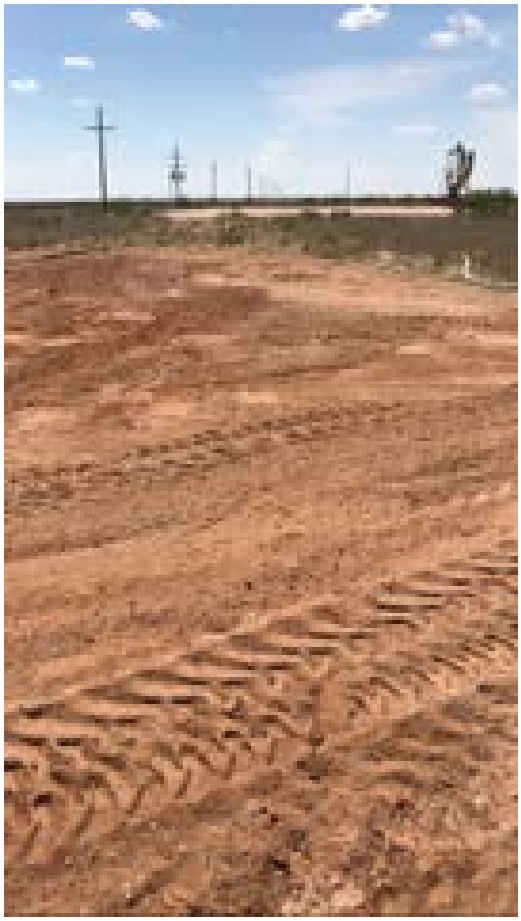
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Jennifer Nobui _____ Date: _____

Printed Name: _____ Title: _____

OPEN EXCAVATION PHOTOS

BACKFILL PHOTOS

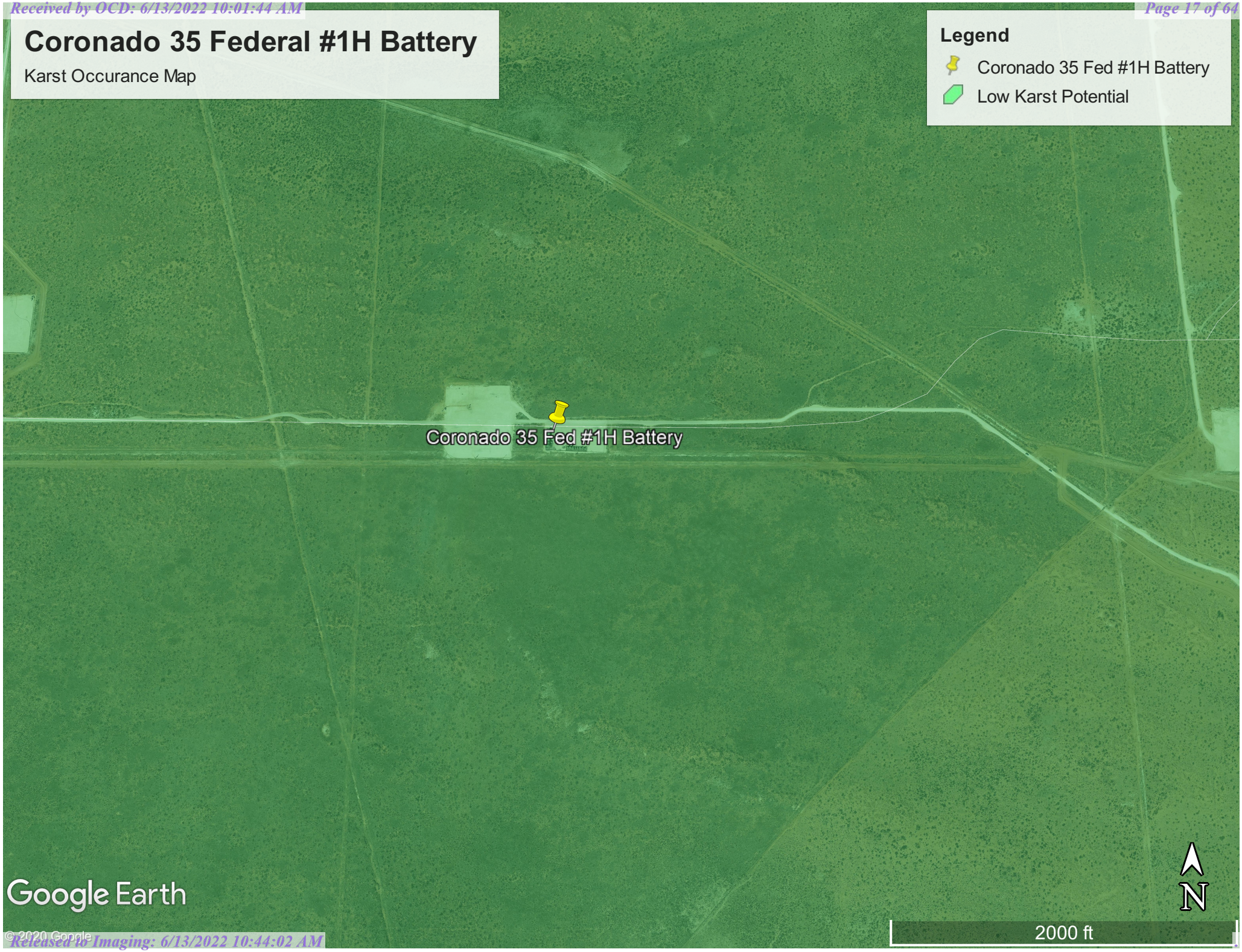


Appendix B

Site Assessment Data

Coronado 35 Federal #1H Battery

Karst Occurance Map



National Flood Hazard Layer FIRMette

FEMA

103°20'54"W 32°5'52"N

103°20'17"W 32°5'21"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/12/2020 at 12:56 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

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	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 01305 POD1	CP	LE	1	4	31	25S	37E		655628	3551065	1169	420	230	190

Average Depth to Water: **230 feet**

Minimum Depth: **230 feet**

Maximum Depth: **230 feet**

Record Count: 1

UTMNAD83 Radius Search (in meters):

Easting (X): 656344.33 **Northing (Y):** 3551989.65 **Radius:** 1610

Appendix C

Analytical Reports

eurofins | Environment Testing Xenco

Certificate of Analysis Summary 667748

COG Operating LLC, Artesia, NM

Project Name: Coronado 35 Federal 001H (6/29/20)

Project Id:

Contact: Ike Tavarez

Project Location: Lea County, NM

Date Received in Lab: Tue 07.21.2020 11:45

Report Date: 07.22.2020 14:41

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	667748-001		667748-002		667748-003		667748-004		667748-005		667748-006	
	Field Id:	Confirmation North Side W		Confirmation South Side W		Confirmation East Side W		Confirmation West Side W		Confirmation North Botton		Confirmation North Botton	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	07.17.2020 00:00		07.17.2020 00:00		07.17.2020 00:00		07.17.2020 00:00		07.17.2020 00:00		07.17.2020 00:00	
BTEX by EPA 8021B	***Extracted:***	07.21.2020 16:00		07.21.2020 16:00		07.21.2020 16:00		07.21.2020 16:00		07.21.2020 16:00		07.21.2020 16:00	
	Analyzed:	07.21.2020 22:42		07.21.2020 23:03		07.21.2020 23:23		07.21.2020 23:44		07.22.2020 00:04		07.22.2020 00:25	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
Toluene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
Ethylbenzene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
m,p-Xylenes		<0.00400	0.00400	<0.00400	0.00400	<0.00400	0.00400	<0.00400	0.00400	<0.00400	0.00400	<0.00400	0.00400
o-Xylene		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
Total Xylenes		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
Total BTEX		<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200	<0.00200	0.00200
Chloride by EPA 300	***Extracted:***	07.21.2020 15:00		07.21.2020 15:00		07.21.2020 15:00		07.21.2020 15:00		07.21.2020 15:00		07.21.2020 15:00	
	Analyzed:	07.21.2020 20:18		07.21.2020 20:34		07.21.2020 20:39		07.21.2020 20:44		07.21.2020 20:49		07.21.2020 21:05	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		691 X	5.00	569	5.03	635	4.96	610	5.00	50.4	5.05	43.9	5.05
TPH By SW8015 Mod	***Extracted:***	07.21.2020 16:00		07.21.2020 16:00		07.21.2020 16:00		07.21.2020 16:00		07.21.2020 16:00		07.21.2020 16:00	
	Analyzed:	07.21.2020 21:12		07.21.2020 22:08		07.21.2020 22:27		07.21.2020 22:46		07.21.2020 23:05		07.22.2020 07:37	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons		<50.0	50.0	<49.8	49.8	<50.0	50.0	<50.0	50.0	<49.9	49.9	<50.0	50.0
Diesel Range Organics		<50.0	50.0	<49.8	49.8	<50.0	50.0	<50.0	50.0	<49.9	49.9	<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.8	49.8	<50.0	50.0	<50.0	50.0	<49.9	49.9	<50.0	50.0
Total TPH		<50.0	50.0	<49.8	49.8	<50.0	50.0	<50.0	50.0	<49.9	49.9	<50.0	50.0

BRL - Below Reporting Limit

Jessica Kramer

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

eurofins | Environment Testing Xenco

Certificate of Analysis Summary 667748

COG Operating LLC, Artesia, NM

Project Name: Coronado 35 Federal 001H (6/29/20)

Project Id:

Contact: Ike Tavarez

Project Location: Lea County, NM

Date Received in Lab: Tue 07.21.2020 11:45

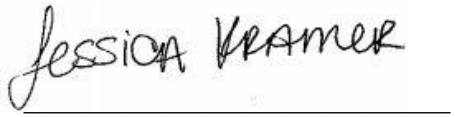
Report Date: 07.22.2020 14:41

Project Manager: Jessica Kramer

Analysis Requested									
	Lab Id:	667748-007		667748-008					
	Field Id:	Confirmation South Botton		Confirmation North Botton					
	Depth:								
	Matrix:	SOIL		SOIL					
	Sampled:	07.17.2020 00:00		07.17.2020 00:00					
BTEX by EPA 8021B	***Extracted:***	07.21.2020 16:00		07.21.2020 16:00					
	Analyzed:	07.22.2020 00:45		07.22.2020 01:06					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Benzene		<0.00200	0.00200	<0.00200	0.00200				
Toluene		<0.00200	0.00200	<0.00200	0.00200				
Ethylbenzene		<0.00200	0.00200	<0.00200	0.00200				
m,p-Xylenes		<0.00400	0.00400	<0.00400	0.00400				
o-Xylene		<0.00200	0.00200	<0.00200	0.00200				
Total Xylenes		<0.00200	0.00200	<0.00200	0.00200				
Total BTEX		<0.00200	0.00200	<0.00200	0.00200				
Chloride by EPA 300	***Extracted:***	07.21.2020 15:00		07.21.2020 15:00					
	Analyzed:	07.21.2020 21:10		07.21.2020 21:15					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		570	5.05	512	4.99				
TPH By SW8015 Mod	***Extracted:***	07.21.2020 16:00		07.21.2020 16:00					
	Analyzed:	07.21.2020 23:43		07.22.2020 00:02					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons		<50.0	50.0	<49.9	49.9				
Diesel Range Organics		<50.0	50.0	<49.9	49.9				
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.9	49.9				
Total TPH		<50.0	50.0	<49.9	49.9				

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



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Analytical Report 667748

for

COG Operating LLC

Project Manager: Ike Tavarez

Coronado 35 Federal 001H (6/29/20)

07.22.2020

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-36), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-25), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

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07.22.2020

Project Manager: **Ike Tavarez**
COG Operating LLC
2407 Pecos Avenue
Artesia, NM 88210

Reference: Eurofins Xenco, LLC Report No(s): **667748**
Coronado 35 Federal 001H (6/29/20)
Project Address: Lea County, NM

Ike Tavarez:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 667748. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 667748 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

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Sample Cross Reference 667748

COG Operating LLC, Artesia, NM

Coronado 35 Federal 001H (6/29/20)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Confirmation North Side Wall-1	S	07.17.2020 00:00		667748-001
Confirmation South Side Wall-1	S	07.17.2020 00:00		667748-002
Confirmation East Side Wall-1	S	07.17.2020 00:00		667748-003
Confirmation West Side Wall-1	S	07.17.2020 00:00		667748-004
Confirmation North Bottom Hole-1 4'	S	07.17.2020 00:00		667748-005
Confirmation North Bottom Hole-2 4'	S	07.17.2020 00:00		667748-006
Confirmation South Bottom Hole-1 3'	S	07.17.2020 00:00		667748-007
Confirmation North Bottom Hole-2 3'	S	07.17.2020 00:00		667748-008

CASE NARRATIVE

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Client Name: COG Operating LLC

Project Name: Coronado 35 Federal 001H (6/29/20)

Project ID:
Work Order Number(s): *667748*

Report Date: *07.22.2020*
Date Received: *07.21.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3132252 Chloride by EPA 300

Lab Sample ID 667748-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 667748-001, -002, -003, -004, -005, -006, -007, -008.
The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3132285 TPH By SW8015 Mod

Surrogate o-Terphenyl recovered above QC limits Data confirmed by re-analysis. Samples affected are: 7707791-1-BLK.

Diesel Range Organics RPD was outside laboratory control limits.
Samples in the analytical batch are: 667748-001, -002, -003, -004, -005, -006, -007, -008

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Certificate of Analytical Results 667748

COG Operating LLC, Artesia, NM

Coronado 35 Federal 001H (6/29/20)

Sample Id: **Confirmation North Side Wall-1** Matrix: Soil Date Received:07.21.2020 11:45

Lab Sample Id: 667748-001 Date Collected: 07.17.2020 00:00

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 07.21.2020 15:00 Basis: Wet Weight

Seq Number: 3132252

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**691**	5.00	mg/kg	07.21.2020 20:18	X	1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 07.21.2020 16:00 Basis: Wet Weight

Seq Number: 3132285

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<50.0	50.0	mg/kg	07.21.2020 21:12	U	1
Diesel Range Organics	C10C28DRO	<50.0	50.0	mg/kg	07.21.2020 21:12	UF	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.21.2020 21:12	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.21.2020 21:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-130	07.21.2020 21:12	
o-Terphenyl	84-15-1	112	%	70-130	07.21.2020 21:12	

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Certificate of Analytical Results 667748

COG Operating LLC, Artesia, NM

Coronado 35 Federal 001H (6/29/20)

Sample Id:	**Confirmation North Side Wall-1**	Matrix:	Soil	Date Received:	07.21.2020 11:45
Lab Sample Id:	667748-001	Date Collected:	07.17.2020 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	AMF			% Moisture:	
Analyst:	AMF	Date Prep:	07.21.2020 16:00	Basis:	Wet Weight
Seq Number:	3132276				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.21.2020 22:42	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.21.2020 22:42	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.21.2020 22:42	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	07.21.2020 22:42	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.21.2020 22:42	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.21.2020 22:42	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.21.2020 22:42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	07.21.2020 22:42	
4-Bromofluorobenzene	460-00-4	127	%	70-130	07.21.2020 22:42	

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Certificate of Analytical Results 667748

COG Operating LLC, Artesia, NM

Coronado 35 Federal 001H (6/29/20)

Sample Id:	**Confirmation South Side Wall-1**	Matrix:	Soil	Date Received:	07.21.2020 11:45
Lab Sample Id:	667748-002	Date Collected:	07.17.2020 00:00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	07.21.2020 15:00	Basis:	Wet Weight
Seq Number:	3132252				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**569**	5.03	mg/kg	07.21.2020 20:34		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	07.21.2020 16:00	Basis:	Wet Weight
Seq Number:	3132285				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<49.8	49.8	mg/kg	07.21.2020 22:08	U	1
Diesel Range Organics	C10C28DRO	<49.8	49.8	mg/kg	07.21.2020 22:08	UF	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	07.21.2020 22:08	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	07.21.2020 22:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-130	07.21.2020 22:08	
o-Terphenyl	84-15-1	116	%	70-130	07.21.2020 22:08	

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Certificate of Analytical Results 667748

COG Operating LLC, Artesia, NM

Coronado 35 Federal 001H (6/29/20)

Sample Id:	**Confirmation South Side Wall-1**	Matrix:	Soil	Date Received:	07.21.2020 11:45
Lab Sample Id:	667748-002	Date Collected:	07.17.2020 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	AMF			% Moisture:	
Analyst:	AMF	Date Prep:	07.21.2020 16:00	Basis:	Wet Weight
Seq Number:	3132276				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.21.2020 23:03	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.21.2020 23:03	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.21.2020 23:03	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	07.21.2020 23:03	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.21.2020 23:03	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.21.2020 23:03	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.21.2020 23:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	07.21.2020 23:03	
4-Bromofluorobenzene	460-00-4	128	%	70-130	07.21.2020 23:03	

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Certificate of Analytical Results 667748

COG Operating LLC, Artesia, NM

Coronado 35 Federal 001H (6/29/20)

Sample Id:	**Confirmation East Side Wall-1**	Matrix:	Soil	Date Received:	07.21.2020 11:45
Lab Sample Id:	667748-003	Date Collected:	07.17.2020 00:00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	07.21.2020 15:00	Basis:	Wet Weight
Seq Number:	3132252				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**635**	4.96	mg/kg	07.21.2020 20:39		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	07.21.2020 16:00	Basis:	Wet Weight
Seq Number:	3132285				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<50.0	50.0	mg/kg	07.21.2020 22:27	U	1
Diesel Range Organics	C10C28DRO	<50.0	50.0	mg/kg	07.21.2020 22:27	UF	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.21.2020 22:27	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.21.2020 22:27	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-130	07.21.2020 22:27	
o-Terphenyl	84-15-1	116	%	70-130	07.21.2020 22:27	

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Certificate of Analytical Results 667748

COG Operating LLC, Artesia, NM

Coronado 35 Federal 001H (6/29/20)

Sample Id:	**Confirmation East Side Wall-1**	Matrix:	Soil	Date Received:	07.21.2020 11:45
Lab Sample Id:	667748-003	Date Collected:	07.17.2020 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	AMF			% Moisture:	
Analyst:	AMF	Date Prep:	07.21.2020 16:00	Basis:	Wet Weight
Seq Number:	3132276				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.21.2020 23:23	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.21.2020 23:23	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.21.2020 23:23	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	07.21.2020 23:23	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.21.2020 23:23	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.21.2020 23:23	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.21.2020 23:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	105	%	70-130	07.21.2020 23:23	
4-Bromofluorobenzene	460-00-4	128	%	70-130	07.21.2020 23:23	

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Certificate of Analytical Results 667748

COG Operating LLC, Artesia, NM

Coronado 35 Federal 001H (6/29/20)

Sample Id: **Confirmation West Side Wall-1** Matrix: Soil Date Received:07.21.2020 11:45

Lab Sample Id: 667748-004 Date Collected: 07.17.2020 00:00

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 07.21.2020 15:00 Basis: Wet Weight

Seq Number: 3132252

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**610**	5.00	mg/kg	07.21.2020 20:44		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 07.21.2020 16:00 Basis: Wet Weight

Seq Number: 3132285

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<50.0	50.0	mg/kg	07.21.2020 22:46	U	1
Diesel Range Organics	C10C28DRO	<50.0	50.0	mg/kg	07.21.2020 22:46	UF	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.21.2020 22:46	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.21.2020 22:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-130	07.21.2020 22:46	
o-Terphenyl	84-15-1	114	%	70-130	07.21.2020 22:46	

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Certificate of Analytical Results 667748

COG Operating LLC, Artesia, NM

Coronado 35 Federal 001H (6/29/20)

Sample Id:	**Confirmation West Side Wall-1**	Matrix:	Soil	Date Received:	07.21.2020 11:45
Lab Sample Id:	667748-004	Date Collected:	07.17.2020 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	AMF			% Moisture:	
Analyst:	AMF	Date Prep:	07.21.2020 16:00	Basis:	Wet Weight
Seq Number:	3132276				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.21.2020 23:44	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.21.2020 23:44	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.21.2020 23:44	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	07.21.2020 23:44	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.21.2020 23:44	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.21.2020 23:44	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.21.2020 23:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	123	%	70-130	07.21.2020 23:44	
1,4-Difluorobenzene	540-36-3	105	%	70-130	07.21.2020 23:44	

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Certificate of Analytical Results 667748

COG Operating LLC, Artesia, NM

Coronado 35 Federal 001H (6/29/20)

Sample Id: **Confirmation North Bottom Hole-1 4'** Matrix: Soil Date Received:07.21.2020 11:45

Lab Sample Id: 667748-005 Date Collected: 07.17.2020 00:00

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 07.21.2020 15:00 Basis: Wet Weight

Seq Number: 3132252

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**50.4**	5.05	mg/kg	07.21.2020 20:49		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 07.21.2020 16:00 Basis: Wet Weight

Seq Number: 3132285

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<49.9	49.9	mg/kg	07.21.2020 23:05	U	1
Diesel Range Organics	C10C28DRO	<49.9	49.9	mg/kg	07.21.2020 23:05	UF	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	07.21.2020 23:05	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	07.21.2020 23:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-130	07.21.2020 23:05	
o-Terphenyl	84-15-1	111	%	70-130	07.21.2020 23:05	

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Certificate of Analytical Results 667748

COG Operating LLC, Artesia, NM

Coronado 35 Federal 001H (6/29/20)

Sample Id:	**Confirmation North Bottom Hole-1 4'**	Matrix:	Soil	Date Received:	07.21.2020 11:45
Lab Sample Id:	667748-005	Date Collected:	07.17.2020 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	AMF			% Moisture:	
Analyst:	AMF	Date Prep:	07.21.2020 16:00	Basis:	Wet Weight
Seq Number:	3132276				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.22.2020 00:04	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.22.2020 00:04	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.22.2020 00:04	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	07.22.2020 00:04	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.22.2020 00:04	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.22.2020 00:04	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.22.2020 00:04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	07.22.2020 00:04	
4-Bromofluorobenzene	460-00-4	130	%	70-130	07.22.2020 00:04	

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Certificate of Analytical Results 667748

COG Operating LLC, Artesia, NM

Coronado 35 Federal 001H (6/29/20)

Sample Id: **Confirmation North Bottom Hole-2 4'** Matrix: Soil Date Received:07.21.2020 11:45

Lab Sample Id: 667748-006 Date Collected: 07.17.2020 00:00

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 07.21.2020 15:00 Basis: Wet Weight

Seq Number: 3132252

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**43.9**	5.05	mg/kg	07.21.2020 21:05		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 07.21.2020 16:00 Basis: Wet Weight

Seq Number: 3132285

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<50.0	50.0	mg/kg	07.22.2020 07:37	U	1
Diesel Range Organics	C10C28DRO	<50.0	50.0	mg/kg	07.22.2020 07:37	UF	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.22.2020 07:37	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.22.2020 07:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-130	07.22.2020 07:37	
o-Terphenyl	84-15-1	114	%	70-130	07.22.2020 07:37	

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Certificate of Analytical Results 667748

COG Operating LLC, Artesia, NM

Coronado 35 Federal 001H (6/29/20)

Sample Id:	**Confirmation North Bottom Hole-2 4'**	Matrix:	Soil	Date Received:	07.21.2020 11:45
Lab Sample Id:	667748-006	Date Collected:	07.17.2020 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	AMF			% Moisture:	
Analyst:	AMF	Date Prep:	07.21.2020 16:00	Basis:	Wet Weight
Seq Number:	3132276				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.22.2020 00:25	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.22.2020 00:25	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.22.2020 00:25	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	07.22.2020 00:25	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.22.2020 00:25	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.22.2020 00:25	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.22.2020 00:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	107	%	70-130	07.22.2020 00:25	
4-Bromofluorobenzene	460-00-4	129	%	70-130	07.22.2020 00:25	

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Certificate of Analytical Results 667748

COG Operating LLC, Artesia, NM

Coronado 35 Federal 001H (6/29/20)

Sample Id:	**Confirmation South Bottom Hole-1 3'**	Matrix:	Soil	Date Received:	07.21.2020 11:45
Lab Sample Id:	667748-007	Date Collected:	07.17.2020 00:00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	07.21.2020 15:00	Basis:	Wet Weight
Seq Number:	3132252				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**570**	5.05	mg/kg	07.21.2020 21:10		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	07.21.2020 16:00	Basis:	Wet Weight
Seq Number:	3132285				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<50.0	50.0	mg/kg	07.21.2020 23:43	U	1
Diesel Range Organics	C10C28DRO	<50.0	50.0	mg/kg	07.21.2020 23:43	UF	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.21.2020 23:43	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.21.2020 23:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-130	07.21.2020 23:43	
o-Terphenyl	84-15-1	121	%	70-130	07.21.2020 23:43	

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Certificate of Analytical Results 667748

COG Operating LLC, Artesia, NM

Coronado 35 Federal 001H (6/29/20)

Sample Id:	**Confirmation South Bottom Hole-1 3'**	Matrix:	Soil	Date Received:	07.21.2020 11:45
Lab Sample Id:	667748-007	Date Collected:	07.17.2020 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	AMF			% Moisture:	
Analyst:	AMF	Date Prep:	07.21.2020 16:00	Basis:	Wet Weight
Seq Number:	3132276				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.22.2020 00:45	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.22.2020 00:45	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.22.2020 00:45	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	07.22.2020 00:45	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.22.2020 00:45	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.22.2020 00:45	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.22.2020 00:45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	104	%	70-130	07.22.2020 00:45	
4-Bromofluorobenzene	460-00-4	127	%	70-130	07.22.2020 00:45	

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Certificate of Analytical Results 667748

COG Operating LLC, Artesia, NM

Coronado 35 Federal 001H (6/29/20)

Sample Id: **Confirmation North Bottom Hole-2 3'** Matrix: Soil Date Received:07.21.2020 11:45

Lab Sample Id: 667748-008 Date Collected: 07.17.2020 00:00

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: CHE % Moisture:

Analyst: CHE Date Prep: 07.21.2020 15:00 Basis: Wet Weight

Seq Number: 3132252

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**512**	4.99	mg/kg	07.21.2020 21:15		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 07.21.2020 16:00 Basis: Wet Weight

Seq Number: 3132285

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<49.9	49.9	mg/kg	07.22.2020 00:02	U	1
Diesel Range Organics	C10C28DRO	<49.9	49.9	mg/kg	07.22.2020 00:02	UF	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	07.22.2020 00:02	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	07.22.2020 00:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	121	%	70-130	07.22.2020 00:02	
o-Terphenyl	84-15-1	128	%	70-130	07.22.2020 00:02	

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Certificate of Analytical Results 667748

COG Operating LLC, Artesia, NM

Coronado 35 Federal 001H (6/29/20)

Sample Id:	**Confirmation North Bottom Hole-2 3'**	Matrix:	Soil	Date Received:	07.21.2020 11:45
Lab Sample Id:	667748-008	Date Collected:	07.17.2020 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	AMF			% Moisture:	
Analyst:	AMF	Date Prep:	07.21.2020 16:00	Basis:	Wet Weight
Seq Number:	3132276				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	07.22.2020 01:06	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	07.22.2020 01:06	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	07.22.2020 01:06	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	07.22.2020 01:06	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	07.22.2020 01:06	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	07.22.2020 01:06	U	1
Total BTEX		<0.00200	0.00200	mg/kg	07.22.2020 01:06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	126	%	70-130	07.22.2020 01:06	
1,4-Difluorobenzene	540-36-3	106	%	70-130	07.22.2020 01:06	

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Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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QC Summary 667748

COG Operating LLC

Coronado 35 Federal 001H (6/29/20)

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3132252 — Matrix: Solid — Date Prep: 07.21.2020
MB Sample Id: 7707768-1-BLK — LCS Sample Id: 7707768-1-BKS — LCSD Sample Id: 7707768-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	274	110	275	110	90-110	0	20	mg/kg	07.21.2020 20:07	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3132252 — Matrix: Soil — Date Prep: 07.21.2020
Parent Sample Id: 667542-002 — MS Sample Id: 667542-002 S — MSD Sample Id: 667542-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	299	250	545	98	564	106	90-110	3	20	mg/kg	07.21.2020 21:36	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3132252 — Matrix: Soil — Date Prep: 07.21.2020
Parent Sample Id: 667748-001 — MS Sample Id: 667748-001 S — MSD Sample Id: 667748-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	691	250	902	84	923	93	90-110	2	20	mg/kg	07.21.2020 20:23	X

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3132285 — Matrix: Solid — Date Prep: 07.21.2020
MB Sample Id: 7707791-1-BLK — LCS Sample Id: 7707791-1-BKS — LCSD Sample Id: 7707791-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons	<50.0	1000	1050	105	871	87	70-130	19	20	mg/kg	07.21.2020 20:34	
Diesel Range Organics	<50.0	1000	1040	104	846	85	70-130	21	20	mg/kg	07.21.2020 20:34	F

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	129		129		120		70-130	%	07.21.2020 20:34
o-Terphenyl	141	**	129		116		70-130	%	07.21.2020 20:34

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3132285 — Matrix: Solid — Date Prep: 07.21.2020
MB Sample Id: 7707791-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	07.21.2020 20:15	

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

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QC Summary 667748

COG Operating LLC

Coronado 35 Federal 001H (6/29/20)

Analytical Method: **TPH By SW8015 Mod** Prep Method: SW8015P
Seq Number: 3132285 Matrix: Soil Date Prep: 07.21.2020
Parent Sample Id: 667748-001 MS Sample Id: 667748-001 S MSD Sample Id: 667748-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons	<49.9	997	930	93	870	87	70-130	7	20	mg/kg	07.22.2020 07:19	
Diesel Range Organics	<49.9	997	906	91	900	90	70-130	1	20	mg/kg	07.22.2020 07:19	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	129		123		70-130	%	07.22.2020 07:19
o-Terphenyl	126		116		70-130	%	07.22.2020 07:19

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3132276 Matrix: Solid Date Prep: 07.21.2020
MB Sample Id: 7707803-1-BLK LCS Sample Id: 7707803-1-BKS LCSD Sample Id: 7707803-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.107	107	0.106	106	70-130	1	35	mg/kg	07.21.2020 20:39	
Toluene	<0.00200	0.100	0.102	102	0.106	106	70-130	4	35	mg/kg	07.21.2020 20:39	
Ethylbenzene	<0.00200	0.100	0.0995	100	0.104	104	70-130	4	35	mg/kg	07.21.2020 20:39	
m,p-Xylenes	<0.00400	0.200	0.193	97	0.205	103	70-130	6	35	mg/kg	07.21.2020 20:39	
o-Xylene	<0.00200	0.100	0.0934	93	0.0998	100	70-130	7	35	mg/kg	07.21.2020 20:39	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		97		95		70-130	%	07.21.2020 20:39
4-Bromofluorobenzene	109		95		102		70-130	%	07.21.2020 20:39

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3132276 Matrix: Soil Date Prep: 07.21.2020
Parent Sample Id: 667748-001 MS Sample Id: 667748-001 S

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0779	78	70-130	mg/kg	07.21.2020 21:20	
Benzene	<0.00200	0.100	0.0737	74	70-130	mg/kg	07.21.2020 21:40	
Toluene	<0.00200	0.100	0.0837	84	70-130	mg/kg	07.21.2020 21:20	
Toluene	<0.00200	0.100	0.0843	84	70-130	mg/kg	07.21.2020 21:40	
Ethylbenzene	<0.00200	0.100	0.0828	83	70-130	mg/kg	07.21.2020 21:20	
Ethylbenzene	<0.00200	0.100	0.0848	85	70-130	mg/kg	07.21.2020 21:40	
m,p-Xylenes	<0.00400	0.200	0.165	83	70-130	mg/kg	07.21.2020 21:20	
m,p-Xylenes	<0.00400	0.200	0.171	86	70-130	mg/kg	07.21.2020 21:40	
o-Xylene	<0.00200	0.100	0.0812	81	70-130	mg/kg	07.21.2020 21:20	
o-Xylene	<0.00200	0.100	0.0832	83	70-130	mg/kg	07.21.2020 21:40	

Surrogate	MS %Rec	MS Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	94		70-130	%	07.21.2020 21:20
1,4-Difluorobenzene	90		70-130	%	07.21.2020 21:40
4-Bromofluorobenzene	104		70-130	%	07.21.2020 21:20
4-Bromofluorobenzene	105		70-130	%	07.21.2020 21:40

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

Analysis Request of Chain of Custody Record

CONCHO

One Concho
Center/600/Illinois
Avenue/Midland, Texas
Tel (432) 683-7443

Lab # 607748

Client Name: COG

Site Manager: Ike Tavarez itavarez@concho.com
Robert Grubbs Jr rgrubbs@concho.com

Project Name: Coronado 35 Federal 001H (6/29/20)

Project Location: (county, state) Lea County, NM

Project #:

Invoice to: COG

Receiving Laboratory: Xenco

Sampler Signature: Robert Grubbs Jr

Comments:

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: 2020 DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	MATRIX	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	PRESERVATIVE METHOD	# CONTAINERS	FILTERED (Y/N)	TPH TX1005 (Ext to C35)	BTEX 8021B	TPH 8015M (GRO - DRO - MRO)	Chloride	Hold
	Confirmation North Side Wall-1	7/17/2020			X				X		1			X	X	X	
	Confirmation South Side Wall-1	7/17/2020			X				X		1			X	X	X	
	Confirmation East Side Wall-1	7/17/2020			X				X		1			X	X	X	
	Confirmation West Side Wall-1	7/17/2020			X				X		1			X	X	X	
	Confirmation North Side Wall-1	7/17/2020			X				X		1			X	X	X	
	Confirmation North Bottom Hole-1 4'	7/17/2020			X				X		1			X	X	X	
	Confirmation North Bottom Hole-2 4'	7/17/2020			X				X		1			X	X	X	
	Confirmation South Bottom Hole-1 3'	7/17/2020			X				X		1			X	X	X	
	Confirmation North Bottom Hole-2 3'	7/17/2020			X				X		1			X	X	X	

Relinquished by:	Date:	Time:	Relinquished by:	Date:	Time:
Robert Grubbs Jr	7/21/2020	1145		7/21/20	1145
Relinquished by:	Date:	Time:	Relinquished by:	Date:	Time:
Relinquished by:	Date:	Time:	Relinquished by:	Date:	Time:

LAB USE ONLY

Sample Temperature 1.6 | 1.2 -0.4

REMARKS:

X	RUSH: Same Day **24 hr** 48 hr 72 hr
	Rush Charges Authorized
	Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

ORIGINAL COPY

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: COG Operating LLC

Date/ Time Received: 07.21.2020 11.45.00 AM

Work Order #: 667748

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	1.2	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**	
#5 Custody Seals intact on sample bottles?	**N/A**	
#6*Custody Seals Signed and dated?	**N/A**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**No**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	BTEX was in bulk container
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**N/A**	
#18 Water VOC samples have zero headspace?	**N/A**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 07.21.2020
Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 07.21.2020
Jessica Kramer

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Certificate of Analysis Summary 668128

COG Operating LLC, Artesia, NM

Project Name: Coronado 35 Federal 001H (6/29/20)

Project Id:

Contact: Ike Tavarez

Project Location: Lea County, NM

Date Received in Lab: Fri 07.24.2020 09:11

Report Date: 07.27.2020 14:29

Project Manager: Jessica Kramer

Analysis Requested											
	Lab Id:	668128-001		668128-002		668128-003					
	Field Id:	Comfirmation North Side W		Comfirmation East Side W		Comfirmation West Side W					
	Depth:										
	Matrix:	SOIL		SOIL		SOIL					
	Sampled:	07.23.2020 00:00		07.23.2020 00:00		07.23.2020 00:00					
BTEX by EPA 8021B	***Extracted:***	07.25.2020 11:30		07.25.2020 11:30		07.25.2020 11:30					
	Analyzed:	** ** ** **		** ** ** **		** ** ** **					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00199	0.00199	<0.00199	0.00199	<0.00199	0.00199				
Toluene		<0.00199	0.00199	<0.00199	0.00199	<0.00199	0.00199				
Ethylbenzene		<0.00199	0.00199	<0.00199	0.00199	<0.00199	0.00199				
m,p-Xylenes		<0.00398	0.00398	<0.00398	0.00398	<0.00398	0.00398				
o-Xylene		<0.00199	0.00199	<0.00199	0.00199	<0.00199	0.00199				
Total Xylenes		<0.00199	0.00199	<0.00199	0.00199	<0.00199	0.00199				
Total BTEX		<0.00199	0.00199	<0.00199	0.00199	<0.00199	0.00199				
Chloride by EPA 300	***Extracted:***	07.24.2020 09:30		07.24.2020 09:30		07.24.2020 09:30					
	Analyzed:	07.24.2020 11:06		07.24.2020 11:12		07.24.2020 11:18					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		7.26	5.03	6.34	5.04	6.41	5.02				
TPH By SW8015 Mod	***Extracted:***	07.24.2020 12:00		07.24.2020 12:00		07.24.2020 12:00					
	Analyzed:	07.24.2020 18:19		07.24.2020 18:41		07.24.2020 19:02					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons		<50.0	50.0	<49.9	49.9	<50.0	50.0				
Diesel Range Organics		<50.0	50.0	<49.9	49.9	<50.0	50.0				
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.9	49.9	<50.0	50.0				
Total TPH		<50.0	50.0	<49.9	49.9	<50.0	50.0				

BRL - Below Reporting Limit

Jessica Kramer

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Analytical Report 668128

for

COG Operating LLC

Project Manager: Ike Tavarez

Coronado 35 Federal 001H (6/29/20)

07.27.2020

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-36), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-25), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

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07.27.2020

Project Manager: **Ike Tavarez**
COG Operating LLC
2407 Pecos Avenue
Artesia, NM 88210

Reference: Eurofins Xenco, LLC Report No(s): **668128**
Coronado 35 Federal 001H (6/29/20)
Project Address: Lea County, NM

Ike Tavarez:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 668128. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 668128 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

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Sample Cross Reference 668128

COG Operating LLC, Artesia, NM

Coronado 35 Federal 001H (6/29/20)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Comfirmation North Side Wall-1	S	07.23.2020 00:00		668128-001
Comfirmation East Side Wall-1	S	07.23.2020 00:00		668128-002
Comfirmation West Side Wall-1	S	07.23.2020 00:00		668128-003

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CASE NARRATIVE

Client Name: COG Operating LLC

Project Name: Coronado 35 Federal 001H (6/29/20)

Project ID:
Work Order Number(s): *668128*

Report Date: *07.27.2020*
Date Received: *07.24.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

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Certificate of Analytical Results 668128

COG Operating LLC, Artesia, NM

Coronado 35 Federal 001H (6/29/20)

Sample Id: **Comfirmation North Side Wall-1** Matrix: Soil Date Received:07.24.2020 09:11

Lab Sample Id: 668128-001 Date Collected: 07.23.2020 00:00

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: SPC % Moisture:

Analyst: SPC Date Prep: 07.24.2020 09:30 Basis: Wet Weight

Seq Number: 3132579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**7.26**	5.03	mg/kg	07.24.2020 11:06		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 07.24.2020 12:00 Basis: Wet Weight

Seq Number: 3132651

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<50.0	50.0	mg/kg	07.24.2020 18:19	U	1
Diesel Range Organics	C10C28DRO	<50.0	50.0	mg/kg	07.24.2020 18:19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.24.2020 18:19	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.24.2020 18:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-130	07.24.2020 18:19	
o-Terphenyl	84-15-1	99	%	70-130	07.24.2020 18:19	

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Certificate of Analytical Results 668128

COG Operating LLC, Artesia, NM

Coronado 35 Federal 001H (6/29/20)

Sample Id:	**Comfirmation North Side Wall-1**	Matrix:	Soil	Date Received:	07.24.2020 09:11
Lab Sample Id:	668128-001	Date Collected:	07.23.2020 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	07.25.2020 11:30	Basis:	Wet Weight
Seq Number:	3132606				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.25.2020 09:39	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.25.2020 09:39	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.25.2020 09:39	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.25.2020 09:39	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.25.2020 09:39	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.25.2020 09:39	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.25.2020 09:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	103	%	70-130	07.25.2020 09:39	
4-Bromofluorobenzene	460-00-4	104	%	70-130	07.25.2020 09:39	

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Certificate of Analytical Results 668128

COG Operating LLC, Artesia, NM

Coronado 35 Federal 001H (6/29/20)

Sample Id:	**Comfirmation East Side Wall-1**	Matrix:	Soil	Date Received:	07.24.2020 09:11
Lab Sample Id:	668128-002	Date Collected:	07.23.2020 00:00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	SPC			% Moisture:	
Analyst:	SPC	Date Prep:	07.24.2020 09:30	Basis:	Wet Weight
Seq Number:	3132579				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6.34**	5.04	mg/kg	07.24.2020 11:12		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	07.24.2020 12:00	Basis:	Wet Weight
Seq Number:	3132651				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<49.9	49.9	mg/kg	07.24.2020 18:41	U	1
Diesel Range Organics	C10C28DRO	<49.9	49.9	mg/kg	07.24.2020 18:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	07.24.2020 18:41	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	07.24.2020 18:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-130	07.24.2020 18:41	
o-Terphenyl	84-15-1	97	%	70-130	07.24.2020 18:41	

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Certificate of Analytical Results 668128

COG Operating LLC, Artesia, NM

Coronado 35 Federal 001H (6/29/20)

Sample Id:	**Comfirmation East Side Wall-1**	Matrix:	Soil	Date Received:	07.24.2020 09:11
Lab Sample Id:	668128-002	Date Collected:	07.23.2020 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	07.25.2020 11:30	Basis:	Wet Weight
Seq Number:	3132606				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.25.2020 09:59	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.25.2020 09:59	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.25.2020 09:59	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.25.2020 09:59	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.25.2020 09:59	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.25.2020 09:59	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.25.2020 09:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	102	%	70-130	07.25.2020 09:59	
1,4-Difluorobenzene	540-36-3	101	%	70-130	07.25.2020 09:59	

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Certificate of Analytical Results 668128

COG Operating LLC, Artesia, NM

Coronado 35 Federal 001H (6/29/20)

Sample Id: **Comfirmation West Side Wall-1** Matrix: Soil Date Received:07.24.2020 09:11

Lab Sample Id: 668128-003 Date Collected: 07.23.2020 00:00

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: SPC % Moisture:

Analyst: SPC Date Prep: 07.24.2020 09:30 Basis: Wet Weight

Seq Number: 3132579

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**6.41**	5.02	mg/kg	07.24.2020 11:18		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P

Tech: DVM % Moisture:

Analyst: ARM Date Prep: 07.24.2020 12:00 Basis: Wet Weight

Seq Number: 3132651

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<50.0	50.0	mg/kg	07.24.2020 19:02	U	1
Diesel Range Organics	C10C28DRO	<50.0	50.0	mg/kg	07.24.2020 19:02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	07.24.2020 19:02	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	07.24.2020 19:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	76	%	70-130	07.24.2020 19:02	
o-Terphenyl	84-15-1	91	%	70-130	07.24.2020 19:02	

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Certificate of Analytical Results 668128

COG Operating LLC, Artesia, NM

Coronado 35 Federal 001H (6/29/20)

Sample Id:	**Comfirmation West Side Wall-1**	Matrix:	Soil	Date Received:	07.24.2020 09:11
Lab Sample Id:	668128-003	Date Collected:	07.23.2020 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	07.25.2020 11:30	Basis:	Wet Weight
Seq Number:	3132606				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	07.25.2020 10:20	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	07.25.2020 10:20	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	07.25.2020 10:20	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	07.25.2020 10:20	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	07.25.2020 10:20	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	07.25.2020 10:20	U	1
Total BTEX		<0.00199	0.00199	mg/kg	07.25.2020 10:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	07.25.2020 10:20	
1,4-Difluorobenzene	540-36-3	102	%	70-130	07.25.2020 10:20	

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Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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QC Summary 668128

COG Operating LLC

Coronado 35 Federal 001H (6/29/20)

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3132579 — Matrix: Solid — Date Prep: 07.24.2020
MB Sample Id: 7707992-1-BLK — LCS Sample Id: 7707992-1-BKS — LCSD Sample Id: 7707992-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	258	103	260	104	90-110	1	20	mg/kg	07.24.2020 09:49	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3132579 — Matrix: Soil — Date Prep: 07.24.2020
Parent Sample Id: 667963-004 — MS Sample Id: 667963-004 S — MSD Sample Id: 667963-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	910	249	1130	88	1130	88	90-110	0	20	mg/kg	07.24.2020 10:08	X

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3132579 — Matrix: Solid — Date Prep: 07.24.2020
Parent Sample Id: 668135-001 — MS Sample Id: 668135-001 S — MSD Sample Id: 668135-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	903	250	1130	91	1130	91	90-110	0	20	mg/kg	07.24.2020 12:02	

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3132651 — Matrix: Solid — Date Prep: 07.24.2020
MB Sample Id: 7708088-1-BLK — LCS Sample Id: 7708088-1-BKS — LCSD Sample Id: 7708088-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons	<50.0	1000	861	86	822	82	70-130	5	20	mg/kg	07.24.2020 12:07	
Diesel Range Organics	<50.0	1000	891	89	880	88	70-130	1	20	mg/kg	07.24.2020 12:07	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	88		89		92		70-130	%	07.24.2020 12:07
o-Terphenyl	104		101		98		70-130	%	07.24.2020 12:07

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3132651 — Matrix: Solid — Date Prep: 07.24.2020
MB Sample Id: 7708088-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	07.24.2020 11:45	

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

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QC Summary 668128

COG Operating LLC

Coronado 35 Federal 001H (6/29/20)

Analytical Method: **TPH By SW8015 Mod** Prep Method: SW8015P
Seq Number: 3132651 Matrix: Soil Date Prep: 07.24.2020
Parent Sample Id: 667963-001 MS Sample Id: 667963-001 S MSD Sample Id: 667963-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons	<49.9	998	809	81	822	82	70-130	2	20	mg/kg	07.24.2020 13:11	
Diesel Range Organics	<49.9	998	838	84	853	86	70-130	2	20	mg/kg	07.24.2020 13:11	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	90		91		70-130	%	07.24.2020 13:11
o-Terphenyl	96		97		70-130	%	07.24.2020 13:11

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3132606 Matrix: Solid Date Prep: 07.25.2020
MB Sample Id: 7708078-1-BLK LCS Sample Id: 7708078-1-BKS LCSD Sample Id: 7708078-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0943	94	0.0948	95	70-130	1	35	mg/kg	07.25.2020 07:35	
Toluene	<0.00200	0.100	0.0915	92	0.0920	92	70-130	1	35	mg/kg	07.25.2020 07:35	
Ethylbenzene	<0.00200	0.100	0.0883	88	0.0887	89	70-130	0	35	mg/kg	07.25.2020 07:35	
m,p-Xylenes	<0.00400	0.200	0.178	89	0.179	90	70-130	1	35	mg/kg	07.25.2020 07:35	
o-Xylene	<0.00200	0.100	0.0886	89	0.0895	90	70-130	1	35	mg/kg	07.25.2020 07:35	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		98		98		70-130	%	07.25.2020 07:35
4-Bromofluorobenzene	102		98		100		70-130	%	07.25.2020 07:35

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3132606 Matrix: Soil Date Prep: 07.25.2020
Parent Sample Id: 668128-001 MS Sample Id: 668128-001 S MSD Sample Id: 668128-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0844	84	0.0854	85	70-130	1	35	mg/kg	07.25.2020 08:16	
Toluene	<0.00200	0.100	0.0807	81	0.0821	81	70-130	2	35	mg/kg	07.25.2020 08:16	
Ethylbenzene	<0.00200	0.100	0.0777	78	0.0788	78	70-130	1	35	mg/kg	07.25.2020 08:16	
m,p-Xylenes	<0.00400	0.200	0.156	78	0.158	79	70-130	1	35	mg/kg	07.25.2020 08:16	
o-Xylene	<0.00200	0.100	0.0769	77	0.0777	77	70-130	1	35	mg/kg	07.25.2020 08:16	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		98		70-130	%	07.25.2020 08:16
4-Bromofluorobenzene	101		100		70-130	%	07.25.2020 08:16

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

Analysis Request of Chain of Custody Record

Page 1 of 1

CONCHO

One Concho Center/600/Illinois Avenue/Midland, Texas
Tel (432) 683-7443

668128

Client Name: COG		**Site Manager:** Ike Tavarez itavarez@concho.com; Robert Grubbs Jr rgrubbs@concho.com	
Project Name: Coronado 35 Federal 001H (6/29/20)			
Project Location: (county, state) Lea County, NM		**Project #:**	
Invoice to: COG			
Receiving Laboratory: Xenco		**Sampler Signature:** Robert Grubbs Jr	
Comments:			

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: 2020 DATE	TIME	MATRIX WATER	SOIL	PRESERVATIVE METHOD HCL	HNO_3	ICE	# CONTAINERS	FILTERED (Y/N)	TPH TX1005 (Ext to C35)	BTEX 8021B	TPH 8015M (GRO - DRO - MRO)	Chloride	Hold
	Confirmation North Side Wall-1	7/23/2020			X			X	1			X	X	X	
	Confirmation East Side Wall-1	7/23/2020			X			X	1			X	X	X	
	Confirmation West Side Wall-1	7/23/2020			X			X	1			X	X	X	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Robert Grubbs Jr	7/23/2020	09:11	[signature]	7/24/20	911
Relinquished by:	Date:	Time:	Relinquished by:	Date:	Time:
Relinquished by:	Date:	Time:	Relinquished by:	Date:	Time:

LAB USE ONLY
Sample Temperature: 1.4/1.2

REMARKS:

X	RUSH: Same Day **24 hr** 48 hr 72 hr
	Rush Charges Authorized
	Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: ____________

ORIGINAL COPY

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: COG Operating LLC

Date/ Time Received: 07.24.2020 09.11.00 AM

Work Order #: 668128

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	1.2	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**	
#5 Custody Seals intact on sample bottles?	**N/A**	
#6*Custody Seals Signed and dated?	**N/A**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**No**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	BTEX was in bulk container
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**N/A**	
#18 Water VOC samples have zero headspace?	**N/A**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 07.24.2020
Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 07.24.2020
Jessica Kramer

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 116211
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved.	6/13/2022