CONCHO

January 25, 2021

Oil Conservation Division, District II
811 S. First St.
Artesia, New Mexico 88210

Re: Closure Report
Wild Cap State Com 7H (5.27.20)
Tracking#: NRM2016730091
GPS: 32.621751, -103.815852
Unit Letter A, Section 36, Township 19 South, Range 31 East
Eddy 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 at the Wild Cap State Com 7H, located in Unit Letter A, Section 36, Township 19 South, Range 31 East Eddy County, New Mexico.

BACKGROUND

The release was discovered on May 27, 2020. An initial C-141 report was submitted and accepted by the New Mexico Oil Conservation Division (NMOCD). The release was caused by a hole in the polyline. The release occurred in the pasture. Approximately seven barrels (7) 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) and the United States Geological Survey (USGS) 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. There is a NMOSE well (POD 641) located a half mile to the southwest of the release. This well indicated groundwater is greater than one hundred (100) feet below surface. The information for this well is found in Appendix B.

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.)
Low Karst	>100 feet

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

- The excavation was done "at risk" and guided by field screens. Twelve (12) confirmation samples and four (4) sidewalls were collected once the excavation was complete. CS-9 was re-sampled due to chlorides exceeding NMOCD closure criteria by 43ppm. The second sample confirmed that the chlorides were well below closure levels. The sample results are shown in Table 1.

REMEDIAL ACTIONS

- The impacted area was excavated to a depth of approximately three (3) feet and four (4) feet below surface. The attached Site and Sample Map documents the excavation depths.
- Table 1 shows the sample depths and analytical results.
- 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 shows that the remediation meets NMOCD closure criteria (NMAC 19.15.29.12(E) Table I, & 19.15.29.13 (D 1)).

SAMPLING AND BACKFILLING

All samples were below Table 1 closure criterial levels. 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 grant closure approval for the Wild Cap State Com 7H release that occurred on May 27, 2020 (Tracking # NRM2016730091).

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

Sincerely,

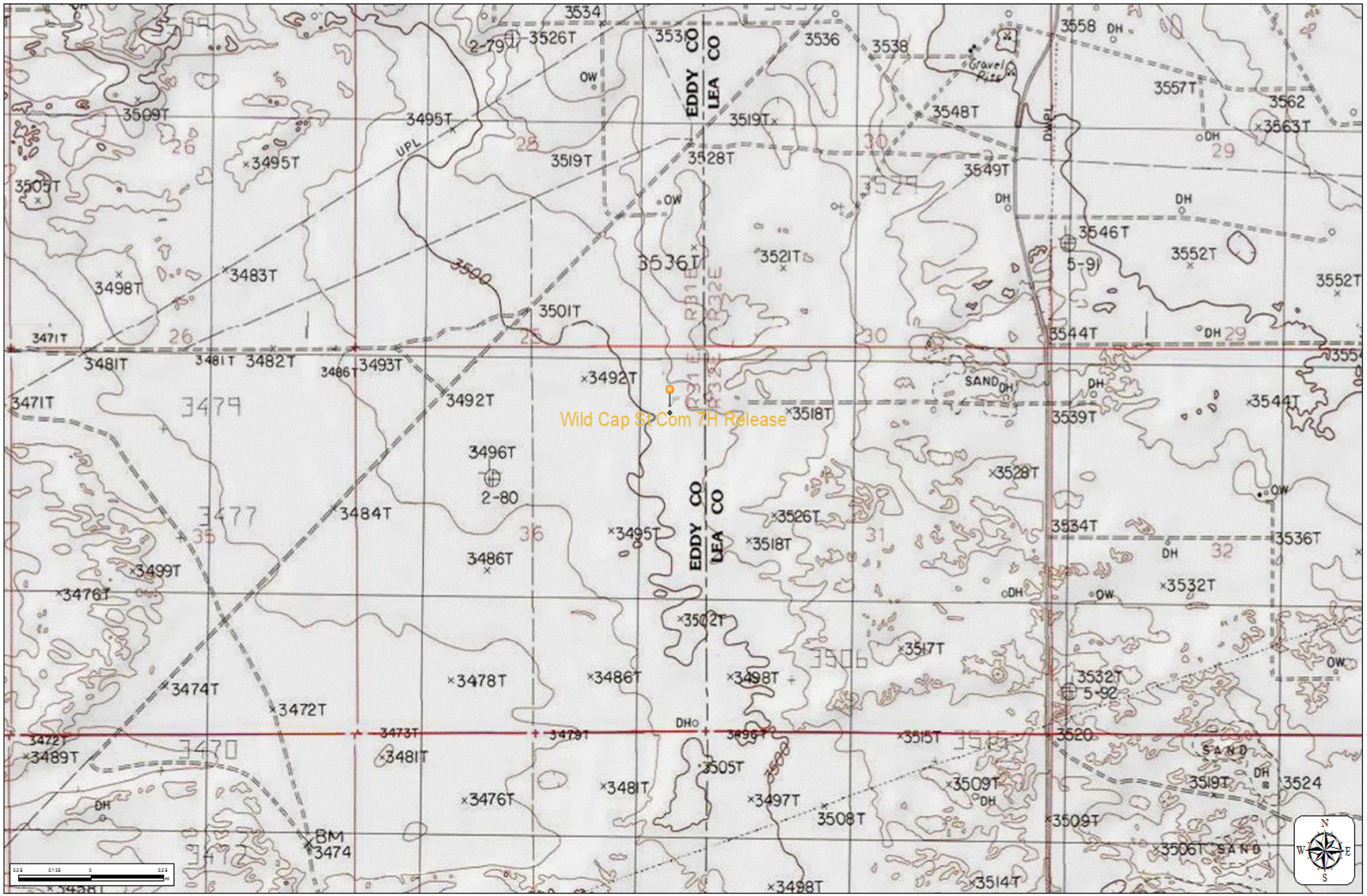
Jacqui Harris

Jacqui Harris
Senior HSE Coordinator
Jharris2@concho.com

Maps

CONCHO

ArcGIS Web Map



COG Operating

Wild Cap State Com 7H (5.27.20)
Site and Sample Map

GPS: 32.621751, -103.815852
Unit Letter A, Section 36, Township 19 South, Range 31 East
Eddy County, New Mexico

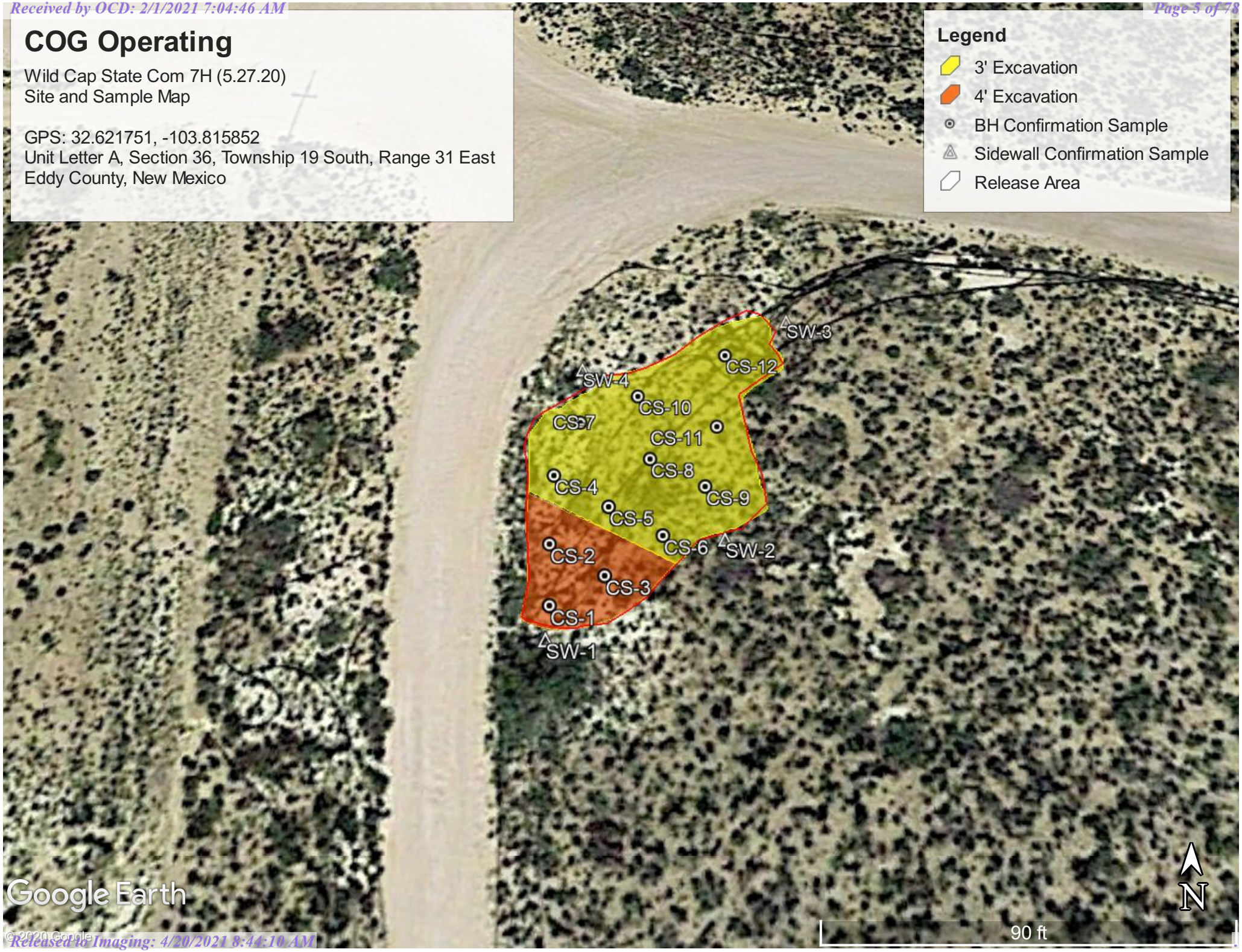


Table of Analytical Data

Table 1
COG Operating LLC.
Wild Cap State Com 7H
Lea County, New Mexico

Sample ID	Sample Date	Depth (Feet BGS)	TPH (mg/kg)							Benzene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			GRO	DRO	MRO	*Total*	GRO	DRO	*Total*			
Average Depth to Groundwater (ft) - >100' Low Karst												
NMOCD RAL Limits (mg/kg)			-	-	-	***2,500***	-	-	***1,000***	***10***	***50***	***20,000***
CS-1	1/4/2021	3.5'-4'	<50.2	<50.2	<50.2	<50.2	<50.2	<50.2	<50.2	<0.00200	<0.00200	421
CS-2	1/4/2021	3.5'-4'	<50.2	<50.2	<50.2	<50.2	<50.2	<50.2	<50.2	<0.00200	<0.00200	401
CS-3	1/4/2021	3.5'-4'	<49.8	<49.8	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	434
CS-4	1/4/2021	2.5'-3'	<49.9	<49.9	<49.9	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	450
CS-5	1/4/2021	2.5'-3'	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	368
CS-6	1/4/2021	2.5'-3'	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	340
CS-7	1/4/2021	2.5'-3'	<49.9	<49.9	<49.9	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	494
CS-8	1/4/2021	2.5'-3'	<49.8	<49.8	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	476
CS-9	1/4/2021	2.5'-3'	<49.8	<49.8	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	643
CS-9 (resampled)	1/14/2021	2.5'-3'	<50.2	<50.2	<50.2	<50.2	<50.2	<50.2	<50.2	<0.00200	<0.00200	35.3
CS-10	1/4/2021	2.5'-3'	<49.9	<49.9	<49.9	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	78.2
CS-11	1/4/2021	2.5'-3'	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	64.1
CS-12	1/4/2021	2.5'-3'	<49.9	<49.9	<49.9	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	86.4
SW-1	1/4/2021	-	<50.1	<50.1	<50.1	<50.1	<50.1	<50.1	<50.1	<0.00201	<0.00201	64.1
SW-2	1/4/2021	-	<49.8	<49.8	<49.8	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	142
SW-3	1/4/2021	-	<50.2	<50.2	<50.2	<50.2	<50.2	<50.2	<50.2	<0.00198	<0.00198	322
SW-4	1/4/2021	-	<49.9	<49.9	<49.9	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	302

Photos

Photo of Excavation

Photo of Excavation

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: _____ Date: _____

Printed Name: _____ Title: _____

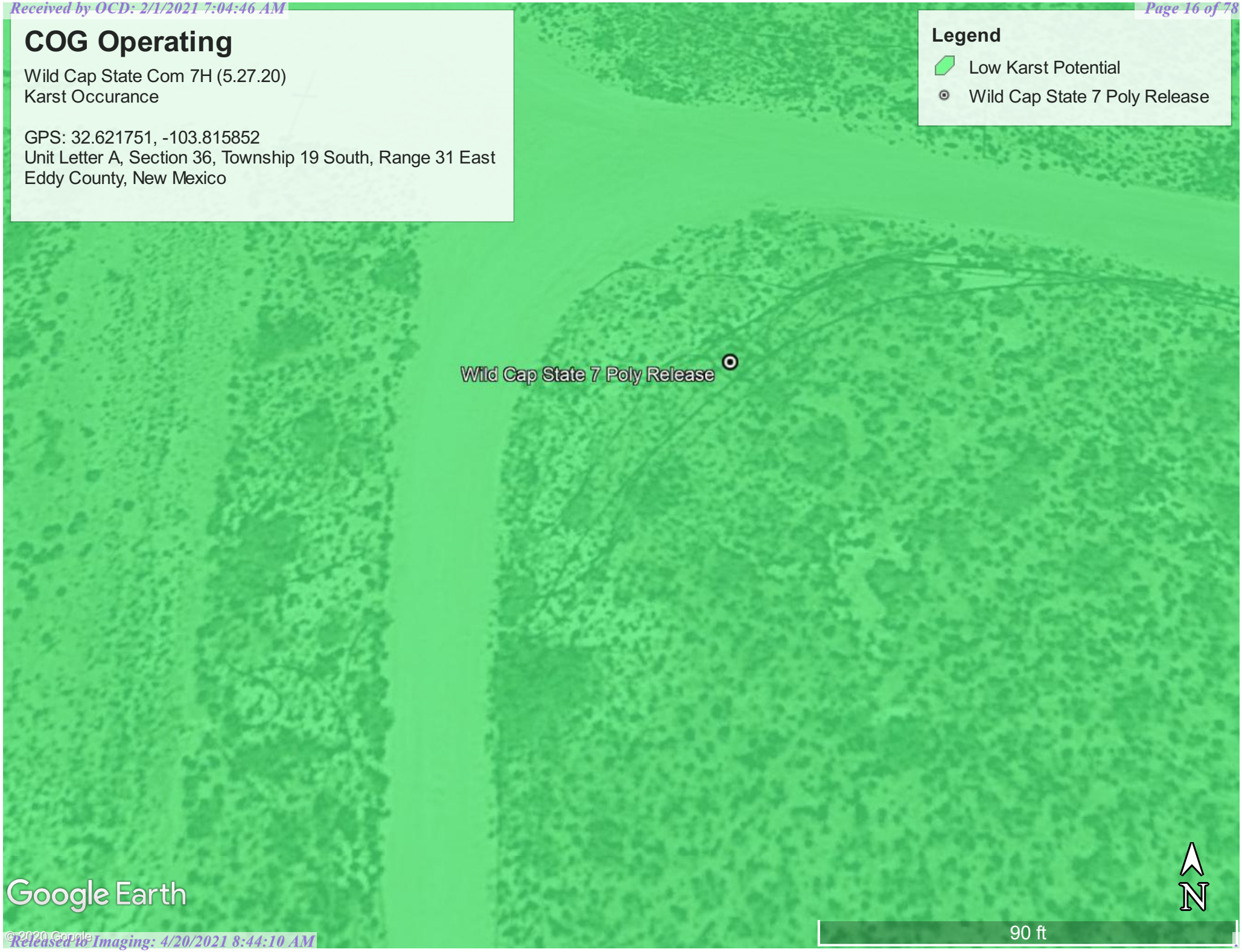
Appendix B

Site Assessment Data

COG Operating

Wild Cap State Com 7H (5.27.20)
Karst Occurance

GPS: 32.621751, -103.815852
Unit Letter A, Section 36, Township 19 South, Range 31 East
Eddy County, New Mexico



National Flood Hazard Layer FIRMette

FEMA

103°49'16"W 32°37'33"N

103°48'38"W 32°37'3"N

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

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

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 Cross Sections with 1% Annual Chance
- 17.5 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 1/25/2021 at 1:57 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 Code	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 00641 POD1	CP	ED	4	1	36	19S	31E		610247	3609634*	922	300	130	170
CP 00642 POD1	CP	ED	2	2	25	19S	31E		611025	3611657*	1667	250		

Average Depth to Water: **130 feet**

Minimum Depth: **130 feet**

Maximum Depth: **130 feet**

Record Count: 2

UTMNAD83 Radius Search (in meters):

Easting (X): 611098 **Northing (Y):** 3609991 **Radius:** 2300

***UTM location was derived from PLSS - see Help**

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater ▼ Geographic Area: United States ▼ GO

Click to hideNews Bulletins

- Introducing The Next Generation of USGS Water Data for the Nation
- Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

- 323712103491001

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

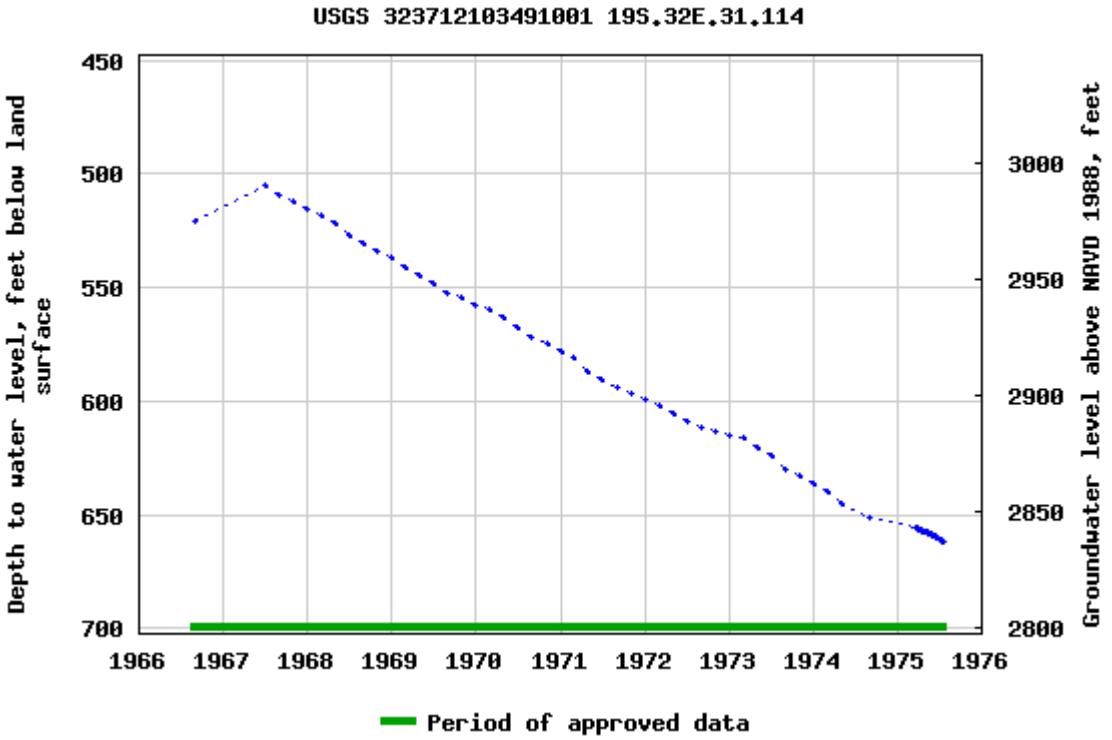
USGS 323712103491001 19S.32E.31.114

Available data for this site Groundwater: Field measurements ▼ GO

Lea County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°37'12", Longitude 103°49'10" NAD27
Land-surface elevation 3,497 feet above NAVD88

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2020-06-16 14:01:39 EDT
0.67 0.58 nadww02

Appendix C

Analytical Reports

eurofins | Environment Testing Xenco

Certificate of Analysis Summary 683484

COG Operating, LLC, Midland, TX

Project Name: Wild Cap State Com 7H

Project Id:

Contact: J Harris

Project Location: Lea, New Mexico

Date Received in Lab: Tue 01.05.2021 16:25

Report Date: 01.06.2021 12:05

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	683484-001		683484-002		683484-003		683484-004		683484-005		683484-006	
	Field Id:	CS-1		CS-2		CS-3		CS-4		CS-5		CS-6	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	01.04.2021 00:00		01.04.2021 00:00		01.04.2021 00:00		01.04.2021 00:00		01.04.2021 00:00		01.04.2021 00:00	
BTEX by EPA 8021B	***Extracted:***	01.05.2021 17:30		01.05.2021 17:30		01.05.2021 17:30		01.05.2021 17:30		01.05.2021 17:30		01.05.2021 17:30	
	Analyzed:	01.06.2021 00:23		01.06.2021 00:46		01.06.2021 01:08		01.06.2021 01:30		01.06.2021 01:53		01.06.2021 02:15	
	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	<0.00198	0.00198	<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201
Toluene		<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201
Ethylbenzene		<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201
m,p-Xylenes		<0.00401	0.00401	<0.00399	0.00399	<0.00396	0.00396	<0.00397	0.00397	<0.00399	0.00399	<0.00402	0.00402
o-Xylene		<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201
Total Xylenes		<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201
Total BTEX		<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00198	0.00198	<0.00200	0.00200	<0.00201	0.00201
Chloride by EPA 300	***Extracted:***	01.05.2021 17:00		01.05.2021 17:00		01.05.2021 17:00		01.05.2021 17:00		01.05.2021 17:00		01.05.2021 17:00	
	Analyzed:	01.05.2021 21:34		01.05.2021 21:39		01.05.2021 21:45		01.05.2021 22:03		01.05.2021 22:09		01.05.2021 22:15	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		421	9.90	401	9.96	434	9.92	450	10.1	368	9.96	340	9.96
TPH By SW8015 Mod	***Extracted:***	01.05.2021 18:00		01.05.2021 18:00		01.05.2021 18:00		01.05.2021 18:00		01.05.2021 18:00		01.05.2021 18:00	
	Analyzed:	01.05.2021 23:55		01.06.2021 00:15		01.06.2021 00:36		01.06.2021 00:56		01.06.2021 01:16		01.06.2021 02:57	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons		<50.2	50.2	<50.2	50.2	<49.8	49.8	<49.9	49.9	<50.0	50.0	<50.0	50.0
Diesel Range Organics		<50.2	50.2	<50.2	50.2	<49.8	49.8	<49.9	49.9	<50.0	50.0	<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)		<50.2	50.2	<50.2	50.2	<49.8	49.8	<49.9	49.9	<50.0	50.0	<50.0	50.0
Total TPH		<50.2	50.2	<50.2	50.2	<49.8	49.8	<49.9	49.9	<50.0	50.0	<50.0	50.0

BRL - Below Reporting Limit

Jessica Kramer

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

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Certificate of Analysis Summary 683484

COG Operating, LLC, Midland, TX

Project Name: Wild Cap State Com 7H

Project Id:

Contact: J Harris

Project Location: Lea, New Mexico

Date Received in Lab: Tue 01.05.2021 16:25

Report Date: 01.06.2021 12:05

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	683484-007		683484-008		683484-009		683484-010		683484-011		683484-012	
	Field Id:	CS-7		CS-8		CS-9		CS-10		CS-11		CS-12	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	01.04.2021 00:00		01.04.2021 00:00		01.04.2021 00:00		01.04.2021 00:00		01.04.2021 00:00		01.04.2021 00:00	
BTEX by EPA 8021B	***Extracted:***	01.05.2021 17:30		01.05.2021 17:30		01.05.2021 17:30		01.05.2021 17:30		01.05.2021 17:30		01.05.2021 17:30	
	Analyzed:	01.06.2021 02:38		01.06.2021 03:00		01.06.2021 03:22		01.06.2021 03:45		01.06.2021 05:03		01.06.2021 05:25	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199	<0.00198	0.00198
Toluene		<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199	<0.00198	0.00198
Ethylbenzene		<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199	<0.00198	0.00198
m,p-Xylenes		<0.00402	0.00402	<0.00401	0.00401	<0.00399	0.00399	<0.00397	0.00397	<0.00398	0.00398	<0.00397	0.00397
o-Xylene		<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199	<0.00198	0.00198
Total Xylenes		<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199	<0.00198	0.00198
Total BTEX		<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00198	0.00198	<0.00199	0.00199	<0.00198	0.00198
Chloride by EPA 300	***Extracted:***	01.05.2021 17:00		01.05.2021 17:00		01.05.2021 17:00		01.05.2021 17:00		01.05.2021 17:00		01.05.2021 17:00	
	Analyzed:	01.05.2021 22:21		01.05.2021 22:27		01.05.2021 22:33		01.05.2021 22:51		01.05.2021 22:57		01.05.2021 23:15	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		494	10.1	476	9.96	643	9.96	78.2	9.92	64.1	9.90	86.4	9.90
TPH By SW8015 Mod	***Extracted:***	01.05.2021 18:00		01.05.2021 18:00		01.05.2021 18:00		01.05.2021 18:00		01.05.2021 18:00		01.05.2021 18:00	
	Analyzed:	01.06.2021 03:58		01.06.2021 04:18		01.06.2021 04:39		01.06.2021 04:58		01.06.2021 05:18		01.06.2021 05:39	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons		<49.9	49.9	<49.8	49.8	<49.8	49.8	<49.9	49.9	<50.0	50.0	<49.9	49.9
Diesel Range Organics		<49.9	49.9	<49.8	49.8	<49.8	49.8	<49.9	49.9	<50.0	50.0	<49.9	49.9
Motor Oil Range Hydrocarbons (MRO)		<49.9	49.9	<49.8	49.8	<49.8	49.8	<49.9	49.9	<50.0	50.0	<49.9	49.9
Total TPH		<49.9	49.9	<49.8	49.8	<49.8	49.8	<49.9	49.9	<50.0	50.0	<49.9	49.9

BRL - Below Reporting Limit

Jessica Kramer

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Certificate of Analysis Summary 683484

COG Operating, LLC, Midland, TX

Project Name: Wild Cap State Com 7H

Project Id:

Contact: J Harris

Project Location: Lea, New Mexico

Date Received in Lab: Tue 01.05.2021 16:25

Report Date: 01.06.2021 12:05

Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	683484-013		683484-014		683484-015		683484-016					
	Field Id:	SW-1		SW-2		SW-3		SW-4					
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	01.04.2021 00:00		01.04.2021 00:00		01.04.2021 00:00		01.04.2021 00:00					
BTEX by EPA 8021B	***Extracted:***	01.05.2021 17:30		01.05.2021 17:30		01.05.2021 17:30		01.05.2021 17:30					
	Analyzed:	01.06.2021 05:47		01.06.2021 06:10		01.06.2021 06:32		01.06.2021 06:55					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200				
Toluene		<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200				
Ethylbenzene		<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200				
m,p-Xylenes		<0.00402	0.00402	<0.00401	0.00401	<0.00397	0.00397	<0.00400	0.00400				
o-Xylene		<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200				
Total Xylenes		<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200				
Total BTEX		<0.00201	0.00201	<0.00200	0.00200	<0.00198	0.00198	<0.00200	0.00200				
Chloride by EPA 300	***Extracted:***	01.05.2021 17:00		01.05.2021 17:00		01.05.2021 17:00		01.05.2021 17:00					
	Analyzed:	01.05.2021 23:21		01.05.2021 23:27		01.05.2021 23:33		01.05.2021 23:39					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		64.1	9.98	142	9.98	322	10.1	302	9.98				
TPH By SW8015 Mod	***Extracted:***	01.05.2021 18:00		01.05.2021 18:00		01.05.2021 18:00		01.05.2021 18:00					
	Analyzed:	01.06.2021 05:59		01.06.2021 06:18		01.06.2021 06:39		01.06.2021 07:19					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons		<50.1	50.1	<49.8	49.8	<50.2	50.2	<49.9	49.9				
Diesel Range Organics		<50.1	50.1	<49.8	49.8	<50.2	50.2	<49.9	49.9				
Motor Oil Range Hydrocarbons (MRO)		<50.1	50.1	<49.8	49.8	<50.2	50.2	<49.9	49.9				
Total TPH		<50.1	50.1	<49.8	49.8	<50.2	50.2	<49.9	49.9				

BRL - Below Reporting Limit

Jessica Kramer

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

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Analytical Report 683484

for

COG Operating, LLC

Project Manager: J Harris

Wild Cap State Com 7H

01.06.2021

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

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01.06.2021

Project Manager: **J Harris**
COG Operating, LLC
600 W Illinois
Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **683484**
Wild Cap State Com 7H
Project Address: Lea, New Mexico

J Harris:

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) 683484. 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. 683484 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

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Sample Cross Reference 683484

COG Operating, LLC, Midland, TX

Wild Cap State Com 7H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
CS-1	S	01.04.2021 00:00		683484-001
CS-2	S	01.04.2021 00:00		683484-002
CS-3	S	01.04.2021 00:00		683484-003
CS-4	S	01.04.2021 00:00		683484-004
CS-5	S	01.04.2021 00:00		683484-005
CS-6	S	01.04.2021 00:00		683484-006
CS-7	S	01.04.2021 00:00		683484-007
CS-8	S	01.04.2021 00:00		683484-008
CS-9	S	01.04.2021 00:00		683484-009
CS-10	S	01.04.2021 00:00		683484-010
CS-11	S	01.04.2021 00:00		683484-011
CS-12	S	01.04.2021 00:00		683484-012
SW-1	S	01.04.2021 00:00		683484-013
SW-2	S	01.04.2021 00:00		683484-014
SW-3	S	01.04.2021 00:00		683484-015
SW-4	S	01.04.2021 00:00		683484-016

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CASE NARRATIVE

Client Name: COG Operating, LLC

Project Name: Wild Cap State Com 7H

Project ID:
Work Order Number(s): *683484*

Report Date: *01.06.2021*
Date Received: *01.05.2021*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

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Certificate of Analytical Results 683484

COG Operating, LLC, Midland, TX

Wild Cap State Com 7H

Sample Id:	**CS-1**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-001	Date Collected:	01.04.2021 00:00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:00	% Moisture:	
Seq Number:	3146835			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**421**	9.90	mg/kg	01.05.2021 21:34		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	CAC				
Analyst:	CAC	Date Prep:	01.05.2021 18:00	% Moisture:	
Seq Number:	3146827			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<50.2	50.2	mg/kg	01.05.2021 23:55	U	1
Diesel Range Organics	C10C28DRO	<50.2	50.2	mg/kg	01.05.2021 23:55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	01.05.2021 23:55	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	01.05.2021 23:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-135	01.05.2021 23:55	
o-Terphenyl	84-15-1	118	%	70-135	01.05.2021 23:55	

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Certificate of Analytical Results 683484

COG Operating, LLC, Midland, TX

Wild Cap State Com 7H

Sample Id:	**CS-1**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-001	Date Collected:	01.04.2021 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:30	% Moisture:	
Seq Number:	3146826			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.06.2021 00:23	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.06.2021 00:23	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.06.2021 00:23	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.06.2021 00:23	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.06.2021 00:23	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.06.2021 00:23	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.06.2021 00:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	86	%	70-130	01.06.2021 00:23	
1,4-Difluorobenzene	540-36-3	96	%	70-130	01.06.2021 00:23	

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Certificate of Analytical Results 683484

COG Operating, LLC, Midland, TX

Wild Cap State Com 7H

Sample Id:	**CS-2**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-002	Date Collected:	01.04.2021 00:00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:00	% Moisture:	
Seq Number:	3146835			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**401**	9.96	mg/kg	01.05.2021 21:39		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	CAC				
Analyst:	CAC	Date Prep:	01.05.2021 18:00	% Moisture:	
Seq Number:	3146827			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<50.2	50.2	mg/kg	01.06.2021 00:15	U	1
Diesel Range Organics	C10C28DRO	<50.2	50.2	mg/kg	01.06.2021 00:15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	01.06.2021 00:15	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	01.06.2021 00:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	01.06.2021 00:15	
o-Terphenyl	84-15-1	118	%	70-135	01.06.2021 00:15	

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Certificate of Analytical Results 683484

COG Operating, LLC, Midland, TX

Wild Cap State Com 7H

Sample Id:	**CS-2**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-002	Date Collected:	01.04.2021 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:30	% Moisture:	
Seq Number:	3146826			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.06.2021 00:46	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.06.2021 00:46	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.06.2021 00:46	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.06.2021 00:46	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.06.2021 00:46	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.06.2021 00:46	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.06.2021 00:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	93	%	70-130	01.06.2021 00:46	
1,4-Difluorobenzene	540-36-3	99	%	70-130	01.06.2021 00:46	

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Certificate of Analytical Results 683484

COG Operating, LLC, Midland, TX

Wild Cap State Com 7H

Sample Id:	**CS-3**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-003	Date Collected:	01.04.2021 00:00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:00	% Moisture:	
Seq Number:	3146835			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**434**	9.92	mg/kg	01.05.2021 21:45		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	CAC				
Analyst:	CAC	Date Prep:	01.05.2021 18:00	% Moisture:	
Seq Number:	3146827			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<49.8	49.8	mg/kg	01.06.2021 00:36	U	1
Diesel Range Organics	C10C28DRO	<49.8	49.8	mg/kg	01.06.2021 00:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.06.2021 00:36	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.06.2021 00:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	01.06.2021 00:36	
o-Terphenyl	84-15-1	98	%	70-135	01.06.2021 00:36	

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Certificate of Analytical Results 683484

COG Operating, LLC, Midland, TX

Wild Cap State Com 7H

Sample Id:	**CS-3**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-003	Date Collected:	01.04.2021 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:30	% Moisture:	
Seq Number:	3146826			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.06.2021 01:08	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.06.2021 01:08	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.06.2021 01:08	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	01.06.2021 01:08	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.06.2021 01:08	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.06.2021 01:08	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.06.2021 01:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	70-130	01.06.2021 01:08	
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.06.2021 01:08	

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Sample Id:	**CS-4**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-004	Date Collected:	01.04.2021 00:00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:00	% Moisture:	
Seq Number:	3146835			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**450**	10.1	mg/kg	01.05.2021 22:03		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	CAC				
Analyst:	CAC	Date Prep:	01.05.2021 18:00	% Moisture:	
Seq Number:	3146827			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<49.9	49.9	mg/kg	01.06.2021 00:56	U	1
Diesel Range Organics	C10C28DRO	<49.9	49.9	mg/kg	01.06.2021 00:56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.06.2021 00:56	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.06.2021 00:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	01.06.2021 00:56	
o-Terphenyl	84-15-1	116	%	70-135	01.06.2021 00:56	

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Sample Id:	**CS-4**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-004	Date Collected:	01.04.2021 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:30	% Moisture:	
Seq Number:	3146826			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.06.2021 01:30	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.06.2021 01:30	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.06.2021 01:30	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.06.2021 01:30	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.06.2021 01:30	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.06.2021 01:30	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.06.2021 01:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	93	%	70-130	01.06.2021 01:30	
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.06.2021 01:30	

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Sample Id:	**CS-5**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-005	Date Collected:	01.04.2021 00:00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:00	% Moisture:	
Seq Number:	3146835			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**368**	9.96	mg/kg	01.05.2021 22:09		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	CAC				
Analyst:	CAC	Date Prep:	01.05.2021 18:00	% Moisture:	
Seq Number:	3146827			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<50.0	50.0	mg/kg	01.06.2021 01:16	U	1
Diesel Range Organics	C10C28DRO	<50.0	50.0	mg/kg	01.06.2021 01:16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.06.2021 01:16	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.06.2021 01:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	01.06.2021 01:16	
o-Terphenyl	84-15-1	104	%	70-135	01.06.2021 01:16	

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Sample Id:	**CS-5**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-005	Date Collected:	01.04.2021 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:30	% Moisture:	
Seq Number:	3146826			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.06.2021 01:53	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.06.2021 01:53	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.06.2021 01:53	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.06.2021 01:53	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.06.2021 01:53	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.06.2021 01:53	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.06.2021 01:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	89	%	70-130	01.06.2021 01:53	
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.06.2021 01:53	

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Sample Id:	**CS-6**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-006	Date Collected:	01.04.2021 00:00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:00	% Moisture:	
Seq Number:	3146835			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**340**	9.96	mg/kg	01.05.2021 22:15		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	CAC				
Analyst:	CAC	Date Prep:	01.05.2021 18:00	% Moisture:	
Seq Number:	3146829			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<50.0	50.0	mg/kg	01.06.2021 02:57	U	1
Diesel Range Organics	C10C28DRO	<50.0	50.0	mg/kg	01.06.2021 02:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.06.2021 02:57	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.06.2021 02:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	01.06.2021 02:57	
o-Terphenyl	84-15-1	106	%	70-135	01.06.2021 02:57	

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Sample Id:	**CS-6**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-006	Date Collected:	01.04.2021 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:30	% Moisture:	
Seq Number:	3146826			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.06.2021 02:15	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.06.2021 02:15	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.06.2021 02:15	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.06.2021 02:15	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.06.2021 02:15	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.06.2021 02:15	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.06.2021 02:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	90	%	70-130	01.06.2021 02:15	
1,4-Difluorobenzene	540-36-3	99	%	70-130	01.06.2021 02:15	

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Sample Id:	**CS-7**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-007	Date Collected:	01.04.2021 00:00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:00	% Moisture:	
Seq Number:	3146835			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**494**	10.1	mg/kg	01.05.2021 22:21		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	CAC				
Analyst:	CAC	Date Prep:	01.05.2021 18:00	% Moisture:	
Seq Number:	3146829			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<49.9	49.9	mg/kg	01.06.2021 03:58	U	1
Diesel Range Organics	C10C28DRO	<49.9	49.9	mg/kg	01.06.2021 03:58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.06.2021 03:58	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.06.2021 03:58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	01.06.2021 03:58	
o-Terphenyl	84-15-1	106	%	70-135	01.06.2021 03:58	

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Sample Id:	**CS-7**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-007	Date Collected:	01.04.2021 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:30	% Moisture:	
Seq Number:	3146826			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.06.2021 02:38	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.06.2021 02:38	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.06.2021 02:38	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.06.2021 02:38	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.06.2021 02:38	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.06.2021 02:38	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.06.2021 02:38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.06.2021 02:38	
4-Bromofluorobenzene	460-00-4	92	%	70-130	01.06.2021 02:38	

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Sample Id:	**CS-8**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-008	Date Collected:	01.04.2021 00:00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:00	% Moisture:	
Seq Number:	3146835			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**476**	9.96	mg/kg	01.05.2021 22:27		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	CAC				
Analyst:	CAC	Date Prep:	01.05.2021 18:00	% Moisture:	
Seq Number:	3146829			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<49.8	49.8	mg/kg	01.06.2021 04:18	U	1
Diesel Range Organics	C10C28DRO	<49.8	49.8	mg/kg	01.06.2021 04:18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.06.2021 04:18	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.06.2021 04:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	01.06.2021 04:18	
o-Terphenyl	84-15-1	112	%	70-135	01.06.2021 04:18	

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Sample Id:	**CS-8**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-008	Date Collected:	01.04.2021 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:30	% Moisture:	
Seq Number:	3146826			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.06.2021 03:00	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.06.2021 03:00	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.06.2021 03:00	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.06.2021 03:00	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.06.2021 03:00	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.06.2021 03:00	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.06.2021 03:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.06.2021 03:00	
4-Bromofluorobenzene	460-00-4	93	%	70-130	01.06.2021 03:00	

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Sample Id:	**CS-9**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-009	Date Collected:	01.04.2021 00:00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:00	% Moisture:	
Seq Number:	3146835			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**643**	9.96	mg/kg	01.05.2021 22:33		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	CAC				
Analyst:	CAC	Date Prep:	01.05.2021 18:00	% Moisture:	
Seq Number:	3146829			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<49.8	49.8	mg/kg	01.06.2021 04:39	U	1
Diesel Range Organics	C10C28DRO	<49.8	49.8	mg/kg	01.06.2021 04:39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.06.2021 04:39	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.06.2021 04:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	01.06.2021 04:39	
o-Terphenyl	84-15-1	102	%	70-135	01.06.2021 04:39	

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Sample Id:	**CS-9**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-009	Date Collected:	01.04.2021 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:30	% Moisture:	
Seq Number:	3146826			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.06.2021 03:22	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.06.2021 03:22	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.06.2021 03:22	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.06.2021 03:22	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.06.2021 03:22	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.06.2021 03:22	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.06.2021 03:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	70-130	01.06.2021 03:22	
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.06.2021 03:22	

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Sample Id:	**CS-10**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-010	Date Collected:	01.04.2021 00:00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:00	% Moisture:	
Seq Number:	3146835			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**78.2**	9.92	mg/kg	01.05.2021 22:51		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	CAC				
Analyst:	CAC	Date Prep:	01.05.2021 18:00	% Moisture:	
Seq Number:	3146829			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<49.9	49.9	mg/kg	01.06.2021 04:58	U	1
Diesel Range Organics	C10C28DRO	<49.9	49.9	mg/kg	01.06.2021 04:58	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.06.2021 04:58	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.06.2021 04:58	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	01.06.2021 04:58	
o-Terphenyl	84-15-1	112	%	70-135	01.06.2021 04:58	

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Sample Id:	**CS-10**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-010	Date Collected:	01.04.2021 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:30	% Moisture:	
Seq Number:	3146826			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.06.2021 03:45	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.06.2021 03:45	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.06.2021 03:45	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.06.2021 03:45	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.06.2021 03:45	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.06.2021 03:45	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.06.2021 03:45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	70-130	01.06.2021 03:45	
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.06.2021 03:45	

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COG Operating, LLC, Midland, TX

Wild Cap State Com 7H

Sample Id:	**CS-11**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-011	Date Collected:	01.04.2021 00:00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:00	% Moisture:	
Seq Number:	3146835			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**64.1**	9.90	mg/kg	01.05.2021 22:57		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	CAC				
Analyst:	CAC	Date Prep:	01.05.2021 18:00	% Moisture:	
Seq Number:	3146829			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<50.0	50.0	mg/kg	01.06.2021 05:18	U	1
Diesel Range Organics	C10C28DRO	<50.0	50.0	mg/kg	01.06.2021 05:18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	01.06.2021 05:18	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	01.06.2021 05:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	01.06.2021 05:18	
o-Terphenyl	84-15-1	116	%	70-135	01.06.2021 05:18	

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COG Operating, LLC, Midland, TX

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Sample Id:	**CS-11**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-011	Date Collected:	01.04.2021 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:30	% Moisture:	
Seq Number:	3146826			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.06.2021 05:03	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.06.2021 05:03	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.06.2021 05:03	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.06.2021 05:03	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.06.2021 05:03	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.06.2021 05:03	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.06.2021 05:03	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	70-130	01.06.2021 05:03	
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.06.2021 05:03	

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COG Operating, LLC, Midland, TX

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Sample Id:	**CS-12**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-012	Date Collected:	01.04.2021 00:00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:00	% Moisture:	
Seq Number:	3146835			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**86.4**	9.90	mg/kg	01.05.2021 23:15		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	CAC				
Analyst:	CAC	Date Prep:	01.05.2021 18:00	% Moisture:	
Seq Number:	3146829			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<49.9	49.9	mg/kg	01.06.2021 05:39	U	1
Diesel Range Organics	C10C28DRO	<49.9	49.9	mg/kg	01.06.2021 05:39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.06.2021 05:39	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.06.2021 05:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	01.06.2021 05:39	
o-Terphenyl	84-15-1	102	%	70-135	01.06.2021 05:39	

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Sample Id:	**CS-12**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-012	Date Collected:	01.04.2021 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:30	% Moisture:	
Seq Number:	3146826			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.06.2021 05:25	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.06.2021 05:25	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.06.2021 05:25	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.06.2021 05:25	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.06.2021 05:25	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.06.2021 05:25	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.06.2021 05:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.06.2021 05:25	
4-Bromofluorobenzene	460-00-4	92	%	70-130	01.06.2021 05:25	

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COG Operating, LLC, Midland, TX

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Sample Id:	**SW-1**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-013	Date Collected:	01.04.2021 00:00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:00	% Moisture:	
Seq Number:	3146835			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**64.1**	9.98	mg/kg	01.05.2021 23:21		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	CAC				
Analyst:	CAC	Date Prep:	01.05.2021 18:00	% Moisture:	
Seq Number:	3146829			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<50.1	50.1	mg/kg	01.06.2021 05:59	U	1
Diesel Range Organics	C10C28DRO	<50.1	50.1	mg/kg	01.06.2021 05:59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	01.06.2021 05:59	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	01.06.2021 05:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	01.06.2021 05:59	
o-Terphenyl	84-15-1	116	%	70-135	01.06.2021 05:59	

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Sample Id:	**SW-1**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-013	Date Collected:	01.04.2021 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:30	% Moisture:	
Seq Number:	3146826			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.06.2021 05:47	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.06.2021 05:47	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.06.2021 05:47	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.06.2021 05:47	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.06.2021 05:47	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.06.2021 05:47	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.06.2021 05:47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	93	%	70-130	01.06.2021 05:47	
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.06.2021 05:47	

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Sample Id:	**SW-2**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-014	Date Collected:	01.04.2021 00:00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:00	% Moisture:	
Seq Number:	3146835			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**142**	9.98	mg/kg	01.05.2021 23:27		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	CAC				
Analyst:	CAC	Date Prep:	01.05.2021 18:00	% Moisture:	
Seq Number:	3146829			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<49.8	49.8	mg/kg	01.06.2021 06:18	U	1
Diesel Range Organics	C10C28DRO	<49.8	49.8	mg/kg	01.06.2021 06:18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	01.06.2021 06:18	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	01.06.2021 06:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	01.06.2021 06:18	
o-Terphenyl	84-15-1	120	%	70-135	01.06.2021 06:18	

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Sample Id:	**SW-2**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-014	Date Collected:	01.04.2021 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:30	% Moisture:	
Seq Number:	3146826			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.06.2021 06:10	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.06.2021 06:10	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.06.2021 06:10	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.06.2021 06:10	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.06.2021 06:10	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.06.2021 06:10	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.06.2021 06:10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.06.2021 06:10	
4-Bromofluorobenzene	460-00-4	92	%	70-130	01.06.2021 06:10	

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Sample Id:	**SW-3**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-015	Date Collected:	01.04.2021 00:00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:00	% Moisture:	
Seq Number:	3146835			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**322**	10.1	mg/kg	01.05.2021 23:33		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	CAC				
Analyst:	CAC	Date Prep:	01.05.2021 18:00	% Moisture:	
Seq Number:	3146829			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<50.2	50.2	mg/kg	01.06.2021 06:39	U	1
Diesel Range Organics	C10C28DRO	<50.2	50.2	mg/kg	01.06.2021 06:39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	01.06.2021 06:39	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	01.06.2021 06:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-135	01.06.2021 06:39	
o-Terphenyl	84-15-1	106	%	70-135	01.06.2021 06:39	

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Sample Id:	**SW-3**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-015	Date Collected:	01.04.2021 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:30	% Moisture:	
Seq Number:	3146826			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.06.2021 06:32	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	01.06.2021 06:32	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.06.2021 06:32	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.06.2021 06:32	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.06.2021 06:32	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.06.2021 06:32	U	1
Total BTEX		<0.00198	0.00198	mg/kg	01.06.2021 06:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.06.2021 06:32	
4-Bromofluorobenzene	460-00-4	91	%	70-130	01.06.2021 06:32	

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Sample Id:	**SW-4**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-016	Date Collected:	01.04.2021 00:00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:00	% Moisture:	
Seq Number:	3146835			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**302**	9.98	mg/kg	01.05.2021 23:39		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	CAC				
Analyst:	CAC	Date Prep:	01.05.2021 18:00	% Moisture:	
Seq Number:	3146829			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<49.9	49.9	mg/kg	01.06.2021 07:19	U	1
Diesel Range Organics	C10C28DRO	<49.9	49.9	mg/kg	01.06.2021 07:19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	01.06.2021 07:19	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	01.06.2021 07:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	01.06.2021 07:19	
o-Terphenyl	84-15-1	112	%	70-135	01.06.2021 07:19	

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COG Operating, LLC, Midland, TX

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Sample Id:	**SW-4**	Matrix:	Soil	Date Received:	01.05.2021 16:25
Lab Sample Id:	683484-016	Date Collected:	01.04.2021 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.05.2021 17:30	% Moisture:	
Seq Number:	3146826			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.06.2021 06:55	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.06.2021 06:55	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.06.2021 06:55	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.06.2021 06:55	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.06.2021 06:55	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.06.2021 06:55	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.06.2021 06:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	94	%	70-130	01.06.2021 06:55	
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.06.2021 06:55	

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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 683484

COG Operating, LLC

Wild Cap State Com 7H

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3146835 — Matrix: Solid — Date Prep: 01.05.2021
MB Sample Id: 7718501-1-BLK — LCS Sample Id: 7718501-1-BKS — LCSD Sample Id: 7718501-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	256	102	257	103	90-110	0	20	mg/kg	01.05.2021 20:58	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3146835 — Matrix: Soil — Date Prep: 01.05.2021
Parent Sample Id: 683463-012 — MS Sample Id: 683463-012 S — MSD Sample Id: 683463-012 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	55.3	200	262	103	264	104	90-110	1	20	mg/kg	01.05.2021 21:16	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3146835 — Matrix: Soil — Date Prep: 01.05.2021
Parent Sample Id: 683484-009 — MS Sample Id: 683484-009 S — MSD Sample Id: 683484-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	643	202	851	103	852	104	90-110	0	20	mg/kg	01.05.2021 22:39	

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3146827 — Matrix: Solid — Date Prep: 01.05.2021
MB Sample Id: 7718503-1-BLK — LCS Sample Id: 7718503-1-BKS — LCSD Sample Id: 7718503-1-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	943	94	1080	108	70-135	14	35	mg/kg	01.05.2021 17:13	
Diesel Range Organics	<50.0	1000	993	99	1090	109	70-135	9	35	mg/kg	01.05.2021 17:13	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	92		109		118		70-135	%	01.05.2021 17:13
o-Terphenyl	82		113		118		70-135	%	01.05.2021 17:13

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3146829 — Matrix: Solid — Date Prep: 01.05.2021
MB Sample Id: 7718505-1-BLK — LCS Sample Id: 7718505-1-BKS — LCSD Sample Id: 7718505-1-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	969	97	1050	105	70-135	8	35	mg/kg	01.06.2021 02:17	
Diesel Range Organics	<50.0	1000	986	99	1090	109	70-135	10	35	mg/kg	01.06.2021 02:17	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	95		100		100		70-135	%	01.06.2021 02:17
o-Terphenyl	97		103		97		70-135	%	01.06.2021 02:17

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 683484

COG Operating, LLC

Wild Cap State Com 7H

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3146827 — Matrix: Solid — Date Prep: 01.05.2021
MB Sample Id: 7718503-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.05.2021 16:53	

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3146829 — Matrix: Solid — Date Prep: 01.05.2021
MB Sample Id: 7718505-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.06.2021 01:57	

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3146827 — Matrix: Soil — Date Prep: 01.05.2021
Parent Sample Id: 683349-001 — MS Sample Id: 683349-001 S — MSD Sample Id: 683349-001 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	52.2	1000	1030	98	988	94	70-135	4	35	mg/kg	01.05.2021 18:13	
Diesel Range Organics	574	1000	1540	97	1650	108	70-135	7	35	mg/kg	01.05.2021 18:13	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	106		104		70-135	%	01.05.2021 18:13
o-Terphenyl	107		103		70-135	%	01.05.2021 18:13

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3146829 — Matrix: Soil — Date Prep: 01.05.2021
Parent Sample Id: 683484-006 — MS Sample Id: 683484-006 S — MSD Sample Id: 683484-006 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	<50.3	1010	1120	111	1100	109	70-135	2	35	mg/kg	01.06.2021 03:18	
Diesel Range Organics	<50.3	1010	1110	110	1120	111	70-135	1	35	mg/kg	01.06.2021 03:18	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	116		105		70-135	%	01.06.2021 03:18
o-Terphenyl	110		104		70-135	%	01.06.2021 03:18

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 683484

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COG Operating, LLC

Wild Cap State Com 7H

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A

Seq Number: 3146826 Matrix: Solid Date Prep: 01.05.2021

MB Sample Id: 7718509-1-BLK LCS Sample Id: 7718509-1-BKS LCSD Sample Id: 7718509-1-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	0.0987	99	0.108	108	70-130	9	35	mg/kg	01.05.2021 22:21	
Toluene	<0.00200	0.100	0.0942	94	0.104	104	70-130	10	35	mg/kg	01.05.2021 22:21	
Ethylbenzene	<0.00200	0.100	0.0863	86	0.0950	95	71-129	10	35	mg/kg	01.05.2021 22:21	
m,p-Xylenes	<0.00400	0.200	0.176	88	0.194	97	70-135	10	35	mg/kg	01.05.2021 22:21	
o-Xylene	<0.00200	0.100	0.0875	88	0.0966	97	71-133	10	35	mg/kg	01.05.2021 22:21	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		94		95		70-130	%	01.05.2021 22:21
4-Bromofluorobenzene	87		85		86		70-130	%	01.05.2021 22:21

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A

Seq Number: 3146826 Matrix: Soil Date Prep: 01.05.2021

Parent Sample Id: 683484-001 MS Sample Id: 683484-001 S MSD Sample Id: 683484-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.101	0.0999	99	0.107	107	70-130	7	35	mg/kg	01.05.2021 23:06	
Toluene	<0.00201	0.101	0.0985	98	0.103	103	70-130	4	35	mg/kg	01.05.2021 23:06	
Ethylbenzene	<0.00201	0.101	0.0911	90	0.0958	96	71-129	5	35	mg/kg	01.05.2021 23:06	
m,p-Xylenes	<0.00402	0.201	0.186	93	0.195	98	70-135	5	35	mg/kg	01.05.2021 23:06	
o-Xylene	<0.00201	0.101	0.0926	92	0.0970	97	71-133	5	35	mg/kg	01.05.2021 23:06	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	94		96		70-130	%	01.05.2021 23:06
4-Bromofluorobenzene	89		88		70-130	%	01.05.2021 23:06

MS/MSD Percent Recovery	[D] = 100*(C-A) / B	LCS = Laboratory Control Sample	MS = Matrix Spike
Relative Percent Difference	RPD = 200* | (C-E) / (C+E) |	A = Parent Result	B = Spike Added
LCS/LCSD Recovery	[D] = 100 * (C) / [B]	C = MS/LCS Result	D = MSD/LCSD % Rec
Log Difference	Log Diff. = Log(Sample Duplicate) - Log(Original Sample)	E = MSD/LCSD Result	

683484

Analysis Request of Chain of Custody Record

Page 1 of 2

CONCHO

One Concho Center/600/Illinois Avenue/Midland, Texas

Tel (432) 683-7443

Client Name: COG	Site Manager: Jacqui Harris
Project Name: Wild Cap State Com 7H	
Project Location: (County, state) Lea, NM	Project #:
Invoice to: Jacqui Harris	
Receiving Laboratory:	Sampler Name: Jacqui Harris/Robert Grubbs
Comments:	

ANALYSIS REQUEST

(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO_3	PRESERVATIVE METHOD: ICE	# CONTAINERS	(C)omposite/(G)rab	TPH 8015M (GRO - DRO - MRO)	BTEX 8021B	Chloride
	CS-1	1/4/2021			X			X			X	X	X
	CS-2	1/4/2021			X			X			X	X	X
	CS-3	1/4/2021			X			X			X	X	X
	CS-4	1/4/2021			X			X			X	X	X
	CS-5	1/4/2021			X			X			X	X	X
	CS-6	1/4/2021			X			X			X	X	X
	CS-7	1/4/2021			X			X			X	X	X
	CS-8	1/4/2021			X			X			X	X	X
	CS-9	1/4/2021			X			X			X	X	X
	CS-10	1/4/2021			X			X			X	X	X

Relinquished by: Jacqui Harris	Date: 1/5/21	Time: 16:25	Received by: Clay Crafton
Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time:	Received by:

Received by: Clay Crafton Date: 1.5.21 Time: 1625

LAB USE ONLY

Sample Temperature 5.8/5.6

REMARKS:

- ☐ RUSH: Same Day 24 hr (48 hr) 72 hr
- ☐ Rush Charges Authorized
- ☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

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Analysis Request of Chain of Custody Record

Page 2 of 2

CONCHO

One Concho
Center/600/Illinois
Avenue/Midland, Texas

Tel (432) 683-7443

Client Name: COG	**Site Manager:** Jacqui Harris
Project Name: Wild Cap State Com 7H	
Project Location: (county, state) Eddy, NM	**Project #:**
Invoice to: Jacqui Harris	
Receiving Laboratory:	**Sampler Name:** Jacqui Harris
Comments:	

ANALYSIS REQUEST

(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO_3	PRESERVATIVE METHOD: ICE	# CONTAINERS	(C)omposite/(G)rab	TPH 8015M (GRO - DRO - MRO)	BTEX 8021B	Chloride	Hold
	CS-11	1/4/2021			X			X			X	X	X	
	CS-12	1/4/2021			X			X			X	X	X	
	SW-1	1/4/2021			X			X			X	X	X	
	SW-2	1/4/2021			X			X			X	X	X	
	SW-3	1/4/2021			X			X			X	X	X	
	SW-4	1/4/2021			X			X			X	X	X	

Relinquished by: Jacqui Harris	Date: 1/5/21	Time: 16:25	Received by: Cloe Cuttle
Relinquished by:	Date:	Time:	Received by:
Relinquished by:	Date:	Time:	Received by:

Received by: Cloe Cuttle Date: 1-5-21 Time: 1625

LAB USE ONLY

Sample Temperature 5.8/5.6

REMARKS:

- ☐ RUSH: Same Day 24 hr (48 hr) 72 hr
- ☐ Rush Charges Authorized
- ☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

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Certificate of Analysis Summary 684718

COG Operating LLC, Artesia, NM

Project Name: Wild Cap State Com 7H

Project Id:

Contact: Ike Tavarez

Project Location: Eddy County, New Mexico

Date Received in Lab: Thu 01.14.2021 14:25

Report Date: 01.15.2021 14:37

Project Manager: Jessica Kramer

Analysis Requested								
	Lab Id:	684718-001						
	Field Id:	CS-9						
	Depth:							
	Matrix:	SOIL						
	Sampled:	01.14.2021 00:00						
BTEX by EPA 8021B	***Extracted:***	01.14.2021 17:02						
	Analyzed:	01.15.2021 01:44						
	Units/RL:	mg/kg	RL					
Benzene		<0.00200	0.00200					
Toluene		<0.00200	0.00200					
Ethylbenzene		<0.00200	0.00200					
m,p-Xylenes		<0.00401	0.00401					
o-Xylene		<0.00200	0.00200					
Total Xylenes		<0.00200	0.00200					
Total BTEX		<0.00200	0.00200					
Chloride by EPA 300	***Extracted:***	01.15.2021 08:59						
	Analyzed:	01.15.2021 11:22						
	Units/RL:	mg/kg	RL					
Chloride		35.3	10.0					
TPH By SW8015 Mod	***Extracted:***	01.14.2021 18:00						
	Analyzed:	01.14.2021 20:19						
	Units/RL:	mg/kg	RL					
Gasoline Range Hydrocarbons		<50.2	50.2					
Diesel Range Organics		<50.2	50.2					
Motor Oil Range Hydrocarbons (MRO)		<50.2	50.2					
Total TPH		<50.2	50.2					

BRL - Below Reporting Limit

Jessica Kramer

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

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Analytical Report 684718

for

COG Operating LLC

Project Manager: Ike Tavarez

Wild Cap State Com 7H

01.15.2021

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

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01.15.2021

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

Reference: Eurofins Xenco, LLC Report No(s): **684718**
Wild Cap State Com 7H
Project Address: Eddy County, New Mexico

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) 684718. 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. 684718 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 684718

COG Operating LLC, Artesia, NM

Wild Cap State Com 7H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
CS-9	S	01.14.2021 00:00		684718-001

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CASE NARRATIVE

Client Name: COG Operating LLC

Project Name: Wild Cap State Com 7H

Project ID:
Work Order Number(s): *684718*

Report Date: *01.15.2021*
Date Received: *01.14.2021*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

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Certificate of Analytical Results 684718

COG Operating LLC, Artesia, NM

Wild Cap State Com 7H

Sample Id:	**CS-9**	Matrix:	Soil	Date Received:	01.14.2021 14:25
Lab Sample Id:	684718-001	Date Collected:	01.14.2021 00:00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.15.2021 08:59	% Moisture:	
Seq Number:	3147928			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**35.3**	10.0	mg/kg	01.15.2021 11:22		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	MAB				
Analyst:	CAC	Date Prep:	01.14.2021 18:00	% Moisture:	
Seq Number:	3147933			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<50.2	50.2	mg/kg	01.14.2021 20:19	U	1
Diesel Range Organics	C10C28DRO	<50.2	50.2	mg/kg	01.14.2021 20:19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	01.14.2021 20:19	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	01.14.2021 20:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	01.14.2021 20:19	
o-Terphenyl	84-15-1	107	%	70-135	01.14.2021 20:19	

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Certificate of Analytical Results 684718

COG Operating LLC, Artesia, NM

Wild Cap State Com 7H

Sample Id:	**CS-9**	Matrix:	Soil	Date Received:	01.14.2021 14:25
Lab Sample Id:	684718-001	Date Collected:	01.14.2021 00:00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	01.14.2021 17:02	% Moisture:	
Seq Number:	3147919			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.15.2021 01:44	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.15.2021 01:44	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.15.2021 01:44	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.15.2021 01:44	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.15.2021 01:44	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.15.2021 01:44	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.15.2021 01:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	91	%	70-130	01.15.2021 01:44	
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.15.2021 01:44	

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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 684718

COG Operating LLC

Wild Cap State Com 7H

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3147928 — Matrix: Solid — Date Prep: 01.15.2021
MB Sample Id: 7719205-1-BLK — LCS Sample Id: 7719205-1-BKS — LCSD Sample Id: 7719205-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	200	215	108	205	103	90-110	5	20	mg/kg	01.15.2021 08:14	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3147928 — Matrix: Soil — Date Prep: 01.15.2021
Parent Sample Id: 684657-001 — MS Sample Id: 684657-001 S — MSD Sample Id: 684657-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	98.7	202	306	103	304	102	90-110	1	20	mg/kg	01.15.2021 09:51	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3147928 — Matrix: Soil — Date Prep: 01.15.2021
Parent Sample Id: 684707-004 — MS Sample Id: 684707-004 S — MSD Sample Id: 684707-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	339	198	537	100	549	107	90-110	2	20	mg/kg	01.15.2021 11:11	

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3147933 — Matrix: Solid — Date Prep: 01.14.2021
MB Sample Id: 7719263-1-BLK — LCS Sample Id: 7719263-1-BKS — LCSD Sample Id: 7719263-1-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	1080	108	1170	117	70-135	8	35	mg/kg	01.14.2021 19:39	
Diesel Range Organics	<50.0	1000	1080	108	1020	102	70-135	6	35	mg/kg	01.14.2021 19:39	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	118		112		97		70-135	%	01.14.2021 19:39
o-Terphenyl	111		110		88		70-135	%	01.14.2021 19:39

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3147933 — Matrix: Solid — Date Prep: 01.14.2021
MB Sample Id: 7719263-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.14.2021 19:19	

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 684718

COG Operating LLC

Wild Cap State Com 7H

Analytical Method: **TPH By SW8015 Mod** Prep Method: SW8015P
Seq Number: 3147933 Matrix: Soil Date Prep: 01.14.2021
Parent Sample Id: 684718-001 MS Sample Id: 684718-001 S MSD Sample Id: 684718-001 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	<50.0	999	1150	115	1070	107	70-135	7	35	mg/kg	01.14.2021 20:39	
Diesel Range Organics	<50.0	999	1020	102	1140	114	70-135	11	35	mg/kg	01.14.2021 20:39	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	99		115		70-135	%	01.14.2021 20:39
o-Terphenyl	109		119		70-135	%	01.14.2021 20:39

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3147919 Matrix: Solid Date Prep: 01.14.2021
MB Sample Id: 7719206-1-BLK LCS Sample Id: 7719206-1-BKS LCSD Sample Id: 7719206-1-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	0.103	103	0.102	102	70-130	1	35	mg/kg	01.14.2021 16:03	
Toluene	<0.00200	0.100	0.0980	98	0.0989	99	70-130	1	35	mg/kg	01.14.2021 16:03	
Ethylbenzene	<0.00200	0.100	0.0911	91	0.0920	92	71-129	1	35	mg/kg	01.14.2021 16:03	
m,p-Xylenes	<0.00400	0.200	0.185	93	0.187	94	70-135	1	35	mg/kg	01.14.2021 16:03	
o-Xylene	<0.00200	0.100	0.0919	92	0.0918	92	71-133	0	35	mg/kg	01.14.2021 16:03	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		95		96		70-130	%	01.14.2021 16:03
4-Bromofluorobenzene	89		87		88		70-130	%	01.14.2021 16:03

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3147919 Matrix: Soil Date Prep: 01.14.2021
Parent Sample Id: 684594-001 MS Sample Id: 684594-001 S MSD Sample Id: 684594-001 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	0.117	117	0.0964	96	70-130	19	35	mg/kg	01.14.2021 16:48	
Toluene	<0.00200	0.100	0.113	113	0.0919	92	70-130	21	35	mg/kg	01.14.2021 16:48	
Ethylbenzene	<0.00200	0.100	0.104	104	0.0841	84	71-129	21	35	mg/kg	01.14.2021 16:48	
m,p-Xylenes	<0.00401	0.200	0.211	106	0.171	86	70-135	21	35	mg/kg	01.14.2021 16:48	
o-Xylene	<0.00200	0.100	0.103	103	0.0825	83	71-133	22	35	mg/kg	01.14.2021 16:48	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	95		96		70-130	%	01.14.2021 16:48
4-Bromofluorobenzene	90		89		70-130	%	01.14.2021 16:48

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

684718

Analysis Request of Chain of Custody Record

Page _____ of _____

CONCHO

One Concho
Center/600/Illinois
Avenue/Midland, Texas

Tel (432) 683-7443

Client Name: COG	Site Manager: Jacqui Harris
Project Name: Wild Cap State Com 7H	
Project Location: (county, state) Eddy, NM	Project #:
Invoice to: Jacqui Harris	
Receiving Laboratory:	Sampler Name: Jacqui Harris
Comments:	

ANALYSIS REQUEST

(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING DATE	SAMPLING TIME	MATRIX: WATER	MATRIX: SOIL	MATRIX:	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO_3	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD:	PRESERVATIVE METHOD:	# CONTAINERS	(C)omposite/(G)rab	TPH 8015M (GRO - DRO - MRO)	BTEX 8021B	Chloride	Hold
	CS9	1/14/2021			X				X					X	X	X	

Relinquished by:	Date:	Time:	Received by: Date: Time:
[signature]	1/14/21	14:25	[signature] 1.14.21 1425
Relinquished by:	Date:	Time:	Received by: Date: Time:
Relinquished by:	Date:	Time:	Received by: Date: Time:

LAB USE ONLY

Sample Temperature 6.0/5.8

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

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

Action 16421

CONDITIONS OF APPROVAL

Operator:			OGRID:	Action Number:	Action Type:
COG OPERATING LLC	600 W Illinois Ave	Midland, TX79701	229137	16421	C-141

OCD Reviewer	Condition
ceads	None