



[Sheldon L. Hitchcock]
[HSE Coordinator]

March 13, 2019

Bradford Billings
Oil Conservation Division
1220 S. St Francis Dr. #3
Santa Fe, NM 87505

Crystal Weaver
Bureau of Land Management, CFO
620 E. Green Street
Carlsbad, NM 88220

**Re: Closure Letter
Monet Federal Com #003H
API #: 30-025-42763
RP#: 1RP-5128
Unit Letter C, Section 04, Township 25S, Range 33E
Lea County, NM**

Mr. Billings/Ms. Weaver,

COG Operating, LLC (COG) is pleased to submit for your consideration the following closure report for the Monet Federal Com #003H. This release occurred on December 6, 2017. Following the release an assessment of impacted soils was conducted. A remediation work plan was submitted to and subsequently approved by the New Mexico Oil Conservation Division (NMOCD) and the Bureau of Land Management. A copy of the approved work plan is attached in Appendix V.

BACKGROUND

The Monet Federal Com #003H release is located in Unit Letter C, Section 04, Township 25 South, and Range 33 East in Lea County, New Mexico. More specifically the latitude and longitude for this release are 32.16674599 North and -103.5793769 West.

On December 6, 2017, paraffin was plugging the supply gas little-joe regulator resulting in the flare fire and release of approximately one hundred eighty-eight (188) barrels (bbls) of oil. The fluid was contained in the firewall around the flare and all one hundred eighty-eight (188) bbls burned.

Remediation activities were conducted in accordance with the approved work plan and NMOCD/BLM stipulations. The analytical results from the NMOCD stipulated confirmation soil sampling activities are summarized in the table below. A site diagram of the excavated area is presented in Appendix I.

March 13, 2019

GROUNDWATER AND SITE RANKING

According to the United States Geological Survey (USGS) groundwater in the project vicinity is approximately ninety-four (94) feet below ground surface (BGS) (Appendix II). No water well or surface water was observed within one-thousand (1,000) feet of the release site. Therefore the site ranking for this release is ten (10) based on the following:

Depth to groundwater 50-100'
 Distance to surface water body >1000'
 Wellhead Protection Area >1000'

Confirmation Sample Results

Sample ID	Sample Depth (ft)	Sample Date	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total			
NMOCD RRAL Limits (mg/kg)					-	-	-	1,000	10	50	600
SP-1 E. SW	N/A	9/19/2018	X		<10.0	13.5	<10.0	13.5	<0.050	<0.300	16.0
SP-2 NE. SW	N/A	9/19/2018	X		<10.0	<10.0	<10.0	0.0	<0.050	<0.300	96.0
SP-3 N. SW	N/A	9/19/2018	X		<10.0	<10.0	<10.0	0.0	<0.050	<0.300	32.0
SP-4 NW. SW	N/A	9/19/2018	X		<10.0	<10.0	<10.0	0.0	<0.050	<0.300	32.0
SP-5 NW. SW	N/A	9/19/2018	X		<10.0	35.0	11.0	46.0	<0.050	<0.300	160.0
SP-6 SW. SW	N/A	9/19/2018	X		<10.0	28.0	<10.0	28.0	<0.050	<0.300	144.0
SP-7 S. SW	N/A	9/19/2018	X		<10.0	<10.0	<10.0	0.0	<0.050	<0.300	48.0
SP-8 BTM S.	4	9/19/2018	X		<10.0	14.9	<10.0	14.9	<0.050	<0.300	64.0
SP-9 BTM N.	4	9/19/2018	X		<10.0	<10.0	<10.0	0.0	<0.050	<0.300	64.0
SP-10 BTM N.	0.5	9/19/2018		X	<10.0	154.0	72.6	226.6	<0.050	<0.300	800.0
SP-11 E. SW	N/A	9/19/2018	X		<10.0	<10.0	<10.0	0.0	<0.050	<0.300	240.0
SP-12 N. SW	N/A	9/19/2018		X	<10.0	26.1	<10.0	26.1	<0.050	<0.300	1,040.0
SP-13 W. SW	N/A	9/19/2018		X	<10.0	<10.0	<10.0	0.0	<0.050	<0.300	1,490.0
SP-14 W. SW	N/A	9/19/2018	X		<10.0	56.5	16.0	72.5	<0.050	<0.300	96.0
SP-15 S. SW	N/A	9/19/2018	X		<10.0	<10.0	<10.0	0.0	<0.050	<0.300	64.0
SP-16 E. SW	N/A	9/19/2018	X		<10.0	91.1	42.8	133.9	<0.050	<0.300	320.0
SP-17 BTM S.	1	9/19/2018	X		<10.0	46.8	13.8	60.6	<0.050	<0.300	128.0
SP-10 BTM N.	1	9/27/2018	X		<10.0	<10.0	<10.0	0.0	<0.050	<0.300	32.0
SP-12 N. SW	N/A	9/27/2018	X		<10.0	<10.0	<10.0	0.0	<0.050	<0.300	48.0
SP-13 W. SW	N/A	9/27/2018		X	<10.0	<10.0	<10.0	0.0	<0.050	<0.300	5,760.0
SP-13 W. SW	N/A	10/3/2018	X		<10.0	<10.0	<10.0	0.0	<0.050	<0.300	96.0

March 13, 2019

REMEDIAL ACTIONS

- The impacted areas in the vicinity of sample locations T-1 and T-3 were excavated to a depth of one (1) foot BGS.
- The impacted area in the vicinity of sample location T-2 was excavated to the depth of four (4) feet BGS.
- All of the excavated material was hauled to an NMOCD approved solid waste disposal facility.
- Upon receipt of analytical results confirming that all impacted soil above NMOCD RRAL's was successfully removed the excavation was backfill with clean "like" material and contoured to match the surrounding terrain.
- The affected area in the pasture will be seeded with BLM #2 seed mixture once proper seasonal conditions exist.

March 13, 2019

CLOSURE REQUEST

COG Operating, LLC respectfully requests that the New Mexico Oil Conservation Division and the Bureau of Land Management grant closure approval for the Monet Federal Com #003H incident that occurred on December 6, 2017.

Should you have any questions or concerns please do not hesitate to contact me.

Sincerely,



Sheldon L. Hitchcock
HSE Coordinator
slhitchcock@concho.com

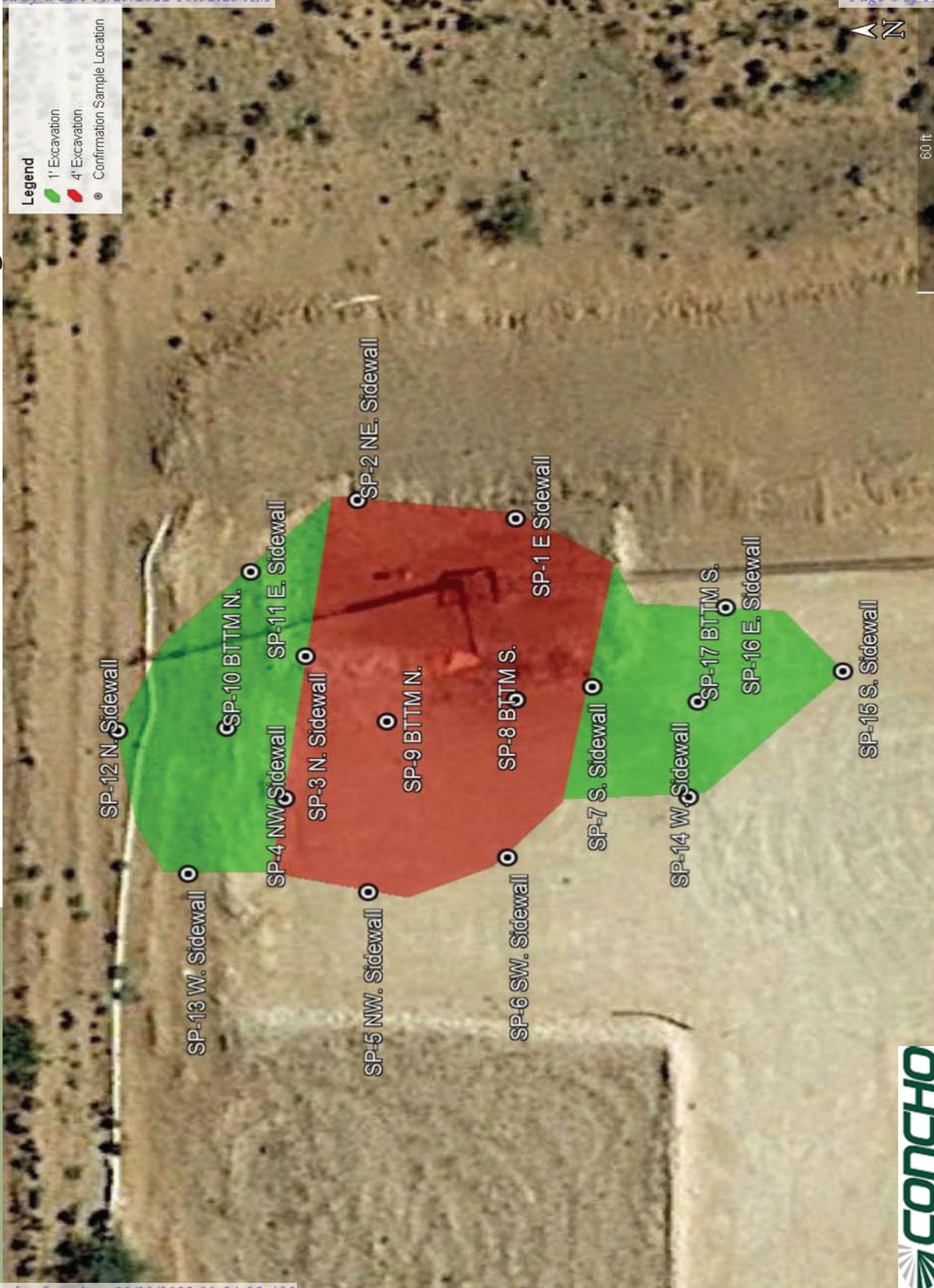
Enclosed:

- Appendix I: Site Diagram
- Appendix II: Groundwater Data
- Appendix III: Initial C-141 (Copy)
- Appendix IV: Final C-141
- Appendix V: Approved Work Plan (Copy)
- Appendix VI: Analytical Reports and Chain-of-Custody Forms
- Appendix VII: Photographic Documentation

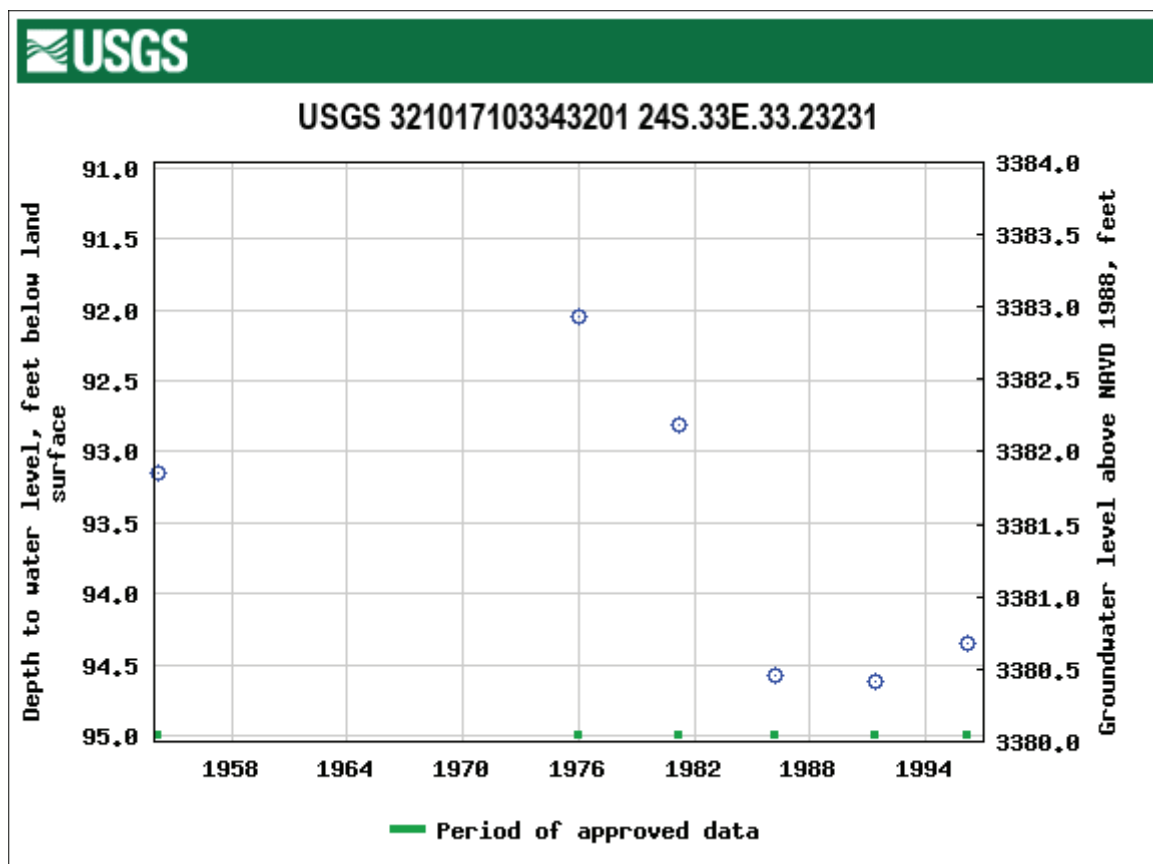
APPENDIX I

Monet Federal Com #003H

December 6, 2017



APPENDIX II



APPENDIX III

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-141
Revised April 3, 2017
Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC

Release Notification and Corrective Action

Initial only

OPERATOR

☒ Initial Report ☒ Final Report

Name of Company: COG Operating LLC OGRID # 229137	Contact: Robert McNeill
Address: 600 West Illinois Avenue, Midland TX 79701	Telephone No. 432-683-7443
Facility Name: Monet Federal Com #003H Tank Battery	Facility Type: Tank Battery
Surface Owner: Federal	Mineral Owner: Federal
API No. 30-025-42763	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
C	04	25S	33E	190	North	1980	West	Lea

Latitude 32.16674599 Longitude -103.5793769

NATURE OF RELEASE

Type of Release: Oil (Fire)	Volume of Release: EST. 188 bbls Oil	Volume Recovered: 0 bbls
Source of Release: Flare	Date and Hour of Occurrence: December 6, 2017 8:00 am	Date and Hour of Discovery: December 6, 2017 8:00 am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Ms. Yu NMOCD / Ms. Tucker BLM	
By Whom? Becky Haskell	Date and Hour: December 6, 2017 1:23 PM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*



Describe Cause of Problem and Remedial Action Taken.*

The release/fire was caused by paraffin plugging the supply gas little joe regulator which caused the vessels to lose supply pressure to the dumps, sending fluid to the flare. The little joe regulator will be replaced and the lines cleared of paraffin.

Describe Area Affected and Cleanup Action Taken.*

The release/fire was contained in the firewall around the flare and all fluids burned. Concho will have the spill area evaluated for any possible impact from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation work.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Dakota Neel	Approved by Environmental Specialist: 	
Title: HSE Coordinator	Approval Date: 12/18/2017	Expiration Date:
E-mail Address: dneel2@concho.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: December 14, 2017 Phone: 575-748-2010		

* Attach Additional Sheets If Necessary

nOY1735238080

APPENDIX IV

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	COG Operating, LLC	OGRID	229137
Contact Name	Jennifer Knowlton	Contact Telephone	(432) 683-7443
Contact email	jknowlton@concho.com	Incident # (assigned by OCD)	
Contact mailing address	600 West Illinois Avenue, Midland, Texas 79701		

Location of Release Source

Latitude 32.16674599 Longitude -103.5793769
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Monet Federal Com #003H	Site Type	Battery
Date Release Discovered	December 6, 2017	API# (if applicable)	30-025-42763

Unit Letter	Section	Township	Range	County
C	4	25S	33E	Lea

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)

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 188	Volume Recovered (bbls) 0
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

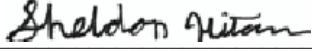
Paraffin plugged the gas supply to the little-joe regulator resulting in fluid being sent out of the flare.

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? Greater than 25bbls
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes-From: Becky Haskell To: Oliva Yu and Shelly Tucker -Via: email	

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> 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: Sheldon L. Hitchcock	Title: HSE Coordinator
Signature: 	Date: 3/13/2019
email: slhitchcock@concho.com	Telephone: 575-746-2010
<u>OCD Only</u> Received by: _____ Date: _____	

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: Sheldon L. Hitchcock

Title: HSE Coordinator

Signature: Sheldon Hitchcock

Date: 3/13/2019

email: slhitchcock@concho.com

Telephone: 575-746-2010

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: Brittany Hall

Date: 11/23/2022

Printed Name: Brittany Hall

Title: Environmental Specialist

APPENDIX V



APPROVED

By Olivia Yu at 4:02 pm, Jul 19, 2018

NMOCD approves of the delineation completed for 1RP-5128. See email correspondence for proposed remediation.

June 22, 2018

Olivia Yu
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division, District 1
1625 N. French Drive
Hobbs, New Mexico 88210

Shelly Tucker
U.S Department of the Interior
Bureau of Land Management
620 E. Greene Street
Carlsbad, NM 88220
Stucker@blm.gov

Re: Soil Investigation Summary and Proposed Remediation Workplan
Monet Federal Com #003H Tank Battery (NOY#: 1735238080)
GPS: N 32.16674599° W 103.5793769°
Unit Letter "C", Section 04, Township 25 South, Range 33 East, NMPM
Lea County, New Mexico

Dear Ms. Yu and Ms. Tucker,

2M Environmental Services, LLC. (2M), on behalf of Concho Operating, LLC. (Concho), has prepared this Soil Investigation Summary and Proposed Remediation Workplan (Workplan) for the Monet Federal Com #003H Tank Battery Release (Release Site). The purpose of this Workplan is to propose remediation activities designed to advance the Monet Federal Com #003H Tank Battery Release Site toward a New Mexico Oil and Conservation District (NMOCD) approved Site Closure Status. The legal description of the Release Site is Unit Letter "C", Section 04, Township 25 South, Range 33 East, in Lea County, New Mexico. The subject property is administered by the New Mexico U.S. Department of the Interior Bureau of Land Management (BLM). The GPS coordinates for the site are N 32.16674599° W 103.5793769°. A Site Location Map and Site Details and Soil Sample Location Map are provided as Figure 1 and Figure 2, respectively. Release Site photographs are attached to this Workplan.

On December 6, 2017, a crude oil release and fire occurred at the Monet Federal Com #003H Tank Battery. The release and fire were the result of paraffin buildup plugging the little joe regulator which caused the vessels to lose supply pressure to the dump valves, sending oil to the flare. On December 6, 2017, Concho verbally reported the release to the NMOCD District 1 Office located in Hobbs, New Mexico and the release was assigned the internal incident number 1735238080. A Release Notification and Corrective Action Form (Form C-141) was subsequently submitted to the NMOCD on December 14, 2017. The release was reported as approximately one hundred eighty-eight (188) barrels of crude oil released with approximately zero (0) barrels of crude oil recovered, resulting in a net loss of approximately one hundred eighty-eight (188) barrels of crude oil. A copy of the NMOCD Release Notification and Corrective Action Form C-141 is attached to this Workplan.

A groundwater database maintained by The New Mexico Office of the State Engineer (NMOSE) did not identify the average depth to groundwater information in Section 4, Township 25 South, Range 33 East. A reference map utilized by the New Mexico Oil Conservation Division (NMOCD) Artesia District Office indicates groundwater should be encountered at approximately one hundred (100) feet below ground surface (bgs). Based on the NMOCD site classification system, twenty (0) points will be assigned to the subject area ranking as a result of this criterion. No water wells were observed within one-thousand feet of the Release Site. Based on the NMOCD site classification system, zero (0) points will be assigned to the subject area ranking as a result of this criterion. No surface water was observed within one thousand (1,000) feet of the release. Based on the NMOCD site classification system, zero (0) points will be assigned to the subject area ranking as a result of this criterion.

Based on the NMOCD Site Classification criteria, the Release Site remediation levels are 10 mg/Kg for benzene, 50 mg/Kg for benzene, toluene, ethylbenzene and xylenes (BTEX) and 5,000 mg/Kg for total petroleum hydrocarbons (TPH). Chloride remediation levels for the Release Site will be 600 mg/Kg, per NMOCD request.

On January 25, 2018, Concho representatives utilized a hand auger and a backhoe to collect thirteen (13) delineation soil samples (T1 0' through T1 4', T2 0' through T2 3', and T3 0' through T3 3') from the stained surface soil. The soil samples were submitted to Xenco Laboratories in Midland, Texas for determination of concentrations of BTEX using Method SW 846-8021B, TPH using Method SW 846-8015M, and chloride using Method E-300.1. Laboratory analytical results indicated additional delineation was needed in the area represented by sample point T2. Sample results are provided as an attachment (Table 1- Concentrations of Benzene, BTEX, TPH and Chloride in Soil).

On March 6, 2018, 2M representatives, on behalf of Concho, utilized a trackhoe to collect three (3) delineation soil samples (T2 @ 4', T2 @ 5' and T2 @ 6') from the area represented by sample point T2. The soil samples were submitted to Xenco Laboratories in Midland, Texas for determination of concentrations of BTEX using Method SW 846-8021B, TPH using Method SW 846-8015M, and chloride using Method E-300.1. Sample results are provided as an attachment (Table 1- Concentrations of Benzene, BTEX, TPH and Chloride in Soil).

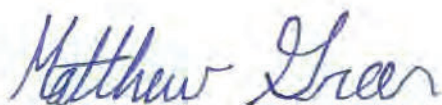
Based on the analytical results of the soil samples collected on January 25, 2018 and March 6, 2018, respectively, Concho proposes the following field activities designed to remediate the Monet Federal Com #003H Tank Battery:

- Utilizing a backhoe and/or trackhoe, surface staining, if applicable, will be aesthetically address in the area represented by sample points T1 and T3.
- The area represented by sample point T2 will be excavated to a depth of approximately four (4) feet bgs. Excavated soil will be stockpiled on a plastic liner adjacent to the excavation disposal.
- Collect an appropriate number of confirmation side wall samples every 40 feet to horizontally delineate the release. Soil samples will be submitted to the laboratory for determination of concentrations of BTEX, TPH, and chloride.
- On receipt of analytical results, Concho will backfill the excavation will be backfilled with locally purchased, non-impacted "like" soil or caliche. In addition, impacted soil will be transported under manifest to a NMOCD approved disposal facility.
- Prepare and submit a "Remediation Summary and Site Closure Request" to the NMOCD and BLM.

Concho is prepared to begin the activities outlined in this Proposed Remediation Workplan on NMOCD and BLM approval.

If you have any questions, or if additional information is required, please feel free to call me at 432-614-6793 (office) or 432-230-3763 (cell).

Thank you,

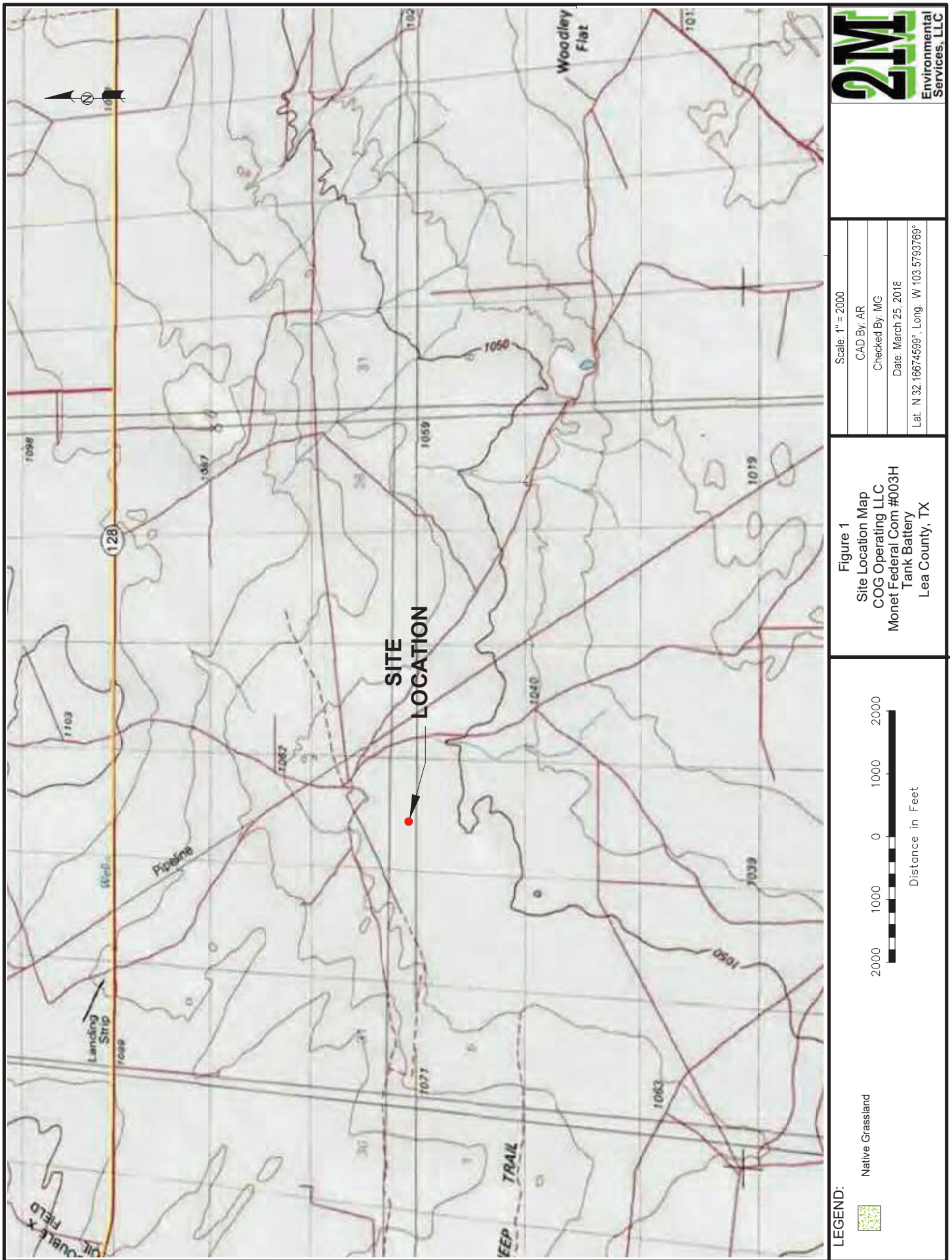


Matthew Green, P.G.
President
2M Environmental Services, LLC.

Attachments:

Figure 1 - Site Location Map
Figure 2 - Site Details and Soil Sample Location Map
Table 1 - Concentrations of Benzene, BTEX, TPH and Chloride in Soil
Laboratory Analytical Results
Release Notification and Corrective Action (Form C-141)

cc: File



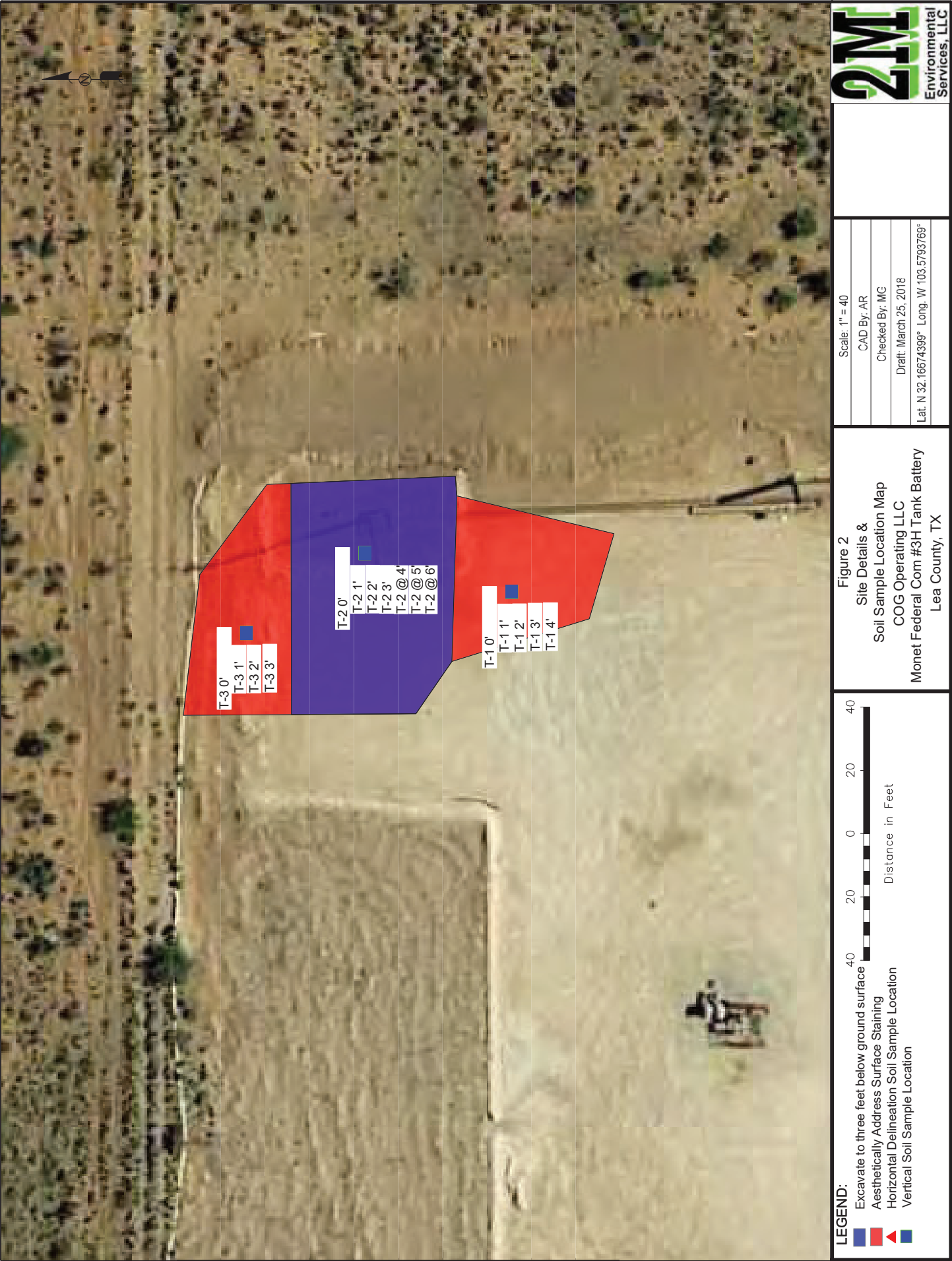


TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH AND CHLORIDE IN SOIL

CONCHO OPERATING, LLC

MONET FEDERAL COM 003H TANK BATTERY RELEASE SITE
LEA COUNTY, NEW MEXICO

All concentrations are reported in mg/Kg

SAMPLE LOCATION	SAMPLE DATE	METHODS: SW 846-8021B					METHOD: SW 8015M					E 300.1 CHLORIDE		
		BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o - XYLENE	TOTAL XYLENES	TOTAL BTEX	TPH GRO C ₆ -C ₁₂	TPH DRO C ₁₂ -C ₂₈	TPH ORO C ₂₈ -C ₃₅		TOTAL TPH C ₆ -C ₃₅	
Limits		10 mg/Kg						50 mg/Kg				5,000 mg/Kg	600	
	T1 0'	1/25/2018	<0.00200	0.00573	<0.00200	<0.00399	<0.00200	<0.00399	0.00573	19.0	1,330	253	1,602.0	59.1
	T1 1'	1/25/2018	<0.00199	<0.00199	<0.00199	<0.00398	<0.00199	<0.00398	<0.00398	<15.0	62.6	<15.0	62.6	18.0
	T1 2'	1/25/2018	<0.00200	<0.00200	<0.00200	<0.00401	<0.00200	<0.00401	<0.00401	<15.0	20.4	<15.0	20.4	<4.95
	T1 3'	1/25/2018	<0.00201	<0.00201	<0.00201	<0.00402	<0.00201	<0.00402	<0.00402	<15.0	20.6	<15.0	20.6	<4.94
	T1 4'	1/25/2018	<0.00202	<0.00202	<0.00202	<0.00404	<0.00202	<0.00404	<0.00404	<15.0	24.1	<15.0	24.1	<4.96
T2 0'	1/25/2018	11.8	156	53.9	182	68.3	250.3	472.0	4,440	18,800	4,510	27,800	18.7	
T2 1'	1/25/2018	0.358	493	126	483	196	679	1,298,358	2,530	4,190	738	7,458	26.4	
T2 2'	1/25/2018	0.351	26.8	0.403	91.0	35.9	126.9	154,454	1,820	3,180	495	5,495	26.8	
T2 3'	1/25/2018	0.0596	15.3	0.0728	53.5	24.2	77.7	93,132	792	2,730	571	4,093	38.6	
Resample 3-6-18														
T2 @ 4'	3/6/2018	<0.00200	<0.00200	<0.00200	0.00762	0.0128	0.02042	0.02042	26.8	402	25.3	454.1	8.32	
T2 @ 5'	3/6/2018	<0.00201	<0.00201	<0.00201	<0.00402	<0.00201	<0.00402	<0.00402	<15.0	46.7	<15.0	46.7	<4.92	
T2 @ 6'	3/6/2018	<0.00202	<0.00202	<0.00202	<0.00404	<0.00202	<0.00404	<0.00404	<15.0	84.1	<15.0	84.1	42.0	
T3 0'	1/25/2018	0.00272	0.0163	0.00268	0.00742	0.00292	0.01034	0.03204	<14.9	2,570	475	3,045	456	
T3 1'	1/25/2018	<0.00198	0.00766	<0.00198	<0.00397	<0.00198	<0.00397	0.00766	<15.0	406	82.3	488.3	227	
T3 2'	1/25/2018	<0.00201	0.00817	<0.00201	0.00416	<0.00201	0.00416	0.01233	<15.0	37.5	<15.0	37.5	76.0	
T3 3'	1/25/2018	<0.00202	0.00228	<0.00202	<0.00404	<0.00202	<0.00404	0.00228	<15.0	134	25.7	159.7	72.7	



Certificate of Analysis Summary 574882

COG Operating LLC, Artesia, NM

Project Name: Monet Fedcom #3 H



Project Id: Dakota Neel
Contact: Lea County, NM
Project Location:

Date Received in Lab: Mon Jan-29-18 03:00 pm
Report Date: 05-FEB-18
Project Manager: Kelsey Brooks

Analysis Requested	Lab Id:	Field Id:	Depth:	Matrix:	Sampled:	574882-001	574882-002	574882-003	574882-004	574882-005	574882-006
	Extracted:	Field Id:	Depth:	Matrix:	Sampled:	T1	T1	T1	T1	T1	T2
	Analyzed:	Jan-31-18 07:15	Jan-30-18 10:00	Jan-30-18 15:43	Jan-25-18 10:30	0- ft	1- ft	2- ft	3- ft	4- ft	0- ft
	Units/RL:	mg/kg	mg/kg	mg/kg	mg/kg	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Jan-25-18 10:30	Jan-25-18 10:30	Jan-25-18 10:30	Jan-25-18 10:30	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
BTEX by EPA 8021B	Benzene	Jan-31-18 07:15	Jan-30-18 10:00	Jan-30-18 15:43	Jan-25-18 10:30	0- ft	1- ft	2- ft	3- ft	4- ft	0- ft
	Toluene	Jan-31-18 09:52	Jan-30-18 15:43	Jan-30-18 15:43	Jan-25-18 10:30	0- ft	1- ft	2- ft	3- ft	4- ft	0- ft
	Ethylbenzene	mg/kg	mg/kg	mg/kg	mg/kg	RL	RL	RL	RL	RL	RL
	m,p-Xylenes	<0.00200 0.00200	<0.00199 0.00199	<0.00199 0.00199	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	11.8 D 0.998
	o-Xylene	0.00573 0.00200	0.00199 0.00199	0.00199 0.00199	0.00199 0.00199	0.00573 0.00200	0.00199 0.00199	0.00200 0.00200	0.00201 0.00201	0.00202 0.00202	156 D 0.998
	Total Xylenes	<0.00200 0.00200	<0.00398 0.00398	<0.00398 0.00398	<0.00398 0.00398	<0.00399 0.00399	<0.00398 0.00398	<0.00401 0.00401	<0.00402 0.00402	<0.00404 0.00404	182 D 2.00
Chloride by EPA 300	Total BTEX	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202	68.3 D 0.998
	Chloride	0.00573 0.00200	0.00199 0.00199	0.00199 0.00199	0.00199 0.00199	0.00573 0.00200	0.00199 0.00199	0.00200 0.00200	0.00201 0.00201	0.00202 0.00202	250 0.998
	Extracted:	Jan-31-18 12:00	Jan-31-18 12:00	Jan-31-18 12:00	Jan-31-18 12:00	Jan-31-18 12:00	Jan-31-18 12:00	Jan-31-18 12:00	Jan-31-18 12:00	Jan-31-18 12:00	Jan-31-18 12:00
	Analyzed:	Jan-31-18 17:17	Jan-31-18 17:24	Jan-31-18 17:31	Jan-31-18 17:38	Jan-31-18 17:45	Jan-31-18 17:52	Jan-31-18 17:59	Jan-31-18 18:06	Jan-31-18 18:13	Jan-31-18 18:20
	Units/RL:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		59.1 4.98	18.0 4.99	<4.95 4.95	<4.94 4.94	<4.93 4.93	<4.92 4.92	<4.91 4.91	<4.90 4.90	<4.89 4.89	18.7 4.93
TPH By SW8015 Mod	Chloride	Jan-30-18 16:00	Jan-30-18 16:00	Jan-30-18 16:00	Jan-30-18 16:00	Jan-30-18 16:00	Jan-30-18 16:00	Jan-30-18 16:00	Jan-30-18 16:00	Jan-30-18 16:00	Jan-30-18 16:00
	Extracted:	Jan-31-18 00:52	Jan-31-18 01:13	Jan-31-18 02:18	Jan-31-18 02:39	Jan-31-18 03:01	Jan-31-18 03:23	Jan-31-18 03:45	Jan-31-18 04:07	Jan-31-18 04:29	Jan-31-18 04:51
	Analyzed:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	Units/RL:	19.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	4440 75.0
		1330 15.0	62.6 15.0	20.4 15.0	20.6 15.0	24.1 15.0	24.1 15.0	24.1 15.0	24.1 15.0	24.1 15.0	18800 75.0
		253 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0	4510 75.0
Total TPH		1600 15.0	62.6 15.0	20.4 15.0	20.6 15.0	24.1 15.0	24.1 15.0	24.1 15.0	24.1 15.0	24.1 15.0	27800 75.0

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Kelsey Brooks

Kelsey Brooks
Project Manager



Certificate of Analysis Summary 574882

COG Operating LLC, Artesia, NM

Project Name: Monet Fedcom #3 H



Project Id: Dakota Neel
Contact: Lea County, NM
Project Location:

Date Received in Lab: Mon Jan-29-18 03:00 pm
Report Date: 05-FEB-18
Project Manager: Kelsey Brooks

Analysis Requested	Lab Id:	574882-007	574882-008	574882-009	574882-010	574882-011	574882-012
	Field Id:	T2	T2	T2	T3	T3	T3
	Depth:	1- ft	2- ft	3- ft	0- ft	1- ft	2- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Jan-25-18 10:30	Jan-25-18 10:30	Jan-25-18 10:30	Jan-25-18 10:30	Jan-25-18 10:30	Jan-25-18 10:30
BTEX by EPA 8021B	Extracted:	Jan-31-18 07:15	Jan-31-18 07:15	Jan-31-18 07:15	Jan-31-18 07:15	Jan-31-18 07:15	Jan-31-18 07:15
	Analyzed:	Jan-31-18 12:05	Jan-31-18 15:33	Jan-31-18 11:46	Jan-31-18 11:27	Jan-31-18 15:14	Jan-31-18 10:49
	Units/RL:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	Benzene	0.358 0.00199	0.351 0.00202	0.0596 0.00202	0.00272 0.00200	<0.00198 0.00198	<0.00201 0.00201
	Toluene	493 D 2.50	26.8 D 0.497	15.3 D 0.501	0.0163 0.00200	0.00766 0.00198	0.00817 0.00201
Chloride by EPA 300	Ethylbenzene	126 D 2.50	0.403 0.00202	0.0728 0.00202	0.00268 0.00200	<0.00198 0.00198	<0.00201 0.00201
	m,p-Xylenes	483 D 5.00	91.0 D 0.994	53.5 D 1.00	0.00742 0.00399	<0.00397 0.00397	0.00416 0.00402
	o-Xylene	196 D 2.50	35.9 D 0.497	24.2 D 0.501	0.00292 0.00200	<0.00198 0.00198	<0.00201 0.00201
	Total Xylenes	679 2.50	127 0.497	77.7 0.501	0.0103 0.00200	<0.00198 0.00198	0.00416 0.00201
	Total BTEX	1300 0.00199	154 0.00202	93.1 0.00202	0.0320 0.00200	0.00766 0.00198	0.0123 0.00201
TPH By SW8015 Mod	Extracted:	Jan-31-18 12:00	Feb-01-18 09:00	Feb-01-18 09:00	Feb-01-18 09:00	Feb-01-18 09:00	Feb-01-18 09:00
	Analyzed:	Jan-31-18 17:59	Feb-01-18 11:25	Feb-01-18 11:32	Feb-01-18 11:53	Feb-01-18 12:00	Feb-01-18 12:21
	Units/RL:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	Chloride	26.4 4.97	26.8 5.00	38.6 5.00	456 4.99	227 4.97	76.0 4.94
	Gasoline Range Hydrocarbons (GRO)	Jan-30-18 16:00	Jan-30-18 16:00	Jan-30-18 16:00	Jan-30-18 16:00	Jan-30-18 16:00	Jan-30-18 16:00
Total TPH	Diesel Range Organics (DRO)	Jan-31-18 03:44	Jan-31-18 04:06	Jan-31-18 04:26	Jan-31-18 04:48	Jan-31-18 05:53	Jan-31-18 06:14
	Oil Range Hydrocarbons (ORO)	2530 15.0	1820 14.9	792 15.0	<14.9 14.9	<15.0 15.0	<15.0 15.0
	Total TPH	4190 15.0	3180 14.9	2730 15.0	2570 14.9	406 15.0	37.5 15.0
		738 15.0	495 14.9	571 15.0	475 14.9	82.3 15.0	<15.0 15.0
		7460 15.0	5500 14.9	4090 15.0	3050 14.9	488 15.0	37.5 15.0

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Kelsey Brooks

Kelsey Brooks
Project Manager



Certificate of Analysis Summary 574882
COG Operating LLC, Artesia, NM
Project Name: Monet Fedcom #3 H

Received by OCD: 11/23/2022 10:52:23 AM

Page 24 of 116

Project Id: Dakota Neel
Contact: Lea County, NM
Project Location:

Date Received in Lab: Mon Jan-29-18 03:00 pm
Report Date: 05-FEB-18
Project Manager: Kelsey Brooks

<i>Analysis Requested</i>		<i>Lab Id:</i>	574882-013					
BTEX by EPA 8021B	<i>Field Id:</i>	T3						
	<i>Depth:</i>	3- ft						
	<i>Matrix:</i>	SOIL						
	<i>Sampled:</i>	Jan-25-18 10:30						
	<i>Extracted:</i>	Jan-31-18 07:15						
	<i>Analyzed:</i>	Jan-31-18 11:08						
	<i>Units/RL:</i>	mg/kg RL						
Benzene		<0.00202	0.00202					
Toluene		0.00228	0.00202					
Ethylbenzene		<0.00202	0.00202					
m,p-Xylenes		<0.00404	0.00404					
o-Xylene		<0.00202	0.00202					
Total Xylenes		<0.00202	0.00202					
Total BTEX		0.00228	0.00202					
Chloride by EPA 300								
Chloride	<i>Extracted:</i>	Feb-01-18 09:00						
	<i>Analyzed:</i>	Feb-01-18 12:28						
	<i>Units/RL:</i>	mg/kg RL						
		72.7	4.97					
TPH By SW8015 Mod	<i>Extracted:</i>	Jan-30-18 16:00						
	<i>Analyzed:</i>	Jan-31-18 06:35						
	<i>Units/RL:</i>	mg/kg RL						
Gasoline Range Hydrocarbons (GRO)		<15.0	15.0					
Diesel Range Organics (DRO)		134	15.0					
Oil Range Hydrocarbons (ORO)		25.7	15.0					
Total TPH		160	15.0					

Kelsey Brooks
Project Manager

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Analytical Report 574882

for
COG Operating LLC

Project Manager: Dakota Neel

Monet Fedcom #3 H

05-FEB-18

Collected By: Client



1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-17-23), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab code: TX01468):

Texas (T104704295-17-15), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)

Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)

Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-17-13)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)

Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)



05-FEB-18

Project Manager: **Dakota Neel**

COG Operating LLC

2407 Pecos Avenue

Artesia, NM 88210

Reference: XENCO Report No(s): **574882**

Monet Fedcom #3 H

Project Address: Lea County, NM

Dakota Neel:

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 XENCO Report Number(s) 574882. 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 XENCO Laboratories. 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. 574882 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 XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads 'Kelsey Brooks'.

Kelsey Brooks

Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

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Sample Cross Reference 574882

COG Operating LLC, Artesia, NM

Monet Fedcom #3 H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
T1	S	01-25-18 10:30	0 ft	574882-001
T1	S	01-25-18 10:30	1 ft	574882-002
T1	S	01-25-18 10:30	2 ft	574882-003
T1	S	01-25-18 10:30	3 ft	574882-004
T1	S	01-25-18 10:30	4 ft	574882-005
T2	S	01-25-18 10:30	0 ft	574882-006
T2	S	01-25-18 10:30	1 ft	574882-007
T2	S	01-25-18 10:30	2 ft	574882-008
T2	S	01-25-18 10:30	3 ft	574882-009
T3	S	01-25-18 10:30	0 ft	574882-010
T3	S	01-25-18 10:30	1 ft	574882-011
T3	S	01-25-18 10:30	2 ft	574882-012
T3	S	01-25-18 10:30	3 ft	574882-013



CASE NARRATIVE

Client Name: COG Operating LLC

Project Name: Monet Fedcom #3 H

Project ID:

Work Order Number(s): 574882

Report Date: 05-FEB-18

Date Received: 01/29/2018

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3039636 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3039836 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3039856 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Surrogate 1,4-Difluorobenzene recovered below QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 574882-006.



Certificate of Analytical Results 574882



COG Operating LLC, Artesia, NM

Monet Fedcom #3 H

Sample Id: T1 Matrix: Soil Date Received: 01.29.18 15.00
 Lab Sample Id: 574882-001 Date Collected: 01.25.18 10.30 Sample Depth: 0 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: OJS % Moisture:
 Analyst: OJS Date Prep: 01.31.18 12.00 Basis: Wet Weight
 Seq Number: 3039855

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	59.1	4.98	mg/kg	01.31.18 17.17		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 01.30.18 16.00 Basis: Wet Weight
 Seq Number: 3039742

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	19.0	15.0	mg/kg	01.31.18 00.52		1
Diesel Range Organics (DRO)	C10C28DRO	1330	15.0	mg/kg	01.31.18 00.52		1
Oil Range Hydrocarbons (ORO)	PHCG2835	253	15.0	mg/kg	01.31.18 00.52		1
Total TPH	PHC635	1600	15.0	mg/kg	01.31.18 00.52		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	01.31.18 00.52	
o-Terphenyl	84-15-1	89	%	70-135	01.31.18 00.52	



Certificate of Analytical Results 574882

COG Operating LLC, Artesia, NM

Monet Fedcom #3 H

Sample Id: T1
Lab Sample Id: 574882-001

Matrix: Soil
Date Collected: 01.25.18 10.30

Date Received: 01.29.18 15.00
Sample Depth: 0 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 01.31.18 07.15

Basis: Wet Weight

Seq Number: 3039836

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.31.18 09.52	U	1
Toluene	108-88-3	0.00573	0.00200	mg/kg	01.31.18 09.52		1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.31.18 09.52	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.31.18 09.52	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.31.18 09.52	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.31.18 09.52	U	1
Total BTEX		0.00573	0.00200	mg/kg	01.31.18 09.52		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	90	%	80-120	01.31.18 09.52		
1,4-Difluorobenzene	540-36-3	83	%	80-120	01.31.18 09.52		



Certificate of Analytical Results 574882

COG Operating LLC, Artesia, NM

Monet Fedcom #3 H

Sample Id: T1 Matrix: Soil Date Received: 01.29.18 15.00
 Lab Sample Id: 574882-002 Date Collected: 01.25.18 10.30 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: OJS % Moisture:
 Analyst: OJS Date Prep: 01.31.18 12.00 Basis: Wet Weight
 Seq Number: 3039855

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	18.0	4.99	mg/kg	01.31.18 17.24		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 01.30.18 16.00 Basis: Wet Weight
 Seq Number: 3039742

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.31.18 01.13	U	1
Diesel Range Organics (DRO)	C10C28DRO	62.6	15.0	mg/kg	01.31.18 01.13		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.31.18 01.13	U	1
Total TPH	PHC635	62.6	15.0	mg/kg	01.31.18 01.13		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	01.31.18 01.13	
o-Terphenyl	84-15-1	95	%	70-135	01.31.18 01.13	



Certificate of Analytical Results 574882

COG Operating LLC, Artesia, NM

Monet Fedcom #3 H

Sample Id: T1
Lab Sample Id: 574882-002

Matrix: Soil
Date Collected: 01.25.18 10.30

Date Received: 01.29.18 15.00
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 01.30.18 10.00

Basis: Wet Weight

Seq Number: 3039636

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.30.18 15.43	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.30.18 15.43	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.30.18 15.43	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.30.18 15.43	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.30.18 15.43	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.30.18 15.43	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.30.18 15.43	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	85	%	80-120	01.30.18 15.43		
4-Bromofluorobenzene	460-00-4	93	%	80-120	01.30.18 15.43		



Certificate of Analytical Results 574882



COG Operating LLC, Artesia, NM

Monet Fedcom #3 H

Sample Id: T1 Matrix: Soil Date Received: 01.29.18 15.00
 Lab Sample Id: 574882-003 Date Collected: 01.25.18 10.30 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: OJS % Moisture:
 Analyst: OJS Date Prep: 01.31.18 12.00 Basis: Wet Weight
 Seq Number: 3039855

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.95	4.95	mg/kg	01.31.18 17.31	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 01.30.18 16.00 Basis: Wet Weight
 Seq Number: 3039742

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.31.18 02.18	U	1
Diesel Range Organics (DRO)	C10C28DRO	20.4	15.0	mg/kg	01.31.18 02.18		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.31.18 02.18	U	1
Total TPH	PHC635	20.4	15.0	mg/kg	01.31.18 02.18		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-135	01.31.18 02.18	
o-Terphenyl	84-15-1	106	%	70-135	01.31.18 02.18	



Certificate of Analytical Results 574882

COG Operating LLC, Artesia, NM

Monet Fedcom #3 H

Sample Id: T1
Lab Sample Id: 574882-003

Matrix: Soil
Date Collected: 01.25.18 10.30

Date Received: 01.29.18 15.00
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 01.31.18 07.15

Basis: Wet Weight

Seq Number: 3039836

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.31.18 10.11	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.31.18 10.11	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.31.18 10.11	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	01.31.18 10.11	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.31.18 10.11	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.31.18 10.11	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.31.18 10.11	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	98	%	80-120	01.31.18 10.11		
1,4-Difluorobenzene	540-36-3	86	%	80-120	01.31.18 10.11		



Certificate of Analytical Results 574882



COG Operating LLC, Artesia, NM

Monet Fedcom #3 H

Sample Id: T1 Matrix: Soil Date Received: 01.29.18 15.00
 Lab Sample Id: 574882-004 Date Collected: 01.25.18 10.30 Sample Depth: 3 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: OJS % Moisture:
 Analyst: OJS Date Prep: 01.31.18 12.00 Basis: Wet Weight
 Seq Number: 3039855

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.94	4.94	mg/kg	01.31.18 17.38	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 01.30.18 16.00 Basis: Wet Weight
 Seq Number: 3039742

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.31.18 02.39	U	1
Diesel Range Organics (DRO)	C10C28DRO	20.6	15.0	mg/kg	01.31.18 02.39		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.31.18 02.39	U	1
Total TPH	PHC635	20.6	15.0	mg/kg	01.31.18 02.39		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	01.31.18 02.39	
o-Terphenyl	84-15-1	93	%	70-135	01.31.18 02.39	



Certificate of Analytical Results 574882

COG Operating LLC, Artesia, NM

Monet Fedcom #3 H

Sample Id: T1
Lab Sample Id: 574882-004

Matrix: Soil
Date Collected: 01.25.18 10.30

Date Received: 01.29.18 15.00
Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 01.31.18 07.15

Basis: Wet Weight

Seq Number: 3039836

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.31.18 10.30	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.31.18 10.30	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.31.18 10.30	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.31.18 10.30	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.31.18 10.30	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.31.18 10.30	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.31.18 10.30	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	80-120	01.31.18 10.30		
1,4-Difluorobenzene	540-36-3	83	%	80-120	01.31.18 10.30		



Certificate of Analytical Results 574882

COG Operating LLC, Artesia, NM

Monet Fedcom #3 H

Sample Id: T1 Matrix: Soil Date Received: 01.29.18 15.00
 Lab Sample Id: 574882-005 Date Collected: 01.25.18 10.30 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: OJS % Moisture:
 Analyst: OJS Date Prep: 01.31.18 12.00 Basis: Wet Weight
 Seq Number: 3039855

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.96	4.96	mg/kg	01.31.18 17.45	U	1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 01.30.18 16.00 Basis: Wet Weight
 Seq Number: 3039742

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.31.18 03.01	U	1
Diesel Range Organics (DRO)	C10C28DRO	24.1	15.0	mg/kg	01.31.18 03.01		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.31.18 03.01	U	1
Total TPH	PHC635	24.1	15.0	mg/kg	01.31.18 03.01		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	01.31.18 03.01	
o-Terphenyl	84-15-1	93	%	70-135	01.31.18 03.01	



Certificate of Analytical Results 574882

COG Operating LLC, Artesia, NM

Monet Fedcom #3 H

Sample Id: T1
Lab Sample Id: 574882-005

Matrix: Soil
Date Collected: 01.25.18 10.30

Date Received: 01.29.18 15.00
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 01.31.18 07.15

Basis: Wet Weight

Seq Number: 3039836

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.31.18 14.55	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.31.18 14.55	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.31.18 14.55	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	01.31.18 14.55	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.31.18 14.55	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.31.18 14.55	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.31.18 14.55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	80-120	01.31.18 14.55		
1,4-Difluorobenzene	540-36-3	84	%	80-120	01.31.18 14.55		



Certificate of Analytical Results 574882



COG Operating LLC, Artesia, NM

Monet Fedcom #3 H

Sample Id: T2 Matrix: Soil Date Received: 01.29.18 15.00
 Lab Sample Id: 574882-006 Date Collected: 01.25.18 10.30 Sample Depth: 0 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: OJS % Moisture:
 Analyst: OJS Date Prep: 01.31.18 12.00 Basis: Wet Weight
 Seq Number: 3039855

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	18.7	4.93	mg/kg	01.31.18 17.52		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 01.30.18 16.00 Basis: Wet Weight
 Seq Number: 3039742

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	4440	75.0	mg/kg	01.31.18 03.23		5
Diesel Range Organics (DRO)	C10C28DRO	18800	75.0	mg/kg	01.31.18 03.23		5
Oil Range Hydrocarbons (ORO)	PHCG2835	4510	75.0	mg/kg	01.31.18 03.23		5
Total TPH	PHC635	27800	75.0	mg/kg	01.31.18 03.23		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	01.31.18 03.23	
o-Terphenyl	84-15-1	96	%	70-135	01.31.18 03.23	



Certificate of Analytical Results 574882

COG Operating LLC, Artesia, NM

Monet Fedcom #3 H

Sample Id: T2
Lab Sample Id: 574882-006

Matrix: Soil
Date Collected: 01.25.18 10.30

Date Received: 01.29.18 15.00
Sample Depth: 0 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 01.31.18 16.30

Basis: Wet Weight

Seq Number: 3039856

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	11.8	0.998	mg/kg	02.01.18 15.38	D	500
Toluene	108-88-3	156	0.998	mg/kg	02.01.18 15.38	D	500
Ethylbenzene	100-41-4	53.9	0.998	mg/kg	02.01.18 15.38	D	500
m,p-Xylenes	179601-23-1	182	2.00	mg/kg	02.01.18 15.38	D	500
o-Xylene	95-47-6	68.3	0.998	mg/kg	02.01.18 15.38	D	500
Total Xylenes	1330-20-7	250	0.998	mg/kg	02.01.18 15.38		500
Total BTEX		472	0.998	mg/kg	02.01.18 15.38		500
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	0	%	80-120	01.31.18 22.09	**	
4-Bromofluorobenzene	460-00-4	101	%	80-120	01.31.18 22.09		



Certificate of Analytical Results 574882

COG Operating LLC, Artesia, NM

Monet Fedcom #3 H

Sample Id: T2 Matrix: Soil Date Received: 01.29.18 15.00
 Lab Sample Id: 574882-007 Date Collected: 01.25.18 10.30 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: OJS % Moisture:
 Analyst: OJS Date Prep: 01.31.18 12.00 Basis: Wet Weight
 Seq Number: 3039855

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	26.4	4.97	mg/kg	01.31.18 17.59		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 01.30.18 16.00 Basis: Wet Weight
 Seq Number: 3039742

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	2530	15.0	mg/kg	01.31.18 03.44		1
Diesel Range Organics (DRO)	C10C28DRO	4190	15.0	mg/kg	01.31.18 03.44		1
Oil Range Hydrocarbons (ORO)	PHCG2835	738	15.0	mg/kg	01.31.18 03.44		1
Total TPH	PHC635	7460	15.0	mg/kg	01.31.18 03.44		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	01.31.18 03.44	
o-Terphenyl	84-15-1	83	%	70-135	01.31.18 03.44	



Certificate of Analytical Results 574882

COG Operating LLC, Artesia, NM

Monet Fedcom #3 H

Sample Id: T2
Lab Sample Id: 574882-007

Matrix: Soil
Date Collected: 01.25.18 10.30

Date Received: 01.29.18 15.00
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 01.31.18 07.15

Basis: Wet Weight

Seq Number: 3039836

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.358	0.00199	mg/kg	01.31.18 12.05		1
Toluene	108-88-3	493	2.50	mg/kg	01.31.18 17.03	D	250
Ethylbenzene	100-41-4	126	2.50	mg/kg	01.31.18 17.03	D	250
m,p-Xylenes	179601-23-1	483	5.00	mg/kg	01.31.18 17.03	D	250
o-Xylene	95-47-6	196	2.50	mg/kg	01.31.18 17.03	D	250
Total Xylenes	1330-20-7	679	2.50	mg/kg	01.31.18 17.03		250
Total BTEX		1300	0.00199	mg/kg	01.31.18 17.03		250
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	85		%	80-120	01.31.18 12.05	
4-Bromofluorobenzene	460-00-4	85		%	80-120	01.31.18 12.05	



Certificate of Analytical Results 574882

COG Operating LLC, Artesia, NM

Monet Fedcom #3 H

Sample Id: T2 Matrix: Soil Date Received: 01.29.18 15.00
 Lab Sample Id: 574882-008 Date Collected: 01.25.18 10.30 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: OJS % Moisture:
 Analyst: OJS Date Prep: 02.01.18 09.00 Basis: Wet Weight
 Seq Number: 3039878

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	26.8	5.00	mg/kg	02.01.18 11.25		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 01.30.18 16.00 Basis: Wet Weight
 Seq Number: 3039742

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	1820	14.9	mg/kg	01.31.18 04.06		1
Diesel Range Organics (DRO)	C10C28DRO	3180	14.9	mg/kg	01.31.18 04.06		1
Oil Range Hydrocarbons (ORO)	PHCG2835	495	14.9	mg/kg	01.31.18 04.06		1
Total TPH	PHC635	5500	14.9	mg/kg	01.31.18 04.06		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	01.31.18 04.06	
o-Terphenyl	84-15-1	77	%	70-135	01.31.18 04.06	



Certificate of Analytical Results 574882

COG Operating LLC, Artesia, NM

Monet Fedcom #3 H

Sample Id: T2
Lab Sample Id: 574882-008

Matrix: Soil
Date Collected: 01.25.18 10.30

Date Received: 01.29.18 15.00
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 01.31.18 07.15

Basis: Wet Weight

Seq Number: 3039856

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.351	0.00202	mg/kg	01.31.18 15.33		1
Toluene	108-88-3	26.8	0.497	mg/kg	02.01.18 11.30	D	250
Ethylbenzene	100-41-4	0.403	0.00202	mg/kg	01.31.18 15.33		1
m,p-Xylenes	179601-23-1	91.0	0.994	mg/kg	02.01.18 11.30	D	250
o-Xylene	95-47-6	35.9	0.497	mg/kg	02.01.18 11.30	D	250
Total Xylenes	1330-20-7	127	0.497	mg/kg	02.01.18 11.30		250
Total BTEX		154	0.00202	mg/kg	02.01.18 11.30		250
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	96	%	80-120	01.31.18 15.33		
4-Bromofluorobenzene	460-00-4	113	%	80-120	01.31.18 15.33		



Certificate of Analytical Results 574882



COG Operating LLC, Artesia, NM

Monet Fedcom #3 H

Sample Id: T2 Matrix: Soil Date Received: 01.29.18 15.00
 Lab Sample Id: 574882-009 Date Collected: 01.25.18 10.30 Sample Depth: 3 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: OJS % Moisture:
 Analyst: OJS Date Prep: 02.01.18 09.00 Basis: Wet Weight
 Seq Number: 3039878

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	38.6	5.00	mg/kg	02.01.18 11.32		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 01.30.18 16.00 Basis: Wet Weight
 Seq Number: 3039742

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	792	15.0	mg/kg	01.31.18 04.26		1
Diesel Range Organics (DRO)	C10C28DRO	2730	15.0	mg/kg	01.31.18 04.26		1
Oil Range Hydrocarbons (ORO)	PHCG2835	571	15.0	mg/kg	01.31.18 04.26		1
Total TPH	PHC635	4090	15.0	mg/kg	01.31.18 04.26		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	01.31.18 04.26	
o-Terphenyl	84-15-1	76	%	70-135	01.31.18 04.26	



Certificate of Analytical Results 574882

COG Operating LLC, Artesia, NM

Monet Fedcom #3 H

Sample Id: T2
Lab Sample Id: 574882-009

Matrix: Soil
Date Collected: 01.25.18 10.30

Date Received: 01.29.18 15.00
Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 01.31.18 07.15

Basis: Wet Weight

Seq Number: 3039836

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.0596	0.00202	mg/kg	01.31.18 11.46		1
Toluene	108-88-3	15.3	0.501	mg/kg	01.31.18 16.44	D	250
Ethylbenzene	100-41-4	0.0728	0.00202	mg/kg	01.31.18 11.46		1
m,p-Xylenes	179601-23-1	53.5	1.00	mg/kg	01.31.18 16.44	D	250
o-Xylene	95-47-6	24.2	0.501	mg/kg	01.31.18 16.44	D	250
Total Xylenes	1330-20-7	77.7	0.501	mg/kg	01.31.18 16.44		250
Total BTEX		93.1	0.00202	mg/kg	01.31.18 16.44		250
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	95	%	80-120	01.31.18 11.46		
1,4-Difluorobenzene	540-36-3	102	%	80-120	01.31.18 11.46		



Certificate of Analytical Results 574882



COG Operating LLC, Artesia, NM

Monet Fedcom #3 H

Sample Id: T3 Matrix: Soil Date Received: 01.29.18 15.00
 Lab Sample Id: 574882-010 Date Collected: 01.25.18 10.30 Sample Depth: 0 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: OJS % Moisture:
 Analyst: OJS Date Prep: 02.01.18 09.00 Basis: Wet Weight
 Seq Number: 3039878

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	456	4.99	mg/kg	02.01.18 11.53		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 01.30.18 16.00 Basis: Wet Weight
 Seq Number: 3039742

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	01.31.18 04.48	U	1
Diesel Range Organics (DRO)	C10C28DRO	2570	14.9	mg/kg	01.31.18 04.48		1
Oil Range Hydrocarbons (ORO)	PHCG2835	475	14.9	mg/kg	01.31.18 04.48		1
Total TPH	PHC635	3050	14.9	mg/kg	01.31.18 04.48		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-135	01.31.18 04.48	
o-Terphenyl	84-15-1	77	%	70-135	01.31.18 04.48	



Certificate of Analytical Results 574882



COG Operating LLC, Artesia, NM

Monet Fedcom #3 H

Sample Id: T3
Lab Sample Id: 574882-010

Matrix: Soil
Date Collected: 01.25.18 10.30

Date Received: 01.29.18 15.00
Sample Depth: 0 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 01.31.18 07.15

Basis: Wet Weight

Seq Number: 3039836

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00272	0.00200	mg/kg	01.31.18 11.27		1
Toluene	108-88-3	0.0163	0.00200	mg/kg	01.31.18 11.27		1
Ethylbenzene	100-41-4	0.00268	0.00200	mg/kg	01.31.18 11.27		1
m,p-Xylenes	179601-23-1	0.00742	0.00399	mg/kg	01.31.18 11.27		1
o-Xylene	95-47-6	0.00292	0.00200	mg/kg	01.31.18 11.27		1
Total Xylenes	1330-20-7	0.0103	0.00200	mg/kg	01.31.18 11.27		1
Total BTEX		0.0320	0.00200	mg/kg	01.31.18 11.27		1
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103		%	80-120	01.31.18 11.27	
1,4-Difluorobenzene	540-36-3	87		%	80-120	01.31.18 11.27	



Certificate of Analytical Results 574882

COG Operating LLC, Artesia, NM

Monet Fedcom #3 H

Sample Id: T3
Lab Sample Id: 574882-011

Matrix: Soil
Date Collected: 01.25.18 10.30

Date Received: 01.29.18 15.00
Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Tech: OJS

Analyst: OJS

Seq Number: 3039878

Date Prep: 02.01.18 09.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	227	4.97	mg/kg	02.01.18 12.00		1

Analytical Method: TPH By SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3039742

Date Prep: 01.30.18 16.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.31.18 05.53	U	1
Diesel Range Organics (DRO)	C10C28DRO	406	15.0	mg/kg	01.31.18 05.53		1
Oil Range Hydrocarbons (ORO)	PHCG2835	82.3	15.0	mg/kg	01.31.18 05.53		1
Total TPH	PHC635	488	15.0	mg/kg	01.31.18 05.53		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	01.31.18 05.53	
o-Terphenyl	84-15-1	101	%	70-135	01.31.18 05.53	



Certificate of Analytical Results 574882

COG Operating LLC, Artesia, NM

Monet Fedcom #3 H

Sample Id: T3
Lab Sample Id: 574882-011

Matrix: Soil
Date Collected: 01.25.18 10.30

Date Received: 01.29.18 15.00
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 01.31.18 07.15

Basis: Wet Weight

Seq Number: 3039836

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	01.31.18 15.14	U	1
Toluene	108-88-3	0.00766	0.00198	mg/kg	01.31.18 15.14		1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	01.31.18 15.14	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	01.31.18 15.14	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	01.31.18 15.14	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	01.31.18 15.14	U	1
Total BTEX		0.00766	0.00198	mg/kg	01.31.18 15.14		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	108	%	80-120	01.31.18 15.14		
1,4-Difluorobenzene	540-36-3	85	%	80-120	01.31.18 15.14		



Certificate of Analytical Results 574882

COG Operating LLC, Artesia, NM

Monet Fedcom #3 H

Sample Id: T3 Matrix: Soil Date Received: 01.29.18 15.00
 Lab Sample Id: 574882-012 Date Collected: 01.25.18 10.30 Sample Depth: 2 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: OJS % Moisture:
 Analyst: OJS Date Prep: 02.01.18 09.00 Basis: Wet Weight
 Seq Number: 3039878

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	76.0	4.94	mg/kg	02.01.18 12.21		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 01.30.18 16.00 Basis: Wet Weight
 Seq Number: 3039742

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.31.18 06.14	U	1
Diesel Range Organics (DRO)	C10C28DRO	37.5	15.0	mg/kg	01.31.18 06.14		1
Oil Range Hydrocarbons (ORO)	PHCG2835	<15.0	15.0	mg/kg	01.31.18 06.14	U	1
Total TPH	PHC635	37.5	15.0	mg/kg	01.31.18 06.14		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	01.31.18 06.14	
o-Terphenyl	84-15-1	99	%	70-135	01.31.18 06.14	



Certificate of Analytical Results 574882

COG Operating LLC, Artesia, NM

Monet Fedcom #3 H

Sample Id: T3
Lab Sample Id: 574882-012

Matrix: Soil
Date Collected: 01.25.18 10.30

Date Received: 01.29.18 15.00
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 01.31.18 07.15

Basis: Wet Weight

Seq Number: 3039836

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.31.18 10.49	U	1
Toluene	108-88-3	0.00817	0.00201	mg/kg	01.31.18 10.49		1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.31.18 10.49	U	1
m,p-Xylenes	179601-23-1	0.00416	0.00402	mg/kg	01.31.18 10.49		1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.31.18 10.49	U	1
Total Xylenes	1330-20-7	0.00416	0.00201	mg/kg	01.31.18 10.49		1
Total BTEX		0.0123	0.00201	mg/kg	01.31.18 10.49		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	96	%	80-120	01.31.18 10.49		
1,4-Difluorobenzene	540-36-3	81	%	80-120	01.31.18 10.49		



Certificate of Analytical Results 574882

COG Operating LLC, Artesia, NM

Monet Fedcom #3 H

Sample Id: T3 Matrix: Soil Date Received: 01.29.18 15.00
 Lab Sample Id: 574882-013 Date Collected: 01.25.18 10.30 Sample Depth: 3 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: OJS % Moisture:
 Analyst: OJS Date Prep: 02.01.18 09.00 Basis: Wet Weight
 Seq Number: 3039878

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	72.7	4.97	mg/kg	02.01.18 12.28		1

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 01.30.18 16.00 Basis: Wet Weight
 Seq Number: 3039742

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.31.18 06.35	U	1
Diesel Range Organics (DRO)	C10C28DRO	134	15.0	mg/kg	01.31.18 06.35		1
Oil Range Hydrocarbons (ORO)	PHCG2835	25.7	15.0	mg/kg	01.31.18 06.35		1
Total TPH	PHC635	160	15.0	mg/kg	01.31.18 06.35		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	01.31.18 06.35	
o-Terphenyl	84-15-1	107	%	70-135	01.31.18 06.35	



Certificate of Analytical Results 574882

COG Operating LLC, Artesia, NM

Monet Fedcom #3 H

Sample Id: T3
Lab Sample Id: 574882-013

Matrix: Soil
Date Collected: 01.25.18 10.30

Date Received: 01.29.18 15.00
Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: ALJ

% Moisture:

Analyst: ALJ

Date Prep: 01.31.18 07.15

Basis: Wet Weight

Seq Number: 3039836

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.31.18 11.08	U	1
Toluene	108-88-3	0.00228	0.00202	mg/kg	01.31.18 11.08		1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.31.18 11.08	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	01.31.18 11.08	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.31.18 11.08	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.31.18 11.08	U	1
Total BTEX		0.00228	0.00202	mg/kg	01.31.18 11.08		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	89	%	80-120	01.31.18 11.08		
1,4-Difluorobenzene	540-36-3	81	%	80-120	01.31.18 11.08		



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.

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

+ 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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(602) 437-0330	



COG Operating LLC

Monet Fedcom #3 H

Analytical Method: Chloride by EPA 300

Seq Number: 3039855

MB Sample Id: 7638386-1-BLK

Matrix: Solid

LCS Sample Id: 7638386-1-BKS

Prep Method: E300P

Date Prep: 01.31.18

LCSD Sample Id: 7638386-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	252	101	274	110	90-110	8	20	mg/kg	01.31.18 14:37	

Analytical Method: Chloride by EPA 300

Seq Number: 3039858

MB Sample Id: 7638393-1-BLK

Matrix: Solid

LCS Sample Id: 7638393-1-BKS

Prep Method: E300P

Date Prep: 02.01.18

LCSD Sample Id: 7638393-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	274	110	275	110	90-110	0	20	mg/kg	02.01.18 09:41	

Analytical Method: Chloride by EPA 300

Seq Number: 3039855

Parent Sample Id: 574497-001

Matrix: Soil

MS Sample Id: 574497-001 S

Prep Method: E300P

Date Prep: 01.31.18

MSD Sample Id: 574497-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	998	249	1310	125	1200	81	90-110	9	20	mg/kg	01.31.18 14:58	X

Analytical Method: Chloride by EPA 300

Seq Number: 3039855

Parent Sample Id: 574802-002

Matrix: Soil

MS Sample Id: 574802-002 S

Prep Method: E300P

Date Prep: 01.31.18

MSD Sample Id: 574802-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	69.0	250	339	108	327	103	90-110	4	20	mg/kg	01.31.18 16:36	

Analytical Method: Chloride by EPA 300

Seq Number: 3039878

Parent Sample Id: 574882-009

Matrix: Soil

MS Sample Id: 574882-009 S

Prep Method: E300P

Date Prep: 02.01.18

MSD Sample Id: 574882-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	38.6	250	301	105	311	109	90-110	3	20	mg/kg	02.01.18 11:39	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery

$[D] = 100 * (C-A) / B$
 $RPD = 200 * | (C-E) / (C+E) |$
 $[D] = 100 * (C) / [B]$

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



COG Operating LLC

Monet Fedcom #3 H

Analytical Method: Chloride by EPA 300

Seq Number: 3039878

Parent Sample Id: 575054-001

Matrix: Soil

MS Sample Id: 575054-001 S

Prep Method: E300P

Date Prep: 02.01.18

MSD Sample Id: 575054-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	232	93	239	96	90-110	3	20	mg/kg	02.01.18 10:02	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3039742

MB Sample Id: 7638359-1-BLK

Matrix: Solid

LCS Sample Id: 7638359-1-BKS

Prep Method: TX1005P

Date Prep: 01.30.18

LCSD Sample Id: 7638359-1-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 (GRO)	<15.0	1000	868	87	857	86	70-135	1	35	mg/kg	01.31.18 00:08	
Diesel Range Organics (DRO)	<15.0	1000	933	93	916	92	70-135	2	35	mg/kg	01.31.18 00:08	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		110		108		70-135	%	01.31.18 00:08
o-Terphenyl	111		100		99		70-135	%	01.31.18 00:08

Analytical Method: TPH By SW8015 Mod

Seq Number: 3039742

Parent Sample Id: 574882-002

Matrix: Soil

MS Sample Id: 574882-002 S

Prep Method: TX1005P

Date Prep: 01.30.18

MSD Sample Id: 574882-002 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 (GRO)	<15.0	997	887	89	919	92	70-135	4	35	mg/kg	01.31.18 01:34	
Diesel Range Organics (DRO)	62.6	997	896	84	1020	96	70-135	13	35	mg/kg	01.31.18 01:34	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	106		116		70-135	%	01.31.18 01:34
o-Terphenyl	90		103		70-135	%	01.31.18 01:34

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$

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



COG Operating LLC

Monet Fedcom #3 H

Analytical Method: BTEX by EPA 8021B

Seq Number: 3039636

MB Sample Id: 7638289-1-BLK

Matrix: Solid

LCS Sample Id: 7638289-1-BKS

Prep Method: SW5030B

Date Prep: 01.30.18

LCSD Sample Id: 7638289-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.101	0.0939	93	0.0917	92	70-130	2	35	mg/kg	01.30.18 10:29	
Toluene	<0.00201	0.101	0.0976	97	0.0959	96	70-130	2	35	mg/kg	01.30.18 10:29	
Ethylbenzene	<0.00201	0.101	0.105	104	0.104	104	71-129	1	35	mg/kg	01.30.18 10:29	
m,p-Xylenes	<0.00402	0.201	0.207	103	0.206	103	70-135	0	35	mg/kg	01.30.18 10:29	
o-Xylene	<0.00201	0.101	0.102	101	0.101	101	71-133	1	35	mg/kg	01.30.18 10:29	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
1,4-Difluorobenzene	89		92		90		80-120	%	01.30.18 10:29			
4-Bromofluorobenzene	100		101		99		80-120	%	01.30.18 10:29			

Analytical Method: BTEX by EPA 8021B

Seq Number: 3039836

MB Sample Id: 7638380-1-BLK

Matrix: Solid

LCS Sample Id: 7638380-1-BKS

Prep Method: SW5030B

Date Prep: 01.31.18

LCSD Sample Id: 7638380-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.0900	90	0.0861	85	70-130	4	35	mg/kg	01.31.18 07:38	
Toluene	<0.00201	0.100	0.0946	95	0.0905	90	70-130	4	35	mg/kg	01.31.18 07:38	
Ethylbenzene	<0.00201	0.100	0.104	104	0.0978	97	71-129	6	35	mg/kg	01.31.18 07:38	
m,p-Xylenes	<0.00402	0.201	0.204	101	0.193	96	70-135	6	35	mg/kg	01.31.18 07:38	
o-Xylene	<0.00201	0.100	0.0997	100	0.0953	94	71-133	5	35	mg/kg	01.31.18 07:38	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
1,4-Difluorobenzene	86		86		86		80-120	%	01.31.18 07:38			
4-Bromofluorobenzene	87		96		96		80-120	%	01.31.18 07:38			

Analytical Method: BTEX by EPA 8021B

Seq Number: 3039856

MB Sample Id: 7638412-1-BLK

Matrix: Solid

LCS Sample Id: 7638412-1-BKS

Prep Method: SW5030B

Date Prep: 02.01.18

LCSD Sample Id: 7638412-1-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	0.0856	86	0.0860	86	70-130	0	35	mg/kg	02.01.18 04:27	
Toluene	<0.00200	0.100	0.0890	89	0.0901	90	70-130	1	35	mg/kg	02.01.18 04:27	
Ethylbenzene	<0.00200	0.100	0.0947	95	0.0950	95	71-129	0	35	mg/kg	02.01.18 04:27	
m,p-Xylenes	<0.00401	0.200	0.186	93	0.187	94	70-135	1	35	mg/kg	02.01.18 04:27	
o-Xylene	<0.00200	0.100	0.0933	93	0.0935	94	71-133	0	35	mg/kg	02.01.18 04:27	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
1,4-Difluorobenzene	84		89		89		80-120	%	02.01.18 04:27			
4-Bromofluorobenzene	83		95		98		80-120	%	02.01.18 04:27			

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery

$[D] = 100 * (C-A) / B$
 $RPD = 200 * | (C-E) / (C+E) |$
 $[D] = 100 * (C) / [B]$

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



COG Operating LLC

Monet Fedcom #3 H

Analytical Method: BTEX by EPA 8021B

Seq Number: 3039636

Parent Sample Id: 574873-001

Matrix: Soil

MS Sample Id: 574873-001 S

Prep Method: SW5030B

Date Prep: 01.30.18

MSD Sample Id: 574873-001 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	0.100	0.0836	84	0.0801	80	70-130	4	35	mg/kg	01.30.18 11:08	
Toluene	<0.00201	0.100	0.0879	88	0.0833	83	70-130	5	35	mg/kg	01.30.18 11:08	
Ethylbenzene	<0.00201	0.100	0.0954	95	0.0900	90	71-129	6	35	mg/kg	01.30.18 11:08	
m,p-Xylenes	<0.00402	0.201	0.188	94	0.179	90	70-135	5	35	mg/kg	01.30.18 11:08	
o-Xylene	<0.00201	0.100	0.0934	93	0.0895	90	71-133	4	35	mg/kg	01.30.18 11:08	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	89		87		80-120	%	01.30.18 11:08
4-Bromofluorobenzene	106		100		80-120	%	01.30.18 11:08

Analytical Method: BTEX by EPA 8021B

Seq Number: 3039836

Parent Sample Id: 574882-001

Matrix: Soil

MS Sample Id: 574882-001 S

Prep Method: SW5030B

Date Prep: 01.31.18

MSD Sample Id: 574882-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0796	79	0.0789	79	70-130	1	35	mg/kg	01.31.18 08:16	
Toluene	0.00573	0.101	0.0829	76	0.0817	76	70-130	1	35	mg/kg	01.31.18 08:16	
Ethylbenzene	<0.00202	0.101	0.0808	80	0.0846	85	71-129	5	35	mg/kg	01.31.18 08:16	
m,p-Xylenes	<0.00403	0.202	0.159	79	0.167	84	70-135	5	35	mg/kg	01.31.18 08:16	
o-Xylene	<0.00202	0.101	0.0796	79	0.0824	82	71-133	3	35	mg/kg	01.31.18 08:16	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	81		86		80-120	%	01.31.18 08:16
4-Bromofluorobenzene	88		94		80-120	%	01.31.18 08:16

Analytical Method: BTEX by EPA 8021B

Seq Number: 3039856

Parent Sample Id: 574885-007

Matrix: Soil

MS Sample Id: 574885-007 S

Prep Method: SW5030B

Date Prep: 02.01.18

MSD Sample Id: 574885-007 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	0.100	0.0739	74	0.0754	75	70-130	2	35	mg/kg	02.01.18 05:05	
Toluene	<0.00201	0.100	0.0770	77	0.0781	77	70-130	1	35	mg/kg	02.01.18 05:05	
Ethylbenzene	<0.00201	0.100	0.0785	79	0.0799	79	71-129	2	35	mg/kg	02.01.18 05:05	
m,p-Xylenes	<0.00402	0.201	0.153	76	0.156	77	70-135	2	35	mg/kg	02.01.18 05:05	
o-Xylene	<0.00201	0.100	0.0777	78	0.0783	78	71-133	1	35	mg/kg	02.01.18 05:05	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	92		89		80-120	%	02.01.18 05:05
4-Bromofluorobenzene	108		93		80-120	%	02.01.18 05:05

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery

$[D] = 100 * (C-A) / B$
 $RPD = 200 * | (C-E) / (C+E) |$
 $[D] = 100 * (C) / [B]$

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



Setting the Standard since 1990
 Stafford, Texas (281-240-4200)
 Dallas Texas (214-902-0300)

CHAIN OF CUSTODY

Page 1 of 2

San Antonio, Texas (210-509-3334)
 Midland, Texas (432-704-5251)

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Phoenix, Arizona (480-355-0900)

Client / Reporting Information		Project Information		Analytical Information		Matrix Codes	
Company Name / Branch:	COG Operating LLC	Project Name/Number:	MONET FIELD COM #3 H				
Company Address:	2407 Pecos Ave. Artesia NM 88210	Project Location:	LEA COUNTY, NM				
Email: daniel2@concho.com sillichhook@concho.com	Phone No: 575-746-2010	Invoice To:	COG Operating LLC Attn: Robert McNeill 600 W. Illinois Ave. Midland TX, 79701				
Project Contact:	DAKOTA NEEL	PO Number:					
Samplers Name:							
No.	Field ID / Point of Collection	Collection	Sample Depth	Date	Time	Matrix	# of bottles
1	T1		0'	11/25/18	10:00 AM	S	
2	T1		1'				
3	T1		2'				
4	T1		3'				
5	T1		4'				
6	T2		0'				
7	T2		1'				
8	T2		2'				
9	T2		3'				
10							
Turnaround Time (Business days)		Data Deliverable Information		Notes:			
<input type="checkbox"/> Same Day TAT	<input type="checkbox"/> 5 Day TAT	<input type="checkbox"/> Level II Std QC		<input type="checkbox"/> Level IV (Full Data Pkg raw data)			
<input type="checkbox"/> Next Day EMERGENCY	<input type="checkbox"/> 7 Day TAT	<input type="checkbox"/> Level III Std QC+ Forms		<input type="checkbox"/> TRRP Level IV			
<input type="checkbox"/> 2 Day EMERGENCY	<input checked="" type="checkbox"/> Contract TAT	<input type="checkbox"/> Level 3 (CLP Forms)		<input type="checkbox"/> UST / RG -411			
<input type="checkbox"/> 3 Day EMERGENCY		<input type="checkbox"/> TRRP Checklist					
TAT Starts Day received by Lab, if received by 5:00 pm							
Relinquished by Sampler:		Date Time:		Received By:		Relinquished By:	
1		1-29-18 1:00 PM		1-29-18 1:00 PM		2-29-18 1:00 PM	
Relinquished by:		Date Time:		Received By:		Relinquished By:	
3				3		4	
Relinquished by:		Date Time:		Received By:		Relinquished By:	
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Setting the Standard since 1990
Stafford, Texas (281-240-4200)
Dallas Texas (214-902-0300)

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Page 2 of 2

San Antonio, Texas (210-509-3334)
Midland, Texas (432-704-5251)

Phoenix, Arizona (480-355-0900)

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Xenco Quote #

Xenco Job #

574882

Client / Reporting Information				Project Information				Analytical Information				Matrix Codes							
Company Name / Branch: COG Operating LLC				Project Name/Number: MONT FLD COM #3H															
Company Address: 2407 Precos Ave. Artesia NM 88210				Project Location:															
Email: dnee@concho.com silhichcock@concho.com cgray@concho.com, mskell@concho.com				Invoice To: COG Operating LLC Attn: Robert McNeill 600 W. Illinois Ave. Midland TX, 79701															
Project Contact: DAKOTA NEEL				PO Number:															
Sampler's Name:																			
No.	Field ID / Point of Collection	Sample Depth	Date	Time	Matrix	# of bottles	HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MeOH	NONE	TPH Extended	BTEX	CHLORIDES	Field Comments	
1	T3	0'	1-25-18	12:30 AM	S										X	X	X		
2	T3	1'													X	X	X		
3	T3	2'													X	X	X		
4	T3	3'													X	X	X		
5																			
6																			
7																			
8																			
9																			
10																			
Turnaround Time (Business days)																			
Data Deliverable Information																			
<input type="checkbox"/> Same Day TAT <input type="checkbox"/> 5 Day TAT <input type="checkbox"/> Level II Std QC <input type="checkbox"/> Level IV (Full Data Pkg raw data)																			
<input type="checkbox"/> Next Day EMERGENCY <input type="checkbox"/> 7 Day TAT <input type="checkbox"/> Level III Std QC+ Forms <input type="checkbox"/> TRRP Level IV																			
<input type="checkbox"/> 2 Day EMERGENCY <input checked="" type="checkbox"/> Contract TAT <input type="checkbox"/> Level 3 (CLP Forms) <input type="checkbox"/> UST / RG -411																			
<input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> TRRP Checklist																			
TAT Starts Day received by Lab, if received by 5:00 pm																			
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY																			
Relinquished by Sampler:				Date Time: 1-25-18 1:00 PM				Received By: 1. del Butta 1-25-18 1:00 PM				Relinquished By: 2. del Butta 1-25-18 3:00 PM				Date Time: 1-25-18 3:00 PM			
Relinquished by:				Date Time:				Received By:				Relinquished By:				Date Time:			
3				Date Time:				Received By:				Relinquished By:				Date Time:			
5				Date Time:				Received By:				Relinquished By:				Date Time:			
Custody Seal #				Preserved when applicable				On Ice				Cooler Temp.				Thermo. Corr. Factor			

Temp: 2.9 IR ID: R-8
CF: (0-6: -0.2°C)
(6-23: +0.2°C)
Corrected Temp: 2.7

FED-EX / UPS: Tracking #

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the Client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at \$5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.



Client: COG Operating LLC

Date/ Time Received: 01/29/2018 03:00:00 PM

Work Order #: 574882

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	2.7
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

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

Analyst:

PH Device/Lot#:

Checklist completed by:

Shawnee Smith

Date: 01/30/2018

Checklist reviewed by:

Kelsey Brooks

Date: 01/30/2018

Analytical Report 579122

for

2M Enviromental Services LLC

Project Manager: Matt Green
COG Monet Federal COM 003H

21-MAR-18

Collected By: Client



1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-18-24), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab code: TX01468):
Texas (T104704295-17-16), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab code: TX00127): Texas (T104704221-17-12)
Xenco-Lubbock (EPA Lab code: TX00139): Texas (T104704219-17-16)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-18-14)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-17-3)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco-Atlanta (LELAP Lab ID #04176)



21-MAR-18

Project Manager: **Matt Green**
2M Enviromental Services LLC
1219 W University Blvd
Odessa, TX 79764

Reference: XENCO Report No(s): **579122**
COG Monet Federal COM 003H
Project Address: Lea County NM

Matt Green:

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 XENCO Report Number(s) 579122. 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 XENCO Laboratories. 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. 579122 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 XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink, appearing to read 'Kelsey Brooks', written over a horizontal line.

Kelsey Brooks

Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

**Sample Cross Reference 579122****2M Enviromental Services LLC, Odessa, TX**

COG Monet Federal COM 003H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
T-2 @ 4'	S	03-06-18 15:00		579122-001
T-2 @ 5'	S	03-06-18 15:45		579122-002
T-2 @ 6'	S	03-06-18 16:10		579122-003



CASE NARRATIVE

Client Name: 2M Enviromental Services LLC

Project Name: COG Monet Federal COM 003H

Project ID:
Work Order Number(s): 579122

Report Date: 21-MAR-18
Date Received: 03/14/2018

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3043921 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



Certificate of Analysis Summary 579122

2M Environmental Services LLC, Odessa, TX

Project Name: COG Monet Federal COM 003H

Received by OCD: 11/23/2022 10:52:23 AM

Page 67 of 116

Date Received in Lab: Wed Mar-14-18 07:56 am
Report Date: 21-MAR-18
Project Manager: Kelsey Brooks

Project Id: Matt Green
Contact: Lea County NM
Project Location:

<i>Analysis Requested</i>		Lab Id: Field Id: Depth: Matrix: Sampled:	579122-001 T-2 @ 4' SOIL Mar-06-18 15:00	579122-002 T-2 @ 5' SOIL Mar-06-18 15:45	579122-003 T-2 @ 6' SOIL Mar-06-18 16:10		
BTEX by EPA 8021B		<i>Extracted:</i>	Mar-15-18 08:00	Mar-15-18 08:00	Mar-15-18 08:00		
		<i>Analyzed:</i>	Mar-16-18 11:05	Mar-16-18 10:29	Mar-16-18 10:47		
		<i>Units/RL:</i>	mg/kg RL <0.00200 0.00200	mg/kg RL <0.00201 0.00201	mg/kg RL <0.00202 0.00202		
Benzene			<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202		
Toluene			<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202		
Ethylbenzene			<0.00200 0.00200	<0.00201 0.00201	<0.00202 0.00202		
m,p-Xylenes			0.00762 0.00401	<0.00402 0.00402	<0.00404 0.00404		
o-Xylene			0.0128 0.00200	<0.00201 0.00201	<0.00202 0.00202		
Total Xylenes			0.02042 0.002	<0.00201 0.00201	<0.00202 0.00202		
Total BTEX			0.02042 0.002	<0.00201 0.00201	<0.00202 0.00202		
Chloride by EPA 300		<i>Extracted:</i>	Mar-15-18 15:30	Mar-15-18 15:30	Mar-15-18 15:30		
		<i>Analyzed:</i>	Mar-15-18 20:10	Mar-15-18 20:15	Mar-15-18 20:20		
		<i>Units/RL:</i>	mg/kg RL 8.32 4.98	mg/kg RL <4.92 4.92	mg/kg RL 42.0 4.95		
Chloride			8.32 4.98	<4.92 4.92	42.0 4.95		
TPH by SW8015 Mod		<i>Extracted:</i>	Mar-16-18 10:00	Mar-16-18 10:00	Mar-16-18 10:00		
		<i>Analyzed:</i>	Mar-16-18 22:21	Mar-16-18 22:48	Mar-16-18 23:13		
		<i>Units/RL:</i>	mg/kg RL 26.8 15.0	mg/kg RL <15.0 15.0	mg/kg RL <15.0 15.0		
Gasoline Range Hydrocarbons (GRO)			26.8 15.0	<15.0 15.0	<15.0 15.0		
Diesel Range Organics (DRO)			402 15.0	46.7 15.0	84.1 15.0		
Oil Range Hydrocarbons (ORO)			25.3 15.0	<15.0 15.0	<15.0 15.0		
Total TPH			454.1 15	46.7 15	84.1 15		

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Kelsey Brooks

Kelsey Brooks
Project Manager



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.

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



Form 2 - Surrogate Recoveries

Project Name: COG Monet Federal COM 003H

Work Orders : 579122,

Project ID:

Lab Batch #: 3043921

Sample: 579122-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/16/18 10:29

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0276	0.0300	92	70-130	
4-Bromofluorobenzene	0.0358	0.0300	119	70-130	

Lab Batch #: 3043921

Sample: 579122-003 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/16/18 10:47

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0218	0.0300	73	70-130	
4-Bromofluorobenzene	0.0355	0.0300	118	70-130	

Lab Batch #: 3043921

Sample: 579122-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/16/18 11:05

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0211	0.0300	70	70-130	
4-Bromofluorobenzene	0.0346	0.0300	115	70-130	

Lab Batch #: 3044121

Sample: 579122-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/16/18 22:21

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	94.9	99.8	95	70-135	
o-Terphenyl	50.6	49.9	101	70-135	

Lab Batch #: 3044121

Sample: 579122-002 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/16/18 22:48

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.5	99.8	94	70-135	
o-Terphenyl	46.6	49.9	93	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: COG Monet Federal COM 003H

Work Orders : 579122,

Lab Batch #: 3044121

Sample: 579122-003 / SMP

Project ID:

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/16/18 23:13

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.0	99.9	93	70-135	
o-Terphenyl	47.9	50.0	96	70-135	

Lab Batch #: 3043921

Sample: 7640920-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/15/18 13:30

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0265	0.0300	88	70-130	
4-Bromofluorobenzene	0.0358	0.0300	119	70-130	

Lab Batch #: 3044121

Sample: 7641052-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/16/18 12:01

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.0	100	97	70-135	
o-Terphenyl	49.4	50.0	99	70-135	

Lab Batch #: 3043921

Sample: 7640920-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/15/18 11:44

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0302	0.0300	101	70-130	
4-Bromofluorobenzene	0.0347	0.0300	116	70-130	

Lab Batch #: 3044121

Sample: 7641052-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/16/18 12:27

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	100	106	70-135	
o-Terphenyl	51.6	50.0	103	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: COG Monet Federal COM 003H

Work Orders : 579122,

Lab Batch #: 3043921

Sample: 7640920-1-BSD / BSD

Project ID:

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/15/18 12:08

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0323	0.0300	108	70-130	
4-Bromofluorobenzene	0.0356	0.0300	119	70-130	

Lab Batch #: 3044121

Sample: 7641052-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 03/16/18 12:54

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	103	100	103	70-135	
o-Terphenyl	50.6	50.0	101	70-135	

Lab Batch #: 3043921

Sample: 579173-003 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/15/18 12:27

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0305	0.0300	102	70-130	
4-Bromofluorobenzene	0.0368	0.0300	123	70-130	

Lab Batch #: 3044121

Sample: 579458-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/16/18 13:46

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1-Chlorooctane	112	99.8	112	70-135	
o-Terphenyl	54.4	49.9	109	70-135	

Lab Batch #: 3043921

Sample: 579173-003 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/15/18 12:48

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0286	0.0300	95	70-130	
4-Bromofluorobenzene	0.0352	0.0300	117	70-130	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: COG Monet Federal COM 003H

Work Orders : 579122,

Project ID:

Lab Batch #: 3044121

Sample: 579458-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 03/16/18 14:12

SURROGATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	100	105	70-135	
o-Terphenyl	50.7	50.0	101	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

All results are based on MDL and validated for QC purposes.

Work Order #: 579122

Analyst: ALJ

Lab Batch ID: 3043921

Units: mg/kg

Sample: 7640920-1-BKS

Batch #: 1

Date Prepared: 03/15/2018

Project ID:

Date Analyzed: 03/15/2018

Matrix: Solid

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
BTEX by EPA 8021B											
Benzene	<0.00202	0.101	0.0956	95	0.100	0.107	107	11	70-130	35	
Toluene	<0.00202	0.101	0.0982	97	0.100	0.102	102	4	70-130	35	
Ethylbenzene	<0.00202	0.101	0.102	101	0.100	0.107	107	5	70-130	35	
m,p-Xylenes	<0.00403	0.202	0.200	99	0.201	0.208	103	4	70-130	35	
o-Xylene	<0.00202	0.101	0.103	102	0.100	0.105	105	2	70-130	35	

Date Prepared: 03/15/2018

Date Analyzed: 03/15/2018

Analyst: OJS

Sample: 7640888-1-BKS

Batch #: 1

Matrix: Solid

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride by EPA 300											
Chloride	<5.00	250	260	104	250	259	104	0	90-110	20	

Relative Percent Difference RPD = $200 * [(C-F)/(C+F)]$
Blank Spike Recovery [D] = $100 * (C)/[B]$
Blank Spike Duplicate Recovery [G] = $100 * (F)/[E]$
All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries

Project Name: COG Monet Federal COM 003H



Work Order #: 579122

Analyst: ARM

Lab Batch ID: 3044121

Units: mg/kg

Sample: 7641052-1-BKS

Date Prepared: 03/16/2018

Batch #: 1

Project ID:

Date Analyzed: 03/16/2018

Matrix: Solid

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY																
Units:	mg/kg	TPH by SW8015 Mod	Analytes	Blank Sample Result	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate Result	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag		
				[A]	[B]	[C]	[D]	[E]	[F]	[G]						
		Gasoline Range Hydrocarbons (GRO)		<15.0	1000	938	94	1000	948	95	1	70-135	35			
		Diesel Range Organics (DRO)		<15.0	1000	967	97	1000	978	98	1	70-135	35			

Relative Percent Difference RPD = $200 * |(C-F)/(C+F)|$
Blank Spike Recovery [D] = $100 * (C)/[B]$
Blank Spike Duplicate Recovery [G] = $100 * (F)/[E]$
All results are based on MDL and Validated for QC Purposes

Work Order # : 579122
Lab Batch ID: 3043921
Date Analyzed: 03/15/2018
Reporting Units: mg/kg
Project ID:
QC- Sample ID: 579173-003 S **Batch #:** 1 **Matrix:** Soil
Date Prepared: 03/15/2018 **Analyst:** ALJ

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Benzene		<0.00199	0.0996	0.0872	88	0.100	0.0856	86	2	70-130	35	
Toluene		<0.00199	0.0996	0.0842	85	0.100	0.0875	88	4	70-130	35	
Ethylbenzene		<0.00199	0.0996	0.0876	88	0.100	0.0890	89	2	70-130	35	
m,p-Xylenes		<0.00398	0.199	0.174	87	0.200	0.174	87	0	70-130	35	
o-Xylene		<0.00199	0.0996	0.0884	89	0.100	0.0888	89	0	70-130	35	

Lab Batch ID: 3043830 **QC- Sample ID:** 578791-001 S **Batch #:** 1 **Matrix:** Soil
Date Analyzed: 03/15/2018 **Date Prepared:** 03/15/2018 **Analyst:** OJS

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chloride		938	249	1190	101	249	1190	101	0	90-110	20	

Lab Batch ID: 3043830 **QC- Sample ID:** 579127-007 S **Batch #:** 1 **Matrix:** Soil
Date Analyzed: 03/15/2018 **Date Prepared:** 03/15/2018 **Analyst:** OJS

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Chloride by EPA 300		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Chloride		795	248	1050	103	248	1050	103	0	90-110	20	

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A)/E$

Matrix Spike Percent Recovery $[D] = 100 \times (C-A)/B$
 Relative Percent Difference $RPD = 200 \times [(C-F)/(C+F)]$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
 N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.



Form 3 - MS / MSD Recoveries

Project Name: COG Monet Federal COM 003H



Work Order #: 579122
Lab Batch ID: 3044121
Date Analyzed: 03/16/2018
Reporting Units: mg/kg

QC- Sample ID: 579458-001 S Batch #: 1 Matrix: Soil
Date Prepared: 03/16/2018 Analyst: ARM

Project ID:

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH by SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	998	1030	103	1000	943	94	9	70-135	35	
Diesel Range Organics (DRO)	18.9	998	1040	102	1000	1010	99	3	70-135	35	

Matrix Spike Percent Recovery $[D] = 100 \times (C-A)/B$
Relative Percent Difference $RPD = 200 \times |(C-F)/(C+F)|$
ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Matrix Spike Duplicate Percent Recovery $[G] = 100 \times (F-A)/E$

CHAIN OF CUSTODY

Page 1 of 1

San Antonio, Texas (210-509-3334)
Midland, Texas (432-704-5251)

Phoenix, Arizona (480-355-0900)

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Client / Reporting Information				Project Information				Analytical Information				Matrix Codes			
Company Name / Branch: TRC				Project Name/Number: COG Monet Federal COM 003H				Xenoco Quote #				Xenoco Job #			
Company Address: 1219 W. University Blvd, Odessa, TX				Project Location: Lea County, NM											
Email: mgreen@2m-environmental.com				Phone No: 4322303783											
Project Contact: Matt Green				Invoice To: COG											
Samplers Name: Matt Green															

No.	Field ID / Point of Collection	Collection			Number of preserved bottles										TPH 8015M Extended 35	BTEX 8021B	Chloride 300	Field Comments
		Sample Depth	Date	Time	Matrix	# of bottles	HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE				
1	T-2 @ 4'		3/6/2018	1500	Soil	1									X	X	X	
2	T-2 @ 5'		3/6/2018		Soil	1									X	X	X	
3	T-2 @ 6'		3/6/2018		Soil	1									X	X	X	
4																		
5																		
6																		
7																		
8																		
9																		
10																		

Turnaround Time (Business days)				Data Deliverable Information			
<input type="checkbox"/> Same Day TAT <input type="checkbox"/> Next Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 3 Day EMERGENCY				<input checked="" type="checkbox"/> 5 Day TAT <input type="checkbox"/> 7 Day TAT <input type="checkbox"/> Contract TAT <input type="checkbox"/> TRRP Checklist			

TAT Starts Day received by Lab, if received by 5:00 pm				FED-EX / UPS: Tracking #			
Relinquished by Sampler: <u>Matt Green</u> Relinquished by: <u>3-14-18 0330</u> Relinquished by: <u>3</u> Relinquished by: <u>3</u>				Received By: <u>Jana Mubler</u> Received By: <u>2 Jana Mubler</u> Received By: <u>3/15/18 7:50</u> Received By: <u>2 J. Mubler</u>			

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY		Temp: <u>3.3</u>		IR ID: R-8	
CF: (0-6: -0.2°C)		Corrected Temp: <u>3.1</u>			

W = Water
 S = Soil/Sed/Solid
 GW = Ground Water
 DW = Drinking Water
 P = Product
 SW = Surface water
 SL = Sludge
 OW = Ocean/Sea Water
 WI = Wipe
 O = Oil
 WW = Waste Water
 A = Air

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for litigation of samples and shall not assume any responsibility for losses or expenses incurred by the Client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received via Xenco but not analyzed will be returned to the sender at no charge.



Client: TRC Solutions, Inc

Date/ Time Received: 03/14/2018 07:56:00 AM

Work Order #: 579122

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	3.1
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	N/A
#18 Water VOC samples have zero headspace?	N/A

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

Analyst:

PH Device/Lot#:

Checklist completed by:

Jessica Kramer

Date: 03/14/2018

Checklist reviewed by:

Kelsey Brooks

Date: 03/14/2018

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-141
Revised April 3, 2017
Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☒ Final Report


Name of Company: COG Operating LLC OGRID # 229137	Contact: Robert McNeill
Address: 600 West Illinois Avenue, Midland TX 79701	Telephone No. 432-683-7443
Facility Name: Monet Federal Com #003H Tank Battery	Facility Type: Tank Battery
Surface Owner: Federal	Mineral Owner: Federal
API No. 30-025-42763	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
C	04	25S	33E	190	North	1980	West	Lea

Latitude 32.16674599 Longitude -103.5793769

NATURE OF RELEASE

Type of Release: Oil (Fire)	Volume of Release: EST. 188 bbls Oil	Volume Recovered: 0 bbls
Source of Release: Flare	Date and Hour of Occurrence: December 6, 2017 8:00 am	Date and Hour of Discovery: December 6, 2017 8:00 am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Ms. Yu NMOCD / Ms. Tucker BLM	
By Whom? Becky Haskell	Date and Hour: December 6, 2017 1:23 PM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.*		
Describe Cause of Problem and Remedial Action Taken.* The release/fire was caused by paraffin plugging the supply gas little joe regulator which caused the vessels to lose supply pressure to the dumps, sending fluid to the flare. The little joe regulator will be replaced and the lines cleared of paraffin.		
Describe Area Affected and Cleanup Action Taken.* The release/fire was contained in the firewall around the flare and all fluids burned. Concho will have the spill area evaluated for any possible impact from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation work.		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		
Signature: 	<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Dakota Neel	Approved by Environmental Specialist:	
Title: HSE Coordinator	Approval Date:	Expiration Date:
E-mail Address: dneel2@concho.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: December 14, 2017 Phone: 575-748-2010		

* Attach Additional Sheets If Necessary

APPENDIX VI



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

September 24, 2018

DAKOTA NEEL

COG OPERATING

P. O. BOX 1630

ARTESIA, NM 88210

RE: MONET FEDERAL COM #003H

Enclosed are the results of analyses for samples received by the laboratory on 09/21/18 14:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 09/21/2018
 Reported: 09/24/2018
 Project Name: MONET FEDERAL COM #003H
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 09/19/2018
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SP-1 (H802683-01)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/24/2018	ND	1.85	92.3	2.00	5.40		
Toluene*	<0.050	0.050	09/24/2018	ND	1.94	97.2	2.00	6.62		
Ethylbenzene*	<0.050	0.050	09/24/2018	ND	2.03	101	2.00	4.80		
Total Xylenes*	<0.150	0.150	09/24/2018	ND	6.07	101	6.00	4.72		
Total BTEX	<0.300	0.300	09/24/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 84.6 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	09/22/2018	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/22/2018	ND	182	91.1	200	0.852	
DRO >C10-C28*	13.5	10.0	09/22/2018	ND	194	96.9	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	09/22/2018	ND					

Surrogate: 1-Chlorooctane 86.0 % 41-142

Surrogate: 1-Chlorooctadecane 86.9 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	09/21/2018	Sampling Date:	09/19/2018
Reported:	09/24/2018	Sampling Type:	Soil
Project Name:	MONET FEDERAL COM #003H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SP-2 (H802683-02)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/24/2018	ND	1.85	92.3	2.00	5.40		
Toluene*	<0.050	0.050	09/24/2018	ND	1.94	97.2	2.00	6.62		
Ethylbenzene*	<0.050	0.050	09/24/2018	ND	2.03	101	2.00	4.80		
Total Xylenes*	<0.150	0.150	09/24/2018	ND	6.07	101	6.00	4.72		
Total BTEx	<0.300	0.300	09/24/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 87.5 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	09/22/2018	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/22/2018	ND	182	91.1	200	0.852	
DRO >C10-C28*	<10.0	10.0	09/22/2018	ND	194	96.9	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	09/22/2018	ND					

Surrogate: 1-Chlorooctane 89.3 % 41-142

Surrogate: 1-Chlorooctadecane 89.9 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 09/21/2018
 Reported: 09/24/2018
 Project Name: MONET FEDERAL COM #003H
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 09/19/2018
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SP-3 (H802683-03)

BTX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/24/2018	ND	1.85	92.3	2.00	5.40		
Toluene*	<0.050	0.050	09/24/2018	ND	1.94	97.2	2.00	6.62		
Ethylbenzene*	<0.050	0.050	09/24/2018	ND	2.03	101	2.00	4.80		
Total Xylenes*	<0.150	0.150	09/24/2018	ND	6.07	101	6.00	4.72		
Total BTX	<0.300	0.300	09/24/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 85.6 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	09/22/2018	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/22/2018	ND	182	91.1	200	0.852	
DRO >C10-C28*	<10.0	10.0	09/22/2018	ND	194	96.9	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	09/22/2018	ND					

Surrogate: 1-Chlorooctane 97.0 % 41-142

Surrogate: 1-Chlorooctadecane 96.6 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 09/21/2018
 Reported: 09/24/2018
 Project Name: MONET FEDERAL COM #003H
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 09/19/2018
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SP-4 (H802683-04)

BTEX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/24/2018	ND	1.85	92.3	2.00	5.40		
Toluene*	<0.050	0.050	09/24/2018	ND	1.94	97.2	2.00	6.62		
Ethylbenzene*	<0.050	0.050	09/24/2018	ND	2.03	101	2.00	4.80		
Total Xylenes*	<0.150	0.150	09/24/2018	ND	6.07	101	6.00	4.72		
Total BTEX	<0.300	0.300	09/24/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 86.1 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	09/22/2018	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/22/2018	ND	182	91.1	200	0.852	
DRO >C10-C28*	<10.0	10.0	09/22/2018	ND	194	96.9	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	09/22/2018	ND					

Surrogate: 1-Chlorooctane 90.7 % 41-142

Surrogate: 1-Chlorooctadecane 92.3 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	09/21/2018	Sampling Date:	09/19/2018
Reported:	09/24/2018	Sampling Type:	Soil
Project Name:	MONET FEDERAL COM #003H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SP-5 (H802683-05)

BTX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/24/2018	ND	1.85	92.3	2.00	5.40		
Toluene*	<0.050	0.050	09/24/2018	ND	1.94	97.2	2.00	6.62		
Ethylbenzene*	<0.050	0.050	09/24/2018	ND	2.03	101	2.00	4.80		
Total Xylenes*	<0.150	0.150	09/24/2018	ND	6.07	101	6.00	4.72		
Total BTX	<0.300	0.300	09/24/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 84.6 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	09/22/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/22/2018	ND	182	91.1	200	0.852	
DRO >C10-C28*	35.0	10.0	09/22/2018	ND	194	96.9	200	2.58	
EXT DRO >C28-C36	11.0	10.0	09/22/2018	ND					

Surrogate: 1-Chlorooctane 86.3 % 41-142

Surrogate: 1-Chlorooctadecane 87.1 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	09/21/2018	Sampling Date:	09/19/2018
Reported:	09/24/2018	Sampling Type:	Soil
Project Name:	MONET FEDERAL COM #003H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SP-6 (H802683-06)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/24/2018	ND	1.85	92.3	2.00	5.40		
Toluene*	<0.050	0.050	09/24/2018	ND	1.94	97.2	2.00	6.62		
Ethylbenzene*	<0.050	0.050	09/24/2018	ND	2.03	101	2.00	4.80		
Total Xylenes*	<0.150	0.150	09/24/2018	ND	6.07	101	6.00	4.72		
Total BTEx	<0.300	0.300	09/24/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 87.8 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	09/22/2018	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/22/2018	ND	182	91.1	200	0.852	
DRO >C10-C28*	28.0	10.0	09/22/2018	ND	194	96.9	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	09/22/2018	ND					

Surrogate: 1-Chlorooctane 82.3 % 41-142

Surrogate: 1-Chlorooctadecane 81.6 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received: 09/21/2018
 Reported: 09/24/2018
 Project Name: MONET FEDERAL COM #003H
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 09/19/2018
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: SP-7 (H802683-07)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/24/2018	ND	1.85	92.3	2.00	5.40		
Toluene*	<0.050	0.050	09/24/2018	ND	1.94	97.2	2.00	6.62		
Ethylbenzene*	<0.050	0.050	09/24/2018	ND	2.03	101	2.00	4.80		
Total Xylenes*	<0.150	0.150	09/24/2018	ND	6.07	101	6.00	4.72		
Total BTEx	<0.300	0.300	09/24/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 86.2 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	09/22/2018	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/22/2018	ND	182	91.1	200	0.852	
DRO >C10-C28*	<10.0	10.0	09/22/2018	ND	194	96.9	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	09/22/2018	ND					

Surrogate: 1-Chlorooctane 88.2 % 41-142

Surrogate: 1-Chlorooctadecane 86.6 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	09/21/2018	Sampling Date:	09/19/2018
Reported:	09/24/2018	Sampling Type:	Soil
Project Name:	MONET FEDERAL COM #003H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SP-8 (H802683-08)

BTX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/24/2018	ND	1.85	92.3	2.00	5.40		
Toluene*	<0.050	0.050	09/24/2018	ND	1.94	97.2	2.00	6.62		
Ethylbenzene*	<0.050	0.050	09/24/2018	ND	2.03	101	2.00	4.80		
Total Xylenes*	<0.150	0.150	09/24/2018	ND	6.07	101	6.00	4.72		
Total BTX	<0.300	0.300	09/24/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 88.1 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	09/22/2018	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/22/2018	ND	182	91.1	200	0.852	
DRO >C10-C28*	14.9	10.0	09/22/2018	ND	194	96.9	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	09/22/2018	ND					

Surrogate: 1-Chlorooctane 93.4 % 41-142

Surrogate: 1-Chlorooctadecane 95.2 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	09/21/2018	Sampling Date:	09/19/2018
Reported:	09/24/2018	Sampling Type:	Soil
Project Name:	MONET FEDERAL COM #003H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SP-9 (H802683-09)

BTEX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/24/2018	ND	1.85	92.3	2.00	5.40		
Toluene*	<0.050	0.050	09/24/2018	ND	1.94	97.2	2.00	6.62		
Ethylbenzene*	<0.050	0.050	09/24/2018	ND	2.03	101	2.00	4.80		
Total Xylenes*	<0.150	0.150	09/24/2018	ND	6.07	101	6.00	4.72		
Total BTEX	<0.300	0.300	09/24/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 85.6 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	09/22/2018	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/22/2018	ND	182	91.1	200	0.852	
DRO >C10-C28*	<10.0	10.0	09/22/2018	ND	194	96.9	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	09/22/2018	ND					

Surrogate: 1-Chlorooctane 67.3 % 41-142

Surrogate: 1-Chlorooctadecane 65.6 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	09/21/2018	Sampling Date:	09/19/2018
Reported:	09/24/2018	Sampling Type:	Soil
Project Name:	MONET FEDERAL COM #003H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SP-10 (H802683-10)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/24/2018	ND	1.85	92.3	2.00	5.40		
Toluene*	<0.050	0.050	09/24/2018	ND	1.94	97.2	2.00	6.62		
Ethylbenzene*	<0.050	0.050	09/24/2018	ND	2.03	101	2.00	4.80		
Total Xylenes*	<0.150	0.150	09/24/2018	ND	6.07	101	6.00	4.72		
Total BTEx	<0.300	0.300	09/24/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 88.3 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	800	16.0	09/22/2018	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/22/2018	ND	182	91.1	200	0.852	
DRO >C10-C28*	154	10.0	09/22/2018	ND	194	96.9	200	2.58	
EXT DRO >C28-C36	72.6	10.0	09/22/2018	ND					

Surrogate: 1-Chlorooctane 79.3 % 41-142

Surrogate: 1-Chlorooctadecane 87.8 % 37.6-147

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Analytical Results For:

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

Received:	09/21/2018	Sampling Date:	09/19/2018
Reported:	09/24/2018	Sampling Type:	Soil
Project Name:	MONET FEDERAL COM #003H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SP-11 (H802683-11)

BTEX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/24/2018	ND	1.85	92.3	2.00	5.40		
Toluene*	<0.050	0.050	09/24/2018	ND	1.94	97.2	2.00	6.62		
Ethylbenzene*	<0.050	0.050	09/24/2018	ND	2.03	101	2.00	4.80		
Total Xylenes*	<0.150	0.150	09/24/2018	ND	6.07	101	6.00	4.72		
Total BTEX	<0.300	0.300	09/24/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 85.5 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	240	16.0	09/22/2018	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/22/2018	ND	182	91.1	200	0.852	
DRO >C10-C28*	<10.0	10.0	09/22/2018	ND	194	96.9	200	2.58	
EXT DRO >C28-C36	<10.0	10.0	09/22/2018	ND					

Surrogate: 1-Chlorooctane 75.2 % 41-142

Surrogate: 1-Chlorooctadecane 75.8 % 37.6-147

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Analytical Results For:

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

Received:	09/21/2018	Sampling Date:	09/19/2018
Reported:	09/24/2018	Sampling Type:	Soil
Project Name:	MONET FEDERAL COM #003H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SP-12 (H802683-12)

BTEX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/24/2018	ND	1.85	92.3	2.00	5.40		
Toluene*	<0.050	0.050	09/24/2018	ND	1.94	97.2	2.00	6.62		
Ethylbenzene*	<0.050	0.050	09/24/2018	ND	2.03	101	2.00	4.80		
Total Xylenes*	<0.150	0.150	09/24/2018	ND	6.07	101	6.00	4.72		
Total BTEX	<0.300	0.300	09/24/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 87.1 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1040	16.0	09/22/2018	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/24/2018	ND	184	91.8	200	2.59	
DRO >C10-C28*	26.1	10.0	09/24/2018	ND	194	97.2	200	0.566	
EXT DRO >C28-C36	<10.0	10.0	09/24/2018	ND					

Surrogate: 1-Chlorooctane 95.2 % 41-142

Surrogate: 1-Chlorooctadecane 96.9 % 37.6-147

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Analytical Results For:

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

Received:	09/21/2018	Sampling Date:	09/19/2018
Reported:	09/24/2018	Sampling Type:	Soil
Project Name:	MONET FEDERAL COM #003H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SP-13 (H802683-13)

BTEX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/24/2018	ND	1.85	92.3	2.00	5.40		
Toluene*	<0.050	0.050	09/24/2018	ND	1.94	97.2	2.00	6.62		
Ethylbenzene*	<0.050	0.050	09/24/2018	ND	2.03	101	2.00	4.80		
Total Xylenes*	<0.150	0.150	09/24/2018	ND	6.07	101	6.00	4.72		
Total BTEX	<0.300	0.300	09/24/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 85.4 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1490	16.0	09/22/2018	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/24/2018	ND	184	91.8	200	2.59	
DRO >C10-C28*	<10.0	10.0	09/24/2018	ND	194	97.2	200	0.566	
EXT DRO >C28-C36	<10.0	10.0	09/24/2018	ND					

Surrogate: 1-Chlorooctane 91.6 % 41-142

Surrogate: 1-Chlorooctadecane 92.2 % 37.6-147

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Analytical Results For:

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

Received:	09/21/2018	Sampling Date:	09/19/2018
Reported:	09/24/2018	Sampling Type:	Soil
Project Name:	MONET FEDERAL COM #003H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SP-14 (H802683-14)

BTEX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/24/2018	ND	1.85	92.3	2.00	5.40		
Toluene*	<0.050	0.050	09/24/2018	ND	1.94	97.2	2.00	6.62		
Ethylbenzene*	<0.050	0.050	09/24/2018	ND	2.03	101	2.00	4.80		
Total Xylenes*	<0.150	0.150	09/24/2018	ND	6.07	101	6.00	4.72		
Total BTEX	<0.300	0.300	09/24/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 85.9 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	09/22/2018	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/24/2018	ND	184	91.8	200	2.59	
DRO >C10-C28*	56.5	10.0	09/24/2018	ND	194	97.2	200	0.566	
EXT DRO >C28-C36	16.0	10.0	09/24/2018	ND					

Surrogate: 1-Chlorooctane 84.6 % 41-142

Surrogate: 1-Chlorooctadecane 88.8 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received:	09/21/2018	Sampling Date:	09/19/2018
Reported:	09/24/2018	Sampling Type:	Soil
Project Name:	MONET FEDERAL COM #003H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SP-15 (H802683-15)

BTEX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/24/2018	ND	1.85	92.3	2.00	5.40		
Toluene*	<0.050	0.050	09/24/2018	ND	1.94	97.2	2.00	6.62		
Ethylbenzene*	<0.050	0.050	09/24/2018	ND	2.03	101	2.00	4.80		
Total Xylenes*	<0.150	0.150	09/24/2018	ND	6.07	101	6.00	4.72		
Total BTEX	<0.300	0.300	09/24/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 84.9 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	09/22/2018	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/24/2018	ND	184	91.8	200	2.59	
DRO >C10-C28*	<10.0	10.0	09/24/2018	ND	194	97.2	200	0.566	
EXT DRO >C28-C36	<10.0	10.0	09/24/2018	ND					

Surrogate: 1-Chlorooctane 69.5 % 41-142

Surrogate: 1-Chlorooctadecane 69.9 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	09/21/2018	Sampling Date:	09/19/2018
Reported:	09/24/2018	Sampling Type:	Soil
Project Name:	MONET FEDERAL COM #003H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SP-16 (H802683-16)

BTEX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/24/2018	ND	1.85	92.3	2.00	5.40		
Toluene*	<0.050	0.050	09/24/2018	ND	1.94	97.2	2.00	6.62		
Ethylbenzene*	<0.050	0.050	09/24/2018	ND	2.03	101	2.00	4.80		
Total Xylenes*	<0.150	0.150	09/24/2018	ND	6.07	101	6.00	4.72		
Total BTEX	<0.300	0.300	09/24/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 85.5 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	320	16.0	09/22/2018	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/24/2018	ND	184	91.8	200	2.59	
DRO >C10-C28*	91.1	10.0	09/24/2018	ND	194	97.2	200	0.566	
EXT DRO >C28-C36	42.8	10.0	09/24/2018	ND					

Surrogate: 1-Chlorooctane 88.6 % 41-142

Surrogate: 1-Chlorooctadecane 94.4 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	09/21/2018	Sampling Date:	09/19/2018
Reported:	09/24/2018	Sampling Type:	Soil
Project Name:	MONET FEDERAL COM #003H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SP-17 (H802683-17)

BTEX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/24/2018	ND	1.85	92.3	2.00	5.40		
Toluene*	<0.050	0.050	09/24/2018	ND	1.94	97.2	2.00	6.62		
Ethylbenzene*	<0.050	0.050	09/24/2018	ND	2.03	101	2.00	4.80		
Total Xylenes*	<0.150	0.150	09/24/2018	ND	6.07	101	6.00	4.72		
Total BTEX	<0.300	0.300	09/24/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 85.8 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	09/22/2018	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/24/2018	ND	184	91.8	200	2.59	
DRO >C10-C28*	46.8	10.0	09/24/2018	ND	194	97.2	200	0.566	
EXT DRO >C28-C36	13.8	10.0	09/24/2018	ND					

Surrogate: 1-Chlorooctane 91.6 % 41-142

Surrogate: 1-Chlorooctadecane 96.9 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager

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Notes and Definitions

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

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: COG Operating LLC
Project Manager: Dakota Neel
Address: 2208 West Main
City: Artesia
State: NM
Zip: 88210
Phone #: (575) 748-6930
Fax #:
Project #:
Project Owner:
Project Name: Monet Federal Com #003H
Project Location:
Sampler Name: Dakota Neel

P.O. #:
Company: COG Operating LLC
Attn: Robert McNeill
Address: 600 W Illinois
City: Midland
State: TX
Zip: 79701
Phone #: (432) 221-0388
Fax #:

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.		DATE	TIME	ANALYSIS REQUEST									
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL			BTEX	TPH Extended	Chloride							
15020683	SP-1		1			X					X	9/19/18	1:00 PM	X	X	X							
	SP-2		1			X					X	9/19/18	1:00 PM	X	X	X							
	SP-3		1			X					X	9/19/18	1:00 PM	X	X	X							
	SP-4		1			X					X	9/19/18	1:00 PM	X	X	X							
	SP-5		1			X					X	9/19/18	1:00 PM	X	X	X							
	SP-6		1			X					X	9/19/18	1:00 PM	X	X	X							
	SP-7		1			X					X	9/19/18	1:00 PM	X	X	X							
	SP-8		1			X					X	9/19/18	1:00 PM	X	X	X							
	SP-9		1			X					X	9/19/18	1:00 PM	X	X	X							
	SP-10		1			X					X	9/19/18	1:00 PM	X	X	X							

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Relinquished By:
Date: 9/21/2018
Time: 4:45
Received By:
Date:
Time:
CHECKED BY:
REMARKS:
Phone Result:
Fax Result:
Add'l Phone #:
Add'l Fax #:
RUSH

Delivered By: (Circle One)
Sampler - UPS - Bus - Other: 4.5c / #497
Sample Condition: Cool Intact
Yes
No
Checked By:
REMARKS:
Phone Result:
Fax Result:
Add'l Phone #:
Add'l Fax #:
RUSH



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: COG Operating LLC						P.O. #:					
Project Manager: Dakota Neel						Company: COG Operating LLC					
Address: 2208 West Main						Attn: Robert McNeill					
City: Artesia						State: NM Zip: 88210					
Phone #: (575) 748-6930 Fax #:						Address: 600 W Illinois					
Project #: Project Owner:						City: Midland					
Project Name: Monet Federal Com #003						State: TX Zip: 79701					
Project Location:						Phone #: (432) 221-0388					
Sampler Name: Dakota Neel						Fax #:					
FOR LAB USE ONLY											
Lab I.D.						Sample I.D.					
H802683						(G)RAB OR (C)OMP.					
						# CONTAINERS					
						GROUNDWATER					
						WASTEWATER					
						SOIL					
						OIL					
						SLUDGE					
						OTHER :					
						ACID/BASE:					
						ICE / COOL					
						OTHER :					
SP-11						DATE TIME					
1						9/19/18 1:00 PM					
SP-12						9/19/18 1:00 PM					
12						9/19/18 1:00 PM					
SP-13						9/19/18 1:00 PM					
13						9/19/18 1:00 PM					
SP-14						9/19/18 1:00 PM					
14						9/19/18 1:00 PM					
SP-15						9/19/18 1:00 PM					
15						9/19/18 1:00 PM					
SP-16						9/19/18 1:00 PM					
16						9/19/18 1:00 PM					
SP-17						9/19/18 1:00 PM					
17						9/19/18 1:00 PM					
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Relinquished By:						Received By:					
Date: 9/21/2018						Time: 14:45					
Relinquished By:						Received By:					
Date:						Time:					
Delivered By: (Circle One)						Sample Condition					
Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>						CHECKED BY: (Initials)					
Sampler - UPS - Bus - Other: 4.5c/#97						Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>					
FORM-006 R 2.0						REMARKS:					



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

September 30, 2018

SHELDON HITCHCOCK

COG OPERATING

P. O. BOX 1630

ARTESIA, NM 88210

RE: MONET FEDERAL COM #003H

Enclosed are the results of analyses for samples received by the laboratory on 09/27/18 11:47.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

COG OPERATING
SHELDON HITCHCOCK
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received:	09/27/2018	Sampling Date:	09/27/2018
Reported:	09/30/2018	Sampling Type:	Soil
Project Name:	MONET FEDERAL COM #003H	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	LEA CO NM		

Sample ID: SP-10 (H802742-01)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/27/2018	ND	1.90	94.9	2.00	4.37	
Toluene*	<0.050	0.050	09/27/2018	ND	2.12	106	2.00	4.47	
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.24	112	2.00	4.35	
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.51	109	6.00	4.79	
Total BTEX	<0.300	0.300	09/27/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	09/29/2018	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/27/2018	ND	194	97.2	200	1.98	
DRO >C10-C28*	<10.0	10.0	09/27/2018	ND	208	104	200	3.40	
EXT DRO >C28-C36	<10.0	10.0	09/27/2018	ND					

Surrogate: 1-Chlorooctane 85.7 % 41-142

Surrogate: 1-Chlorooctadecane 82.8 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

COG OPERATING
SHELDON HITCHCOCK
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 09/27/2018
Reported: 09/30/2018
Project Name: MONET FEDERAL COM #003H
Project Number: NOT GIVEN
Project Location: LEA CO NM

Sampling Date: 09/27/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP-12 (H802742-02)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/27/2018	ND	1.90	94.9	2.00	4.37		
Toluene*	<0.050	0.050	09/27/2018	ND	2.12	106	2.00	4.47		
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.24	112	2.00	4.35		
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.51	109	6.00	4.79		
Total BTEX	<0.300	0.300	09/27/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	09/29/2018	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/27/2018	ND	194	97.2	200	1.98	
DRO >C10-C28*	<10.0	10.0	09/27/2018	ND	208	104	200	3.40	
EXT DRO >C28-C36	<10.0	10.0	09/27/2018	ND					

Surrogate: 1-Chlorooctane 87.4 % 41-142

Surrogate: 1-Chlorooctadecane 81.6 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

COG OPERATING
SHELDON HITCHCOCK
P. O. BOX 1630
ARTESIA NM, 88210
Fax To: NONE

Received: 09/27/2018
Reported: 09/30/2018
Project Name: MONET FEDERAL COM #003H
Project Number: NOT GIVEN
Project Location: LEA CO NM

Sampling Date: 09/27/2018
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: SP-13 (H802742-03)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/27/2018	ND	1.90	94.9	2.00	4.37		
Toluene*	<0.050	0.050	09/27/2018	ND	2.12	106	2.00	4.47		
Ethylbenzene*	<0.050	0.050	09/27/2018	ND	2.24	112	2.00	4.35		
Total Xylenes*	<0.150	0.150	09/27/2018	ND	6.51	109	6.00	4.79		
Total BTEX	<0.300	0.300	09/27/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	5760	16.0	09/29/2018	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/27/2018	ND	194	97.2	200	1.98	
DRO >C10-C28*	<10.0	10.0	09/27/2018	ND	208	104	200	3.40	
EXT DRO >C28-C36	<10.0	10.0	09/27/2018	ND					

Surrogate: 1-Chlorooctane 90.5 % 41-142

Surrogate: 1-Chlorooctadecane 86.0 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager

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Notes and Definitions

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

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*=Accredited Analyte

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A handwritten signature in black ink, appearing to read "Celey D. Keene", is written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager



CARDINAL
Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

[illegible]



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

October 09, 2018

DAKOTA NEEL

COG OPERATING

P. O. BOX 1630

ARTESIA, NM 88210

RE: MONET FEDERAL COM #003H

Enclosed are the results of analyses for samples received by the laboratory on 10/08/18 14:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	10/08/2018	Sampling Date:	10/03/2018
Reported:	10/09/2018	Sampling Type:	Soil
Project Name:	MONET FEDERAL COM #003H	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

Sample ID: SP-13 (H802854-01)

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/09/2018	ND	2.12	106	2.00	0.321	
Toluene*	<0.050	0.050	10/09/2018	ND	1.97	98.7	2.00	0.155	
Ethylbenzene*	<0.050	0.050	10/09/2018	ND	1.96	98.2	2.00	0.276	
Total Xylenes*	<0.150	0.150	10/09/2018	ND	5.89	98.2	6.00	0.482	
Total BTX	<0.300	0.300	10/09/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 93.2 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	10/09/2018	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/09/2018	ND	169	84.7	200	0.970	
DRO >C10-C28*	<10.0	10.0	10/09/2018	ND	172	85.8	200	2.75	
EXT DRO >C28-C36	<10.0	10.0	10/09/2018	ND					

Surrogate: 1-Chlorooctane 85.4 % 41-142

Surrogate: 1-Chlorooctadecane 82.6 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager

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Notes and Definitions

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

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager

Page 4 of 4



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

1051

[illegible]

APPENDIX VII

30

60

90

120

72°E (T) 32.165714°, -103.579865° ±16.4ft ▲ 3487ft



27 Sep 2018, 09:20



30

60

90

120

E

SE

☼ 77°E (T) ● 32.166706°, -103.578598° ±16.4ft ▲ 3454ft



27 Sep 2018, 09:40

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 161233

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 161233
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

Created By	Condition	Condition Date
bhall	None	11/23/2022