### Fields, Vanessa, EMNRD

From:	Fields, Vanessa, EMNRD
Sent:	Thursday, February 28, 2019 11:09 AM
То:	DeAnn Grant; EMNRD-OCD-District1spills; jamos@blm.gov; Rebecca Haskell
Cc:	Griswold, Jim, EMNRD; Tucker, Shelly; Jennifer Knowlton; Ike Tavarez; Robert McNeill; Sheldon
	Hitchcock; Dakota Neel; dmckinne@blm.gov
Subject:	RE: (Resubmittal) (Site Characterization and Remediation Work Plan) Nocaster 19 Federal #004H
	(30-025-41449) 09-20-2018 (1RP-5211)

Good morning Becky,

Per our conversation this morning please include in your summary that Concho applies micro blaze after a release has occurred, I was unaware this is a standard operating procedure for all releases that occur on Concho assets.

The remediation plan has been approved with the following conditions:

• Concho will need to collect (2) 5-point composite samples in the over sprayed release area. If samples results are above regulatory standards, further remediation will need to commence.

OCD Approval of the plan does not relieve the operator of any requirements imposed by other regulatory agencies.

Thank you,

Vanessa Fields Environmental Specialist Oil Conservation Division Energy, Minerals, & Natural Resources 1000 Rio Brazos, Aztec, NM 87410 (505)334-6178 ext 119 Cell: (505) 419-0463 vanessa.fields@state.nm.us

From: DeAnn Grant <agrant@concho.com>Sent: Wednesday, February 13, 2019 12:37 PMTo: EMNRD-OCD-District1spills <EMNRD-OCD-District1spills@state.nm.us>; jamos@blm.govCc: Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>; Tucker, Shelly <stucker@blm.gov>; Jennifer Knowlton<jknowlton@concho.com>; Ike Tavarez <itavarez@concho.com>; Robert McNeill <RMcNeill@concho.com>; SheldonHitchcock <SLHitchcock@concho.com>; Dakota Neel <DNeel2@concho.com>; Rebecca Haskell<RHaskell@concho.com>; DeAnn Grant <agrant@concho.com>; dmckinne@blm.govSubject: [EXT] (Resubmittal) (Site Characterization and Remediation Work Plan) Nocaster 19 Federal #004H (30-025-41449) 09-20-2018 (1RP-5211)

To Whom It May Concern,

Please find the attached Work Plan for the COG Nocaster 19 Federal #004H (1RP-5211) release which occurred on 9/20/2018. The work plan was originally submitted to the NMOCD District 1 Office on December 19, 2018. COG is requesting that you review this work plan.

Thank you,

#### **DeArm Grant** HSE Administrative Assistant

agrant@concho.com COG Operating LLC# 600 W Illinois Avenue | Midland, TX 79701 Direct: 432-253-4513 | Main: 432.683.7443



From: Rebecca Haskell
Sent: Wednesday, December 19, 2018 1:17 PM
To: Hernandez, Christina, EMNRD <<u>Christina.Hernandez@state.nm.us</u>>; Mann, Ryan <<u>rmann@slo.state.nm.us</u>>; <a href="mailto:stucker@blm.gov">stucker@blm.gov</a>
Cc: Ike Tavarez <<u>itavarez@concho.com</u>>; Dakota Neel <<u>DNeel2@concho.com</u>>; Sheldon Hitchcock
<<u>SLHitchcock@concho.com</u>>; DeAnn Grant <<u>agrant@concho.com</u>>; Robert McNeill<<u>RMcNeill@concho.com</u>>; Rebecca Haskell <<u>RHaskell@concho.com</u>>; Site Characterization and Remediation Work Plan) Nocaster 19 Federal #004H (30-025-41449) 09-20-2018 (1RP-5211)

Ms. Hernandez, Mr. Mann, and Ms. Tucker,

Please find the attached Site Characterization and Remediation Work Plan for the Nocaster 19 Federal #004H release which occurred on September 20, 2018 for your review and approval. If you have any questions or concerns please contact me.

### Thank You,

Becky Haskell Senior HSE Coordinator COG Operating LLC 600 W Illinois Avenue | Midland, TX 79701 Direct: 432-818-2372 | Main: 432.683.7443 Cell: 432-556-5130 rhaskell@concho.com



CONFIDENTIALITY NOTICE: The information in this email may be confidential and/or privileged. If you are not the intended recipient or an authorized representative of the intended recipient, you are hereby notified that any review, dissemination or copying of this email and its attachments, if any, or the information herein, is prohibited. If you received this email in error, please immediately notify the sender by return email and delete this email from your system. Thank you.

From: Yu, Olivia, EMNRD [mailto:Olivia.Yu@state.nm.us]
Sent: Thursday, September 27, 2018 10:36 AM
To: Rebecca Haskell <<u>RHaskell@concho.com</u>>; DeAnn Grant <<u>agrant@concho.com</u>>; Mann, Ryan

<<u>rmann@slo.state.nm.us</u>>; Tucker, Shelly <<u>stucker@blm.gov</u>> Cc: Hernandez, Christina, EMNRD <<u>Christina.Hernandez@state.nm.us</u>>; Griswold, Jim, EMNRD <<u>Jim.Griswold@state.nm.us</u>>; jamos@blm.gov; Ike Tavarez <<u>itavarez@concho.com</u>>; Robert McNeill <<u>RMcNeill@concho.com</u>>; Sheldon Hitchcock <<u>SLHitchcock@concho.com</u>>; Dakota Neel <<u>DNeel2@concho.com</u>> Subject: [External] RE: [EXT] RE: (C-141 Initial) Nocaster 19 Federal #004H (30-025-41449) 09-20-2018

Ms. Haskell:

Acknowledged. Thanks for your prompt response regarding the release calculation as provided just for the area with overspray.

Olivia

From: Rebecca Haskell <<u>RHaskell@concho.com</u>> Sent: Thursday, September 27, 2018 9:10 AM To: Yu, Olivia, EMNRD <<u>Olivia.Yu@state.nm.us</u>>; DeAnn Grant <<u>agrant@concho.com</u>>; Mann, Ryan <<u>rmann@slo.state.nm.us</u>>; Tucker, Shelly <<u>stucker@blm.gov</u>> Cc: Hernandez, Christina, EMNRD <<u>Christina.Hernandez@state.nm.us</u>>; Griswold, Jim, EMNRD <<u>Jim.Griswold@state.nm.us</u>>; jamos@blm.gov; Ike Tavarez <<u>itavarez@concho.com</u>>; Robert McNeill <<u>RMcNeill@concho.com</u>>; Sheldon Hitchcock <<u>SLHitchcock@concho.com</u>>; Dakota Neel <<u>DNeel2@concho.com</u>> Subject: [EXT] RE: (C-141 Initial) Nocaster 19 Federal #004H (30-025-41449) 09-20-2018

Ms. Yu,

It is a very light overspray and yes it was measured with a measuring devise.

Thank You,

Becky Haskell Senior HSE Coordinator COG Operating LLC 600 W Illinois Avenue | Midland, TX 79701 Direct: 432-818-2372 | Main: 432.683.7443 Cell: 432-556-5130 rhaskell@concho.com



CONFIDENTIALITY NOTICE: The information in this email may be confidential and/or privileged. If you are not the intended recipient or an authorized representative of the intended recipient, you are hereby notified that any review, dissemination or copying of this email and its attachments, if any, or the information herein, is prohibited. If you received this email in error, please immediately notify the sender by return email and delete this email from your system. Thank you.

From: Yu, Olivia, EMNRD [mailto:Olivia.Yu@state.nm.us]
Sent: Thursday, September 27, 2018 10:00 AM
To: DeAnn Grant; Mann, Ryan; Tucker, Shelly
Cc: Hernandez, Christina, EMNRD; Griswold, Jim, EMNRD; jamos@blm.gov; Ike Tavarez; Robert McNeill; Sheldon Hitchcock; Dakota Neel; Rebecca Haskell
Subject: [External] RE: (C-141 Initial) Nocaster 19 Federal #004H (30-025-41449) 09-20-2018

\*\*\*\* External email. Use caution. \*\*\*\*

Good morning Ms. Haskell:

Please clarify how depth of wet soil was determined. Was 0.1 inch measured with a ruler?

Thanks, Olivia

From: DeAnn Grant <agrant@concho.com>
Sent: Monday, September 24, 2018 4:37 PM
To: Yu, Olivia, EMNRD <<u>Olivia.Yu@state.nm.us</u>>; Mann, Ryan <<u>rmann@slo.state.nm.us</u>>; Tucker, Shelly<<<u>stucker@blm.gov></u>
Cc: Hernandez, Christina, EMNRD <<u>Christina.Hernandez@state.nm.us</u>>; Griswold, Jim, EMNRD
<<u>Jim.Griswold@state.nm.us</u>>; jamos@blm.gov; Ike Tavarez <<u>itavarez@concho.com</u>>; Robert McNeill
<<u>RMcNeill@concho.com</u>>; Sheldon Hitchcock <<u>SLHitchcock@concho.com</u>>; Dakota Neel <<u>DNeel2@concho.com</u>>; Rebecca Haskell@<u>concho.com</u>>; DeAnn Grant <<u>agrant@concho.com</u>>
Subject: (C-141 Initial) Nocaster 19 Federal #004H (30-025-41449) 09-20-2018

Ms. Yu/Mr. Mann/Ms. Tucker,

Please find the attached C-141 for your consideration. Also, attached is the calculation sheet to determine the estimated release volume released. The liquid lost estimate is based on the spill dimensions, estimated depth of fluid (wet soil depth) and type of formation. The spreadsheet will calculate the volume lost in the ground and does not include the recovered amount in the calculation. The calculated volume in the ground and the volume recovered were added together and reported on the C-141. If you have any questions or concerns please do not hesitate to contact me.

Thank you,

### DeAnn Grant

HSE Administrative Assistant agrant@concho.com COG Operating LLC# 600 W Illinois Avenue | Midland, TX 79701 Direct: 432-253-4513 | Main: 432.683.7443





NOTICE: The information in this email may be confidential and/or privileged. If you are not the intended recipient or an authorized representative of the intended recipient, you are hereby notified that any review, dissemination or copying of this email and its attachments, if any, or the information contained herein, is prohibited. If you have received this email in error, please immediately notify the sender by return email and delete this email from your system. Further, any contract terms proposed or purportedly accepted in this email are not binding and are subject to management's final approval as memorialized in a separate written instrument, excluding electronic correspondence, executed by an authorized representative of COG Operating LLC or its affiliates.



December 19, 2018

Christina Hernandez Oil Conservation Division, District 1 1625 N. French Dr. Hobbs, NM 88240

Ryan Mann New Mexico State Land Office 2827 N. Dal Paso Suite 117 Hobbs, NM 88240

Shelly Tucker Bureau of Land Management, CFO 620 E. Green Street Carlsbad, NM 88220

Site Characterization and Remediation Work Plan Nocaster 19 Federal #004H API#: 30-025-41449 RP#: 1RP-5211 DOR: September 20, 2018 GPS: 32.284264 -103.503040 Unit Letter P, Section 19, Township 23 South, Range 34 East Lea County, New Mexico

Ms. Hernandez/Mr. Mann/Ms. Tucker,

COG Operating, LLC (COG) is pleased to submit the following Site Characterization and Remediation Work Plan in response to a release that occurred at the Nocaster 19 Federal #004H. The release is located in Unit Letter P, Section 19, Township 23 South and Range 34 East in Lea County, New Mexico. More specifically the latitude and longitude for the release are 32.284264 North and -103.503040 West.

### BACKGROUND

The release was discovered on September 20, 2018. A C-141 initial report was submitted to the New Mexico Oil Conservation Division (NMOCD) and the Bureau of Land Management (BLM). The initial C-141 is presented in Appendix A. The release was caused by the equalizer being closed while circulating tanks which caused one of the tanks to overflow. The release was a crude oil release of forty-five (45) barrels (bbl.). Windy conditions on that day caused a small over spray in the pasture. Vacuum trucks were utilized to recover approximately forty-four and seven-tenths (44.7) bbl. of oil from the falcon lined facility.

### **GROUNDWATER AND REGULATORY FRAMEWORK**

According to the New Mexico Office of the State Engineer's (NMOSE) database the nearest water well (C 02282) indicates that groundwater in the project vicinity is approximately two-hundred and twenty-five (225) feet below ground surface (BGS) and the average depth to groundwater is two-hundred and twelve (212) feet BGS. The water well information is shown in Appendix B.

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

### GENERAL SITE CHARACTERIZATION AND GROUNDWATER:

Site Characterization	Average Groundwater Depth (ft.)
None Located	>100 feet

### **DELINEATION AND CLOSURE CRITERIA:**

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

### **REMEDIATION PLAN**

All samples were below the closure criteria detailed in Table 1 of 19.15.29.12 NMAC and thus no remediation will occur.

### SITE RECLAMATION AND RESTORATION

All constituents of concerns were below the closure criteria detailed in Table 1 of 19.15.29.12 NMAC, however, TPH concentrations above Table 1 of 19.15.29.12 NMAC for groundwater less than fifty (50) feet BGS are present in the pasture within the first four (4) feet. TPH concentrations of one-hundred forty-five (145) mg/kg are present at zero (0) to one half (0.5) feet within the pasture. COG proposes to resample the pasture area to determine if natural attenuation has occurred. If TPH concentrations are below one-hundred (100) mg/kg a closure report will be submitted.

If TPH concentrations are above one-hundred (100) mg/kg, COG will either treat the area with microblaze and resample at a later date or will excavate approximately six (6) inches from the impacted area. If excavation is necessary approximately 12 cubic yards of material will be removed and hauled to an approved NMOCD solid waste disposal facility. Once excavated, one (1) composite soil sample will be collected from the excavated area to confirm TPH concentrations are below one-hundred (100) mg/kg. The backfill material will be non-impacted with concentrations below 600 mg/kg of chlorides. The surface will be left in a rough condition to approximate natural surface deviations and the site will be mechanically seeded with the New Mexico State Land Office (NMSLO) Sandy Loam (SL) seed mixture. A closure report will be submitted within 90 days of work plan approval.

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

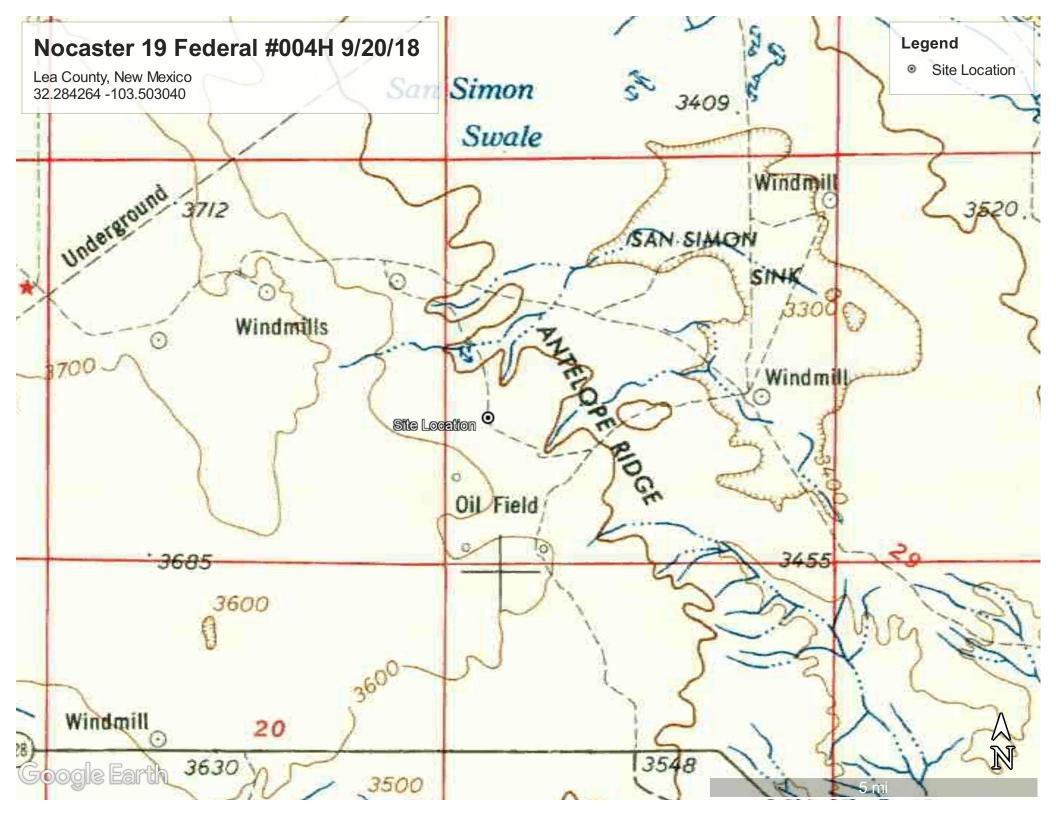
Sincerely,

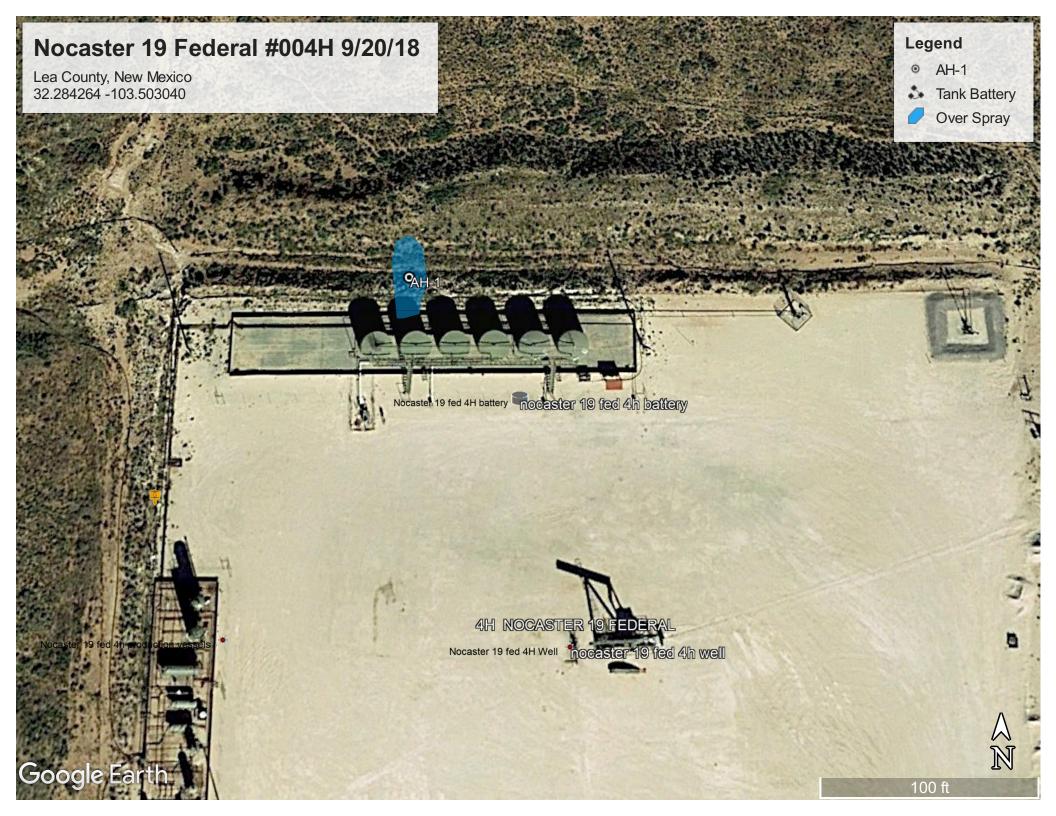
Relecca Haskell

Rebecca Haskell Senior HSE Coordinator rhaskell@concho.com

cc: File

# Figures





# Tables

#### Table 1 COG Operating LLC. Nocaster 19 Federal #004H 9/20/18 Lea County, New Mexico

Sample Soil Status			Status	TPH (mg/kg)						Benzene	Total BTEX	Chloride		
Sample ID	Depth (ft)	Sample Date	In-Situ	Removed	GRO	DRO	MRO	Total	GRO	DRO	Total	(mg/kg)	(mg/kg)	(mg/kg)
Average Depth to	Average Depth to Groundwater (ft) >100 feet													
NMOCD RRAL Lin	nits (mg/kg)				-	-	-	2,500	-	-	1,000	10	50	20,000
T-1	0-0.5'	9/27/2018	Х		<14.9	145	<14.9	145	<14.9	145	145	<0.00200	0.00262	<4.98

Proposed Excavation Depth

(-) Not Analyzed

Appendix A

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

)

Incident ID	
District RP	
Facility ID	
Application ID	

# **Release Notification**

### **Responsible Party**

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

### **Location of Release Source**

(NAD 83 in decimal degrees to 5 decimal places)

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

Unit Letter	Section	Township	Range	County

Surface Owner: State Federal Tribal Private (Name: \_

### Nature and Volume of Release

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

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

Page 2

### State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

### **Initial Response**

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

The source of the release has been stopped.

The impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

All free liquids and recoverable materials have been removed and managed appropriately.

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

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

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

Printed Name:	Title:
Signature: Deann Opeanst	Date:
email:	Telephone:
OCD Only	
Received by:	Date:

Form C-141 Page 3 State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

# Site Assessment/Characterization

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

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

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

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

Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
Field data
Data table of soil contaminant concentration data
Depth to water determination
Determination of water sources and significant watercourses within 1/2-mile of the lateral extents of the release
Boring or excavation logs
Photographs including date and GIS information

- **Topographic**/Aerial maps
- Laboratory data including chain of custody

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

Form C-141 Page 4	State of New Mexico Oil Conservation Division		Incident ID District RP Facility ID Application ID	
regulations all operators an public health or the enviro failed to adequately invest	formation given above is true and complete to the re required to report and/or file certain release noti onment. The acceptance of a C-141 report by the C tigate and remediate contamination that pose a thre of a C-141 report does not relieve the operator of	fications and perform co DCD does not relieve the eat to groundwater, surfa	prective actions for rele operator of liability sho ce water, human health	eases which may endanger ould their operations have or the environment. In
Printed Name:		Title:		
Signature: Rellecca	Haskell	Date:		
email:		Telephone:		
OCD Only				
Received by:		Date:		

Form C-141 Page 5 State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

# **Remediation Plan**

<b><u>Remediation Plan Checklist</u></b> : Each of the following items must be	e included in the plan.						
<ul> <li>Detailed description of proposed remediation technique</li> <li>Scaled sitemap with GPS coordinates showing delineation points</li> <li>Estimated volume of material to be remediated</li> <li>Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC</li> <li>Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)</li> </ul>							
<b><u>Deferral Requests Only</u></b> : Each of the following items must be con	firmed as part of any request for deferral of remediation.						
Contamination must be in areas immediately under or around pr deconstruction.	oduction equipment where remediation could cause a major facility						
Extents of contamination must be fully delineated.							
Contamination does not cause an imminent risk to human health	Contamination does not cause an imminent risk to human health, the environment, or groundwater.						
	e and remediate contamination that pose a threat to groundwater, acceptance of a C-141 report does not relieve the operator of						
Printed Name:							
Signature: Rellecca Haskell	Date:						
email:	Telephone:						
OCD Only							
Received by:	Date:						
Approved Approved with Attached Conditions of	Approval Denied Deferral Approved						
Signature:	Date: 2/28/2019						

Appendix B

# Nocaster 19 Federal #004H 9/20/18

Lea County, New Mexico 32.284264 -103.503040

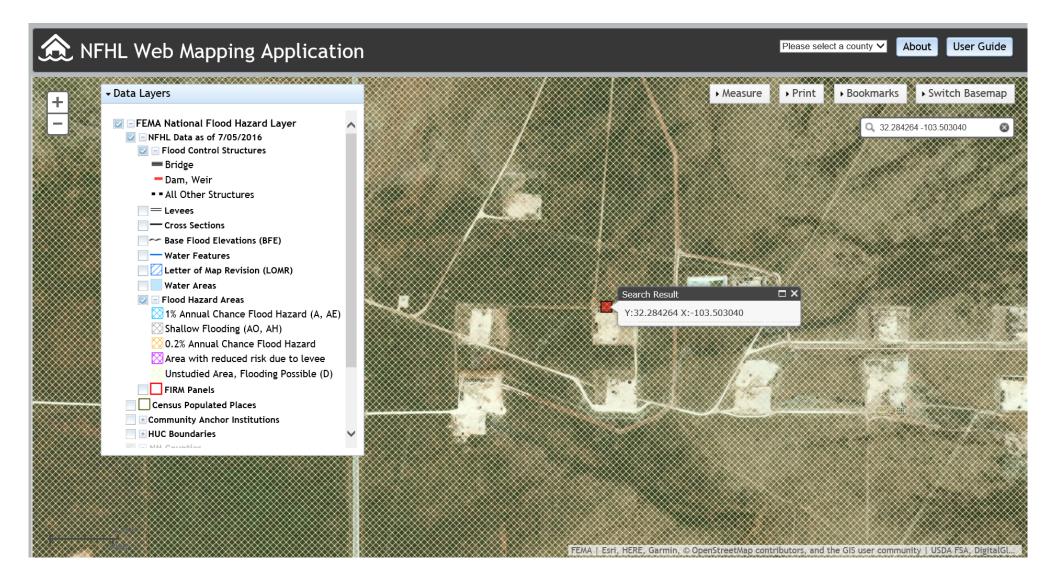








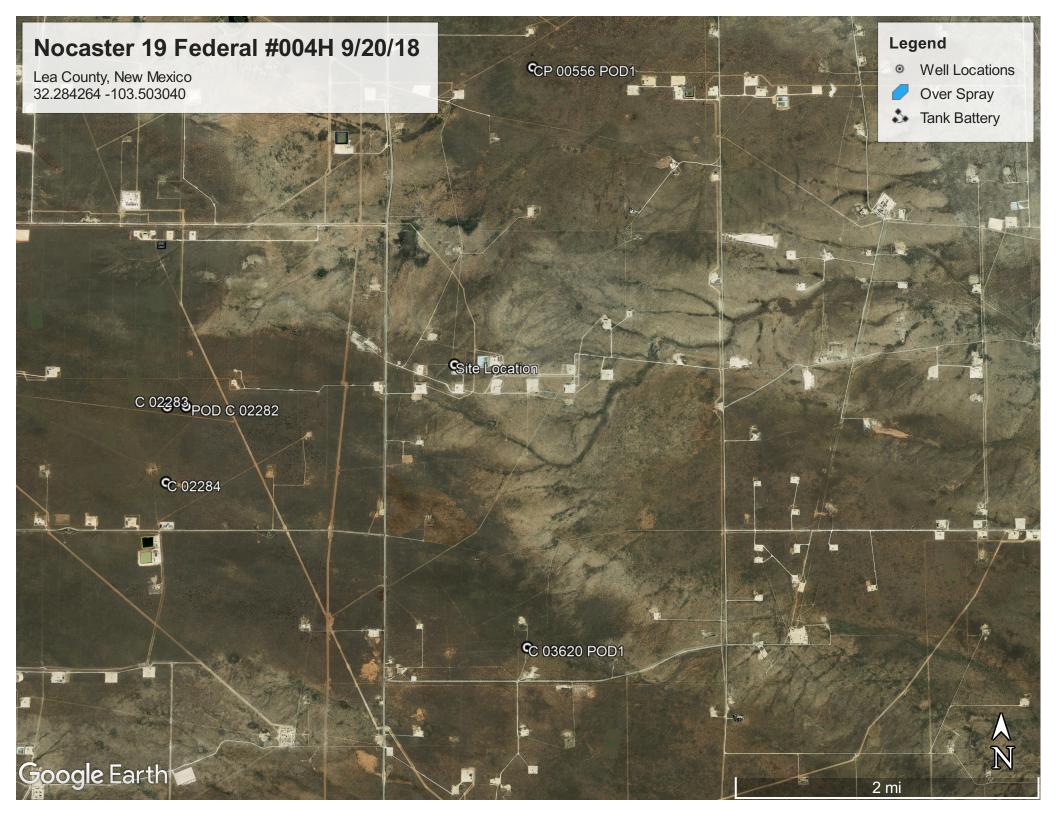
 $\mathbb{N}$ 

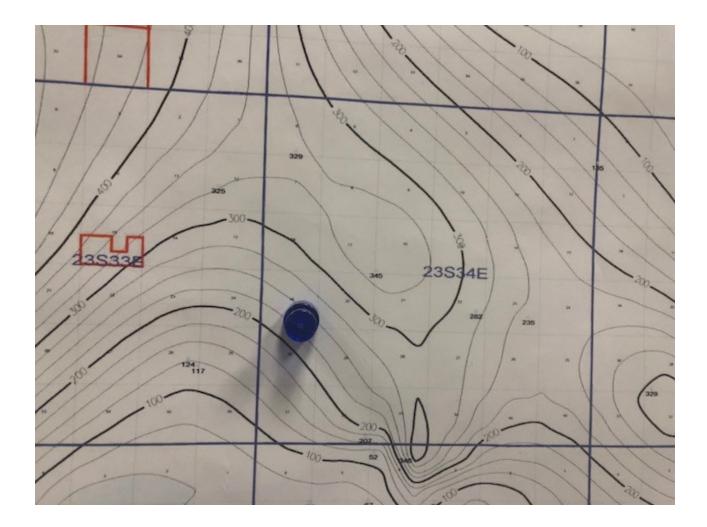




(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)	(R=POD replaced, O=orpha C=the fil closed)	ned,	1						V 2=NE est to lar	3=SW 4=S egest) (N	E) IAD83 UTM in m	eters)	(In f	eet)	
		POD Sub-			Q										Vater
POD Number <u>C 02282</u>	Code	<b>basin</b> CUB	County LE				Sec 25		0	X 638098	Y 3572436* 🍋	DistanceDep 2908	thWellDept 325	hWater Co 225	olumn 100
C 03620 POD1		CUB	LE	1	4	3	32	238	34E	641790	3569941 🌍	3098	480	130	35
<u>C 02283</u>		CUB	LE	4	2	2	26	238	33E	637896	3572431* 🌍	3108	325	225	10
<u>C 02284</u>		CUB	LE	4	2	4	26	23S	33E	637907	3571626* 🌍	3323	325	225	10
CP 00556 POD1		СР	LE	4	4	3	08	238	34E	641762	3576206	3373	497	255	24
											Avera	ge Depth to Wat	ter:	212 fee	t
												Minimum De	pth:	130 fee	t
												Maximum Dep	oth:	255 fee	t
Record Count: 5															
UTMNAD83 Radius	Search (in	meters)	<u>):</u>												
<b>Easting (X):</b> 640	964.83		North	ing	(Y	):	3572	2928.6	3		Radius: 3520				
*UTM location was derived	from PLSS	. see Heln													

WATER





Appendix C



**Project Id:** 

Contact:

**Project Location:** Lea County, New Mexico

Ike Tavarez

### Certificate of Analysis Summary 600660

COG Operating LLC, Artesia, NM Project Name: Nocaster 19 Federal 4H (9/20/18)



Date Received in Lab:Fri Sep-28-18 10:10 amReport Date:02-OCT-18Project Manager:Jessica Kramer

Lab Id:	600660-001					
Field Id:	AH-1 (0-0.5')-Overspray Ar	e				
Depth:						
Matrix:	SOIL					
Sampled:	Sep-27-18 00:00					
Extracted:	Sep-30-18 08:30					
Analyzed:	Sep-30-18 15:27					
Units/RL:	mg/kg RL					
	<0.00200 0.00200					
	0.00262 0.00200					
	<0.00200 0.00200					
	< 0.00400 0.00400					
	< 0.00200 0.00200					
	< 0.00200 0.00200					
	0.00262 0.00200					
Extracted:	Sep-28-18 15:30					
Analyzed:	Sep-28-18 18:47					
Units/RL:	mg/kg RL					
	<4.98 4.98					
Extracted:	Sep-29-18 08:00					
Analyzed:	Sep-30-18 07:51					
Units/RL:	mg/kg RL					
	<14.9 14.9					
	145 14.9					
	<14.9 14.9					
	145 14.9					
	Depth: Matrix: Sampled: Extracted: Analyzed: Units/RL: Extracted: Analyzed: Units/RL: Extracted: Analyzed:	Field Id:       AH-1 (0-0.5')-Overspray Ar         Depth:       SOIL         Matrix:       SOIL         Sampled:       Sep-27-18 00:00         Extracted:       Sep-30-18 08:30         Analyzed:       Sep-30-18 15:27         Units/RL:       mg/kg       RL         Units/RL:       mg/kg       RL         OO0262       0.00200       0.00200         OO00262       0.00200       0.00200         OO00262       0.00200       0.00200         Colonation       <0.00200       0.00200         Colonation       Sep-28-18 15:30       Analyzed:         Sep-28-18 15:30       Sep-28-18 18:47       Units/RL:         Units/RL:       mg/kg       RL         Extracted:       Sep-29-18 08:00       Analyzed:         Sep-30-18 07:51       Units/RL:       mg/kg       RL         Units/RL:       mg/kg       RL       14.9         Units/RL:       mg/kg       RL       14.9	Field Id:       AH-1 (0-0.5')-Overspray Are         Depth:       SOIL         Matrix:       SOIL         Sampled:       Sep-27-18 00:00         Extracted:       Sep-30-18 08:30         Analyzed:       Sep-30-18 08:30         Matrix:       Sep-30-18 15:27         Units/RL:       mg/kg       RL          <0.00200       0.00200          <0.00262       0.00200          <0.00200       0.00200          <0.00200       0.00200          <0.00200       0.00200          <0.00200       0.00200          <0.00200       0.00200          <0.00262       0.00200          <0.00262       0.00200          <0.00262       0.00200          <0.00262       0.00200         Extracted:       Sep-28-18 15:30         Analyzed:       Sep-28-18 18:47         Units/RL:       mg/kg       RL          <4.98       4.98         Extracted:       Sep-29-18 08:00         Analyzed:       Sep-30-18 07:51         Units/RL:       mg/kg       RL <th>Field Id:       AH-1 (0-0.5')-Overspray Are         Depth:      </th> <th>Field Id:       AH-1 (0-0.5)-Overspray Are         Depth:       SOIL         Matrix:       SOIL         Sampled:       Sep-27-18 0::00         Extracted:       Sep-30-18 08::30         Analyzed:       Sep-30-18 15:27         Units/RL:       mg/kg       RL              0.00200       0.00200               0.002020                0.002020</th> <th>Field Hit       AH-1 (0-0.5)-Overspray Art         Depth:       SOIL         Matrix:       SOIL         Samplet:       Sep-27-18 00:00         Extractet:       Sep-30-18 08:30         Analyzet:       Sep-30-18 15:27         Units/RL:       mg/kg       RL          -0.0020 0.00200          Sep-28.18 15:30         Analyzet       Sep-28.18 18:47         Units/RL       mg/kg</th>	Field Id:       AH-1 (0-0.5')-Overspray Are         Depth:	Field Id:       AH-1 (0-0.5)-Overspray Are         Depth:       SOIL         Matrix:       SOIL         Sampled:       Sep-27-18 0::00         Extracted:       Sep-30-18 08::30         Analyzed:       Sep-30-18 15:27         Units/RL:       mg/kg       RL              0.00200       0.00200               0.002020                0.002020	Field Hit       AH-1 (0-0.5)-Overspray Art         Depth:       SOIL         Matrix:       SOIL         Samplet:       Sep-27-18 00:00         Extractet:       Sep-30-18 08:30         Analyzet:       Sep-30-18 15:27         Units/RL:       mg/kg       RL          -0.0020 0.00200          Sep-28.18 15:30         Analyzet       Sep-28.18 18:47         Units/RL       mg/kg

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

fession Vermer

Jessica Kramer Project Assistant

# **Analytical Report 600660**

for COG Operating LLC

**Project Manager: Ike Tavarez** 

Nocaster 19 Federal 4H (9/20/18)

### 02-OCT-18

Collected By: Client





### 1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122): Texas (T104704215-18-27), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054) Oklahoma (2017-142)

> Xenco-Dallas (EPA Lab Code: TX01468): Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-13) Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-17) Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-16) Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4) Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757) Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757) Xenco-Atlanta (LELAP Lab ID #04176) Xenco-Tampa: Florida (E87429) Xenco-Lakeland: Florida (E84098)



02-OCT-18



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

Reference: XENCO Report No(s): 600660 Nocaster 19 Federal 4H (9/20/18) Project Address: Lea County, New Mexico

### Ike Tavarez:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 600660. 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. 600660 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,

Jession KRAMER

Jessica Kramer Project Assistant

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 600660



### COG Operating LLC, Artesia, NM

Nocaster 19 Federal 4H (9/20/18)

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
AH-1 (0-0.5')-Overspray Area	S	09-27-18 00:00		600660-001



### CASE NARRATIVE

Client Name: COG Operating LLC Project Name: Nocaster 19 Federal 4H (9/20/18)

Project ID: Work Order Number(s): 600660 Report Date:02-OCT-18Date Received:09/28/2018

### Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments: Batch: LBA-3064879 BTEX by EPA 8021B Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



# **Certificate of Analytical Results 600660**



### COG Operating LLC, Artesia, NM

Nocaster 19 Federal 4H (9/20/18)

Sample Id: Lab Sample Id	<b>AH-1 (0-0.5')-Overspr</b> d: 600660-001	ay Area	Matrix: Date Collec	Soil ted: 09.27.18 00.00	E	Date Received	1:09.28.18 10.10	
Analytical Me	ethod: Chloride by EPA 3	800			Р	Prep Method:	E300P	
Tech:	CHE				%	6 Moisture:		
Analyst:	CHE		Date Prep:	09.28.18 15.30	В	Basis:	Wet Weight	
Seq Number:	3064849							
Parameter		Cas Number	Result	RL	Units	Analysis Da	ate Flag	Dil

1 araneter	Cas Number	Ktsuit	KL	Units	Analysis Date	riag	Dii
Chloride	16887-00-6	<4.98	4.98	mg/kg	09.28.18 18.47	U	1

Analytical Method: TPH By SW801	5 Mod				F	Prep Method: TX	1005P	
Tech: ARM					9	6 Moisture:		
Analyst: ARM		Date Prep	p: 09.29.	18 08.00	E	Basis: We	t Weight	
Seq Number: 3064923								
Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons	PHC610	<14.9	14.9		mg/kg	09.30.18 07.51	U	1
Diesel Range Organics	C10C28DRO	145	14.9		mg/kg	09.30.18 07.51		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9		mg/kg	09.30.18 07.51	U	1
Total TPH	PHC635	145	14.9		mg/kg	09.30.18 07.51		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane		111-85-3	98	%	70-135	09.30.18 07.51		
o-Terphenyl		84-15-1	106	%	70-135	09.30.18 07.51		



### **Certificate of Analytical Results 600660**



### COG Operating LLC, Artesia, NM

Nocaster 19 Federal 4H (9/20/18)

Sample Id:         AH-1 (0-0.5')-Overspray Area           Lab Sample Id:         600660-001	Matrix: Date Collecte	Soil ed: 09.27.18 00.00	Date Receive	ed:09.28.18 10.10
Analytical Method: BTEX by EPA 8021B Tech: ALJ			Prep Method % Moisture:	: SW5030B
Analyst: ALJ Seq Number: 3064879	Date Prep:	09.30.18 08.30	Basis:	Wet Weight

Parameter	Cas Number	Result	RL		Units	Analysis Date	Flag	Dil
Benzene	71-43-2	< 0.00200	0.00200		mg/kg	09.30.18 15.27	U	1
Toluene	108-88-3	0.00262	0.00200		mg/kg	09.30.18 15.27		1
Ethylbenzene	100-41-4	< 0.00200	0.00200		mg/kg	09.30.18 15.27	U	1
m,p-Xylenes	179601-23-1	< 0.00400	0.00400		mg/kg	09.30.18 15.27	U	1
o-Xylene	95-47-6	< 0.00200	0.00200		mg/kg	09.30.18 15.27	U	1
Total Xylenes	1330-20-7	< 0.00200	0.00200		mg/kg	09.30.18 15.27	U	1
Total BTEX		0.00262	0.00200		mg/kg	09.30.18 15.27		1
Surrogate		Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene		540-36-3	95	%	70-130	09.30.18 15.27		
4-Bromofluorobenzene		460-00-4	74	%	70-130	09.30.18 15.27		



# **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 LimitSDLSample Detection LimitLOD Limit of Detection
- PQL Practical Quantitation Limit MQL Method Quantitation Limit LOQ Limit of Quantitation
- DL Method Detection Limit
- NC Non-Calculable

SMP Clie	ent Sample	BLK	Method Blank	
BKS/LCS	S Blank Spike/Laboratory Control Sample	BKSD/LCSD	Blank Spike Duplicate/Labor	ratory 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



QC Summary 600660

### **COG Operating LLC**

Nocaster 19 Federal 4H (9/20/18)

Analytical Method:	Chloride by EPA 3	00						Prep Me	hod: E3	600P	
Seq Number:	3064849			Matrix:	Solid			Date	Prep: 09	.28.18	
MB Sample Id:	7663245-1-BLK		LCS Sar	nple Id:	7663245-1	I-BKS		LCSD Sam	ole Id: 76	63245-1-BSD	
Donomotor	MB	Spike	LCS	LCC	T COD	I GOD	T ::4		mit Unita		
Parameter	Result	Amount	Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD RPD L	init Onits	Analysis Date	Flag

Analytical Method:	Chloride by EPA 30	00						Pr	ep Metho	od: E30	0P	
Seq Number:	3064849			Matrix:	Soil				Date Pre	ep: 09.2	28.18	
Parent Sample Id:	600660-001		MS Sar	nple Id:	600660-00	01 S		MS	D Sample	d: 600	600660-001 SD	
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Lim	it Units	Analysis Date	Flag
Chloride	< 0.855	249	269	108	269	108	90-110	0	20	mg/kg	09.28.18 18:53	

Analytical Method:	Chloride by EPA 30	00						P	rep Meth	od: E30	0P	
Seq Number:	3064849			Matrix:	Soil				Date Pr	ep: 09.2	8.18	
Parent Sample Id:	600665-001		MS Sar	nple Id:	600665-00	01 S		MSD Sample Id: 600665-001 SD				
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Lim	it Units	Analysis Date	Flag
Chloride	< 0.850	248	257	104	255	103	90-110	1	20	mg/kg	09.28.18 17:15	

Analytical Method: TPH By SW8015 Mod Prep Method: TX1005P											
Seq Number:	3064923			Matrix:	Solid			Date Pr	ep: 09.2	29.18	
MB Sample Id:	7663252-1-BLK	- -	LCS Sa	ample Id:	7663252-	1-BKS		LCSD Sampl	e Id: 766	3252-1-BSD	
Parameter	l Res	MB Spi sult Amou		LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD RPD Lin	nit Units	Analysis Date	Flag
Gasoline Range Hydroc	arbons <8	3.00 10	954	95	940	94	70-135	1 20	mg/kg	09.29.18 17:49	
Diesel Range Organics	<8	3.13 10	975	98	969	97	70-135	1 20	mg/kg	09.29.18 17:49	
Surrogate		AB M Rec Fla		LCS ⁄6Rec	LCS Flag	LCSI %Ree			Units	Analysis Date	
1-Chlorooctane		97		116		113		70-135	%	09.29.18 17:49	
o-Terphenyl		00		101		100		70-135	%	09.29.18 17:49	

[D] = 100\*(C-A) / B RPD = 200\* | (C-E) / (C+E) | [D] = 100 \* (C) / [B] Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample A = Parent Result C = MS/LCS Result E = MSD/LCSD Result MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec



### **COG Operating LLC**

Nocaster 19 Federal 4H (9/20/18)

Analytical Method:	TPH By SW8	8015 M	od						]	Prep Method	l: TX1	.005P	
Seq Number:	3064923				Matrix:	Soil				Date Prep	o: 09.2	9.18	
Parent Sample Id:	600660-001			MS San	nple Id:	600660-00	01 S		Μ	SD Sample l	(d: 600	560-001 SD	
Parameter		Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPI	ORPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydroc	arbons	<7.99	998	898	90	926	93	70-135	3	20	mg/kg	09.29.18 18:47	
Diesel Range Organics		145	998	1090	95	1130	99	70-135	4	20	mg/kg	09.29.18 18:47	
Surrogate					1S Rec	MS Flag	MSD %Ree		-	Limits	Units	Analysis Date	
1-Chlorooctane				1	25		120		-	70-135	%	09.29.18 18:47	
o-Terphenyl				1	00		103		-	70-135	%	09.29.18 18:47	

Analytical Method: Seq Number: MB Sample Id:	<b>BTEX by EPA 802</b> 3064879 7663274-1-BLK	1B	LCS Sar	Matrix: nple Id:	Solid 7663274-	1-BKS			Prep Metho Date Pre SD Sample	p: 09.3	5030B 0.18 3274-1-BSD	
Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPI	) RPD Limi	t Units	Analysis Date	Flag
Benzene	< 0.00202	0.101	0.0819	81	0.0812	80	70-130	1	35	mg/kg	09.30.18 10:05	
Toluene	< 0.00202	0.101	0.0759	75	0.0786	78	70-130	3	35	mg/kg	09.30.18 10:05	
Ethylbenzene	< 0.00202	0.101	0.0862	85	0.0904	90	70-130	5	35	mg/kg	09.30.18 10:05	
m,p-Xylenes	< 0.00403	0.202	0.169	84	0.179	89	70-130	6	35	mg/kg	09.30.18 10:05	
o-Xylene	< 0.00202	0.101	0.0858	85	0.0904	90	70-130	5	35	mg/kg	09.30.18 10:05	
Surrogate	MB %Rec	MB Flag		CS Rec	LCS Flag	LCSD %Rec			Limits	Units	Analysis Date	
1,4-Difluorobenzene	97		1	06		94			70-130	%	09.30.18 10:05	
4-Bromofluorobenzene	87		9	99		101			70-130	%	09.30.18 10:05	

<b>Analytical Method:</b> Seq Number: Parent Sample Id:	<b>BTEX by EPA 802</b> 3064879 600661-010	1B	MS San	Matrix: nple Id:	Soil 600661-0		Prep Method: SW5030B Date Prep: 09.30.18 MSD Sample Id: 600661-010 SD						
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Lim	it Units	Analysis Date	Flag	
Benzene	< 0.000388	0.101	0.0470	47	0.0568	57	70-130	19	35	mg/kg	09.30.18 10:48	Х	
Toluene	0.00152	0.101	0.0450	43	0.0499	48	70-130	10	35	mg/kg	09.30.18 10:48	Х	
Ethylbenzene	< 0.00202	0.101	0.0405	40	0.0446	45	70-130	10	35	mg/kg	09.30.18 10:48	Х	
m,p-Xylenes	< 0.00102	0.202	0.0757	37	0.0813	40	70-130	7	35	mg/kg	09.30.18 10:48	Х	
o-Xylene	< 0.00202	0.101	0.0405	40	0.0437	44	70-130	8	35	mg/kg	09.30.18 10:48	Х	
Surrogate				1S Rec	MS Flag	MSD %Rec			Limits	Units	Analysis Date		
1,4-Difluorobenzene			1	08		109		7	0-130	%	09.30.18 10:48		
4-Bromofluorobenzene			1	11		111		7	0-130	%	09.30.18 10:48		

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

LCS = Laboratory Control Sample A = Parent Result C = MS/LCS Result E = MSD/LCSD Result MS = Matrix Spike B = Spike Added D = MSD/LCSD % Rec

	Relinquished by:			Relinquished	3					АН	(LAB USE ONLY	LAB #		Comments: Run D mg/kg	Receiving Laboratory:		county, state)	Project Name:	Client Name:		Analysis Requ
	Date: Time:		an	Date: Time:						AH-1 (0-0.5') - Overspray Area		SAMPLE IDENTIFICATION		Run Deeper samples if TPH exceeds 1000 mg/kg. Run Deeper samples of benzene exceeds 10 mg/kg or total BTEX mg/kg	v: Xenco	COG	Lea County, New Mexico	Nocaster 19 Federal 4H (9/20/18)	COG		Analysis Request of Chain of Custody Record
ORIGINAL COPY	Received by:	Received by:	NRVOV	Referent hv:						9/27/2018	DATE	YEAR:	SAMPLING	er samples of benzene ex	Sampler Signature:		Project #:		Site Manager:		
×	Date:	<sup>1</sup> Date:	A 9/201				-			x	WATER SOIL HCL HNO <sub>3</sub> ICE	2	MATRIX PRESERVATIN METHOD	ceeds 10 mg/kg or total B	ike Tavarez				lke Tavarez	One Concho Center/600/Illinois Avenue/Midiand, Texas Tel (432) 683-7443	
	Time:	Time:	1111E 12)  0°, 10	Tizza						1	# CONTA	D (Y		exceeds 50						u ŵ	
(Circle) HAND DELIVERED	0000	Sample Temperature	LAB USE							×	BTEX 802 TPH TX10 TPH 8015 PAH 8270 Total Meta TCLP Met	005 5 <b>M (</b> DC als A als A	(Ext to GRO - g As Ba Ag As B	DRO - MI	<b>RO)</b> b Se H						200 lolu
FEDEX UPS		ARUSH: Same Day	REMARKS:								TCLP Vola TCLP Sen RCI GC/MS Vc GC/MS Se PCB's 800 NORM	ni Va ol. 8: əmi. '	olatiles 260B / Vol. 82					or specity wethod	ANALYSIS REQUEST		(UD
Tracking #:	Rush Charges Authorized Special Report Limits or TRRP Report	24 hr - 48 hr								×	NORM PLM (Asbe Chloride Chloride General V Anion/Cat	Su Vate	ulfate er Chen		e attac	hed lis	st)	;tnod No.)			Page
	-+	72 hr	<u> </u>						Pag		Hold of 12			- 11		Fina	al 1.000				of



# **XENCO Laboratories**



Prelogin/Nonconformance Report- Sample Log-In

Client: COG Operating LLC	Acceptable Temperature Range: 0 - 6 degC Air and Metal samples Acceptable Range: Ambient
Date/ Time Received: 09/28/2018 10:10:00 AM	
Work Order #: 600660	Temperature Measuring device used : R8
Sample Recei	pt Checklist Comments
#1 *Temperature of cooler(s)?	3
#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

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

Analyst:

PH Device/Lot#:

#18 Water VOC samples have zero headspace?

Checklist completed by:

Date: 09/28/2018

N/A

Checklist reviewed by: fession Vramer

Jessica Kramer

Date: 09/28/2018