



Site Information

Closure Report

Ophelia 27 CTB #501H

Unit G Sec 27 T26S R33E

1RP-4198

32.015073°, -103.557007°

Lea County, New Mexico

Produced Water Release

Source: 4" poly split on the water transfer pump

Release Date: 02/29/2016

Volume Released: 120 bbls/PW

Volume Recovered: 60 bbls/PW

Prepared for:

EOG Resources

5509 Champions Dr.

Midland, TX 79706

Prepared by:

NTG Environmental

701 Tradewinds Blvd

Suite C

Midland, TX 79706



TABLE OF CONTENTS

FIGURES

FIGURE 1	OVERVIEW MAP
FIGURE 2	TOPOGRAPHIC MAP
FIGURE 3	SITE LOCATION MAP

TABLES/PHOTOLOG

TABLE 1	INITIAL SOIL ANALYTICAL RESULTS
PHOTOS	PHOTOLOG

APPENDICES

APPENDIX A	C-141 INITIAL AND FINAL
APPENDIX B	GROUNDWATER RESEARCH
APPENDIX C	LABORATORY ANALYTICAL REPORTS



701 Tradewinds Boulevard, Suite C
Midland, Texas 79706
Tel. 432.685.3898
www.ntglobal.com

March 18, 2021

Mr. Bradford Billings
New Mexico Oil Conservation Division
5200 Oakland Ave N.E Suite100
Albuquerque, NM 87113

Re: Closure Report
Ophelia 27 #501H 1RP-4198
EOG Resources Inc.
Site Location: Unit G, S27, T26S, R33E
(Lat 32.015073°, Long -103.557007°)
Lea County, New Mexico

To whom it may concern:

On behalf of EOG Resources Inc. (EOG), New Tech Global Environmental, LLC (NTGE) has prepared this letter to document site assessment activities for the Ophelia 27 #501H 1RP-4198. The Site is located at 32.015073°, -103.557007° within Unit G, S27, T26S, R33E, and approximately 21.96 miles southwest of Jal, New Mexico, in Lea County (Figures 1 and 2).

Background

Based on the initial C-141 obtained from the New Mexico Oil Conservation Division (NMOCD), the leak was discovered on February 29, 2016. It resulted in the release of approximately 120 barrels of produced water due to a 4" inch poly line split on the waste transfer pump discharge. Approximately 60 barrels of produced water were recovered. The impacted area occurred on the pad and migrated into the pasture and measured approximately 205' x 18' as shown on Figure 3. The initial C-141 form is attached in Appendix A.

Site Characterization

The Site is located within a low karst area. Based on a review of the New Mexico Office of State Engineer's database, there is one well within ½ miles radius of the location. It is located approximately .50 miles North of the Site in S22, T26S, R33E. The well has a reported depth to groundwater of 110 feet below ground surface (ft bgs) and was drilled in 2012. A copy of the associated *Point of Diversion Summary* report is attached in Appendix B.

Regulatory Criteria

In accordance with the NMOCD regulatory criteria established in 19.15.29.12 NMAC, the following criteria were utilized in assessing the Site.

- Benzene: 10 milligrams per kilogram (mg/kg).

- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg.
- TPH: 2,500 mg/kg (GRO + DRO + MRO).
- TPH: 1,000 mg/kg (GRO + DRO).
- Chloride 20,000 mg/kg

Site Assessment

On March 2, 2021, NTGE conducted site assessment activities to assess soil impacts resulting from the release. A total of nine (9) sample points were advanced to depths ranging 1 – 1.5 ft bgs within and surrounding the release area to assess the vertical and horizontal extent of potential impacts. The soil sample locations are shown on figure 3.

The soil samples were collected and placed directly into laboratory-provided sample containers, stored on ice, and transported under the proper chain-of-custody protocol to Xenco Laboratories in Midland, Texas, for chemical analysis. The samples were analyzed for total petroleum hydrocarbons (TPH) by EPA method 8015 modified, benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8021B, and chloride by EPA method 300.0. The laboratory reports containing analytical methods, results, and chain-of-custody documents are attached in Appendix C. The analytical results are provided in Table 1.

All samples are below the NMOCD regulatory criteria for TPH, BTEX, and chloride based on the analytical results.

Conclusions

Based on the finding of the assessment and the analytical results, no further actions are required at the Site. The final C-141 is attached, and EOG formally requests closure of the spill. If you have any questions regarding this report or need additional information, please contact us at 432-813-0263.

Sincerely,
NTG Environmental



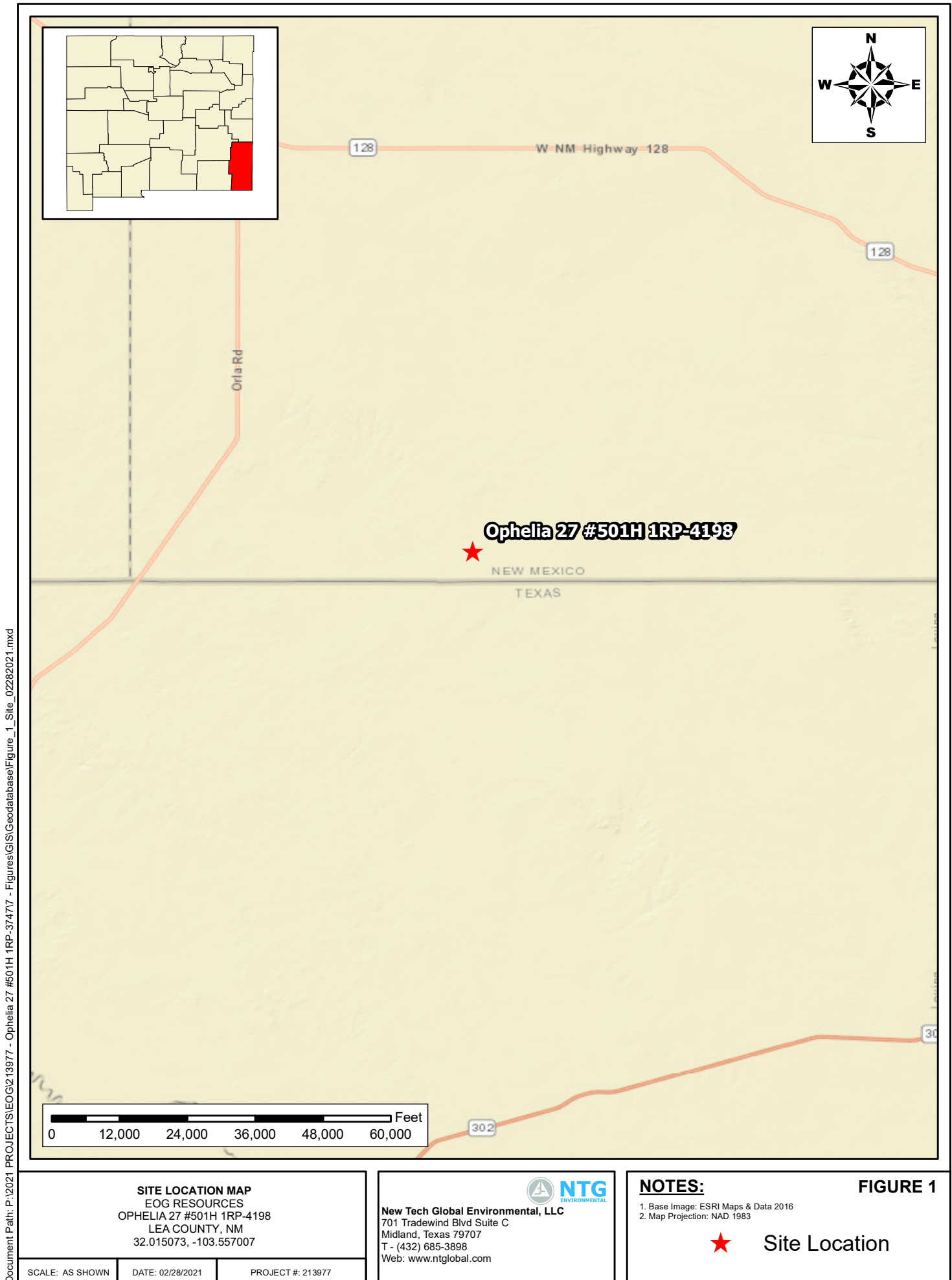
Mike Carmona
Senior Project Manager



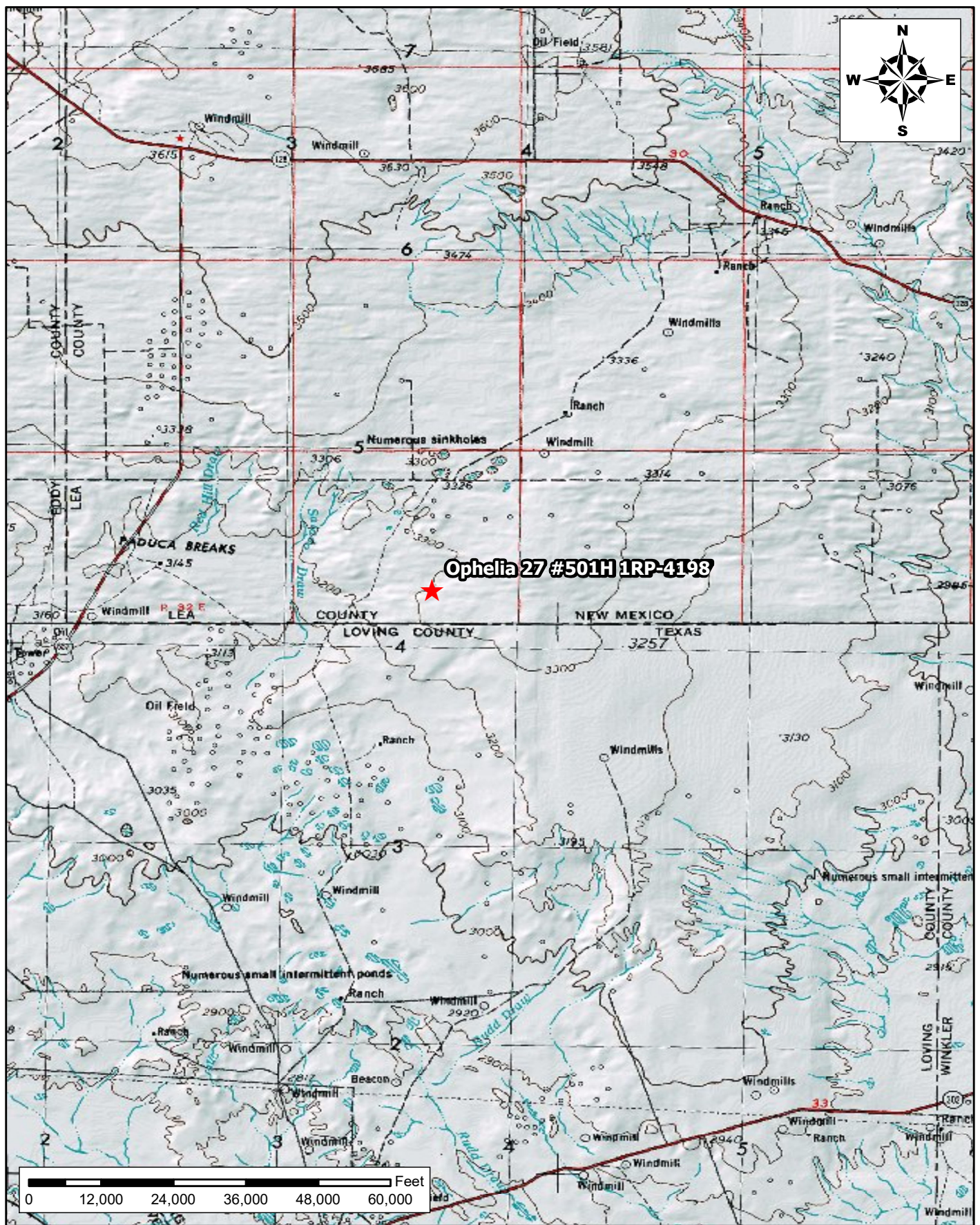
Conner Moehring
Project Manager



Figures



Document Path: P:\2021 PROJECTS\EOG213977 - Ophelia 27 #501H 1RP-4198 - Figures\GIS\Geodatabase\Figure_2_AREA_02282021.mxd



AREA MAP
 EOG RESOURCES
 OPHELIA 27 #501H 1RP-4198
 LEA COUNTY, NM
 32.015073, -103.557007

New Tech Global Environmental, LLC
 701 Tradewind Blvd Suite C
 Midland, Texas 79707
 T - (432) 685-3898
 Web: www.ntgglobal.com



NOTES:

1. Base Image: ESRI Maps & Data 2016
2. Map Projection: NAD 1983



Site Location

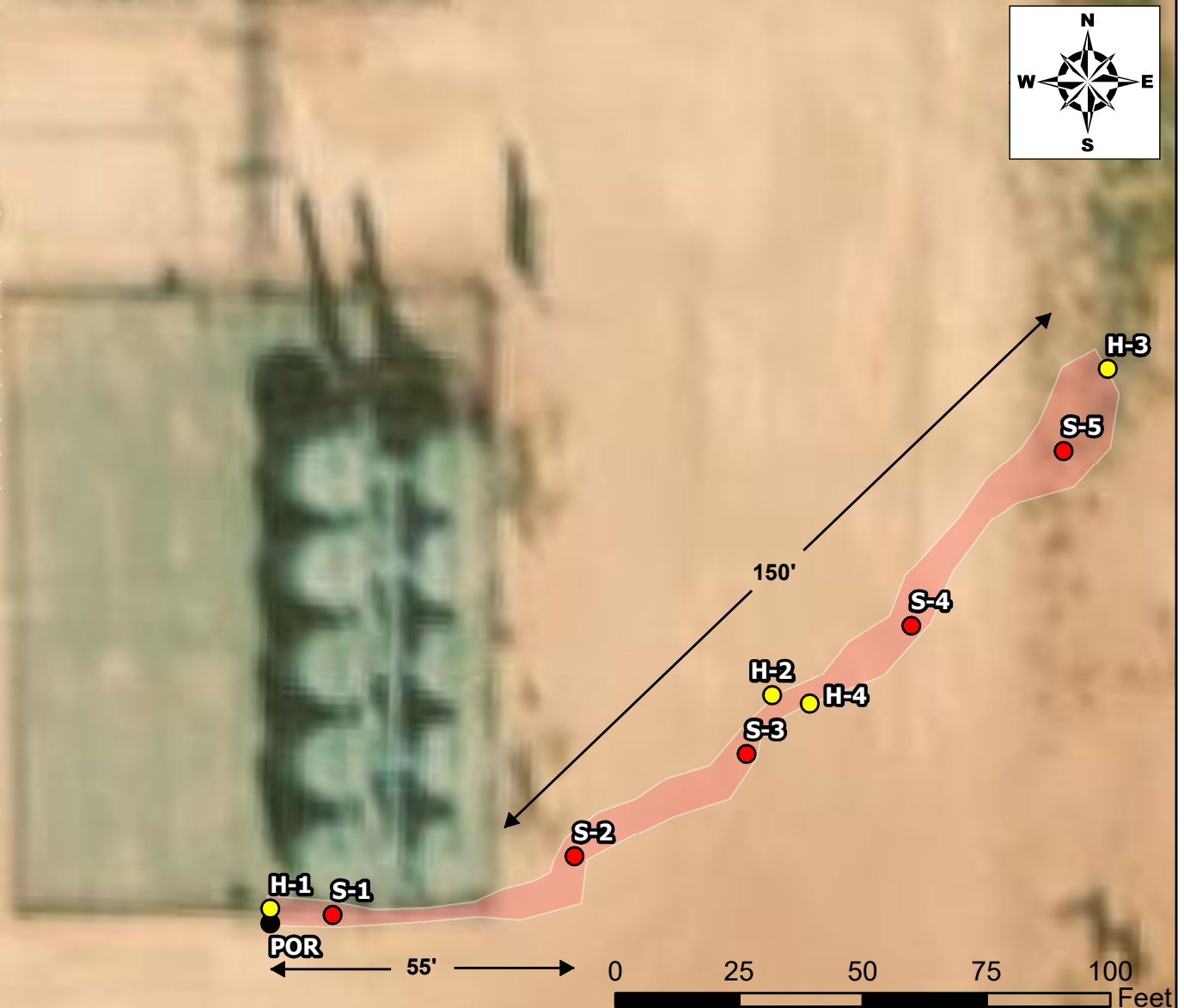
FIGURE 3

SCALE: AS SHOWN DATE: 02/28/2021 PROJECT #: 213977

Sample ID	Latitude	Longitude
Point of Release		
POR	32.016067	-103.55816
Horizontal Samples		
H-1	32.01607	-103.55816
H-2	32.0162	-103.55784
H-3	32.01639	-103.55763
H-4	32.0162	-103.55782
Sample Points		
S-1	32.01607	-103.55812
S-2	32.01611	-103.55797
S-3	32.01617	-103.55786
S-4	32.01624	-103.55775
S-5	32.01634	-103.55766

LEGEND

- Point of Release
- Sample Point
- Horizontal Samples
- Impacted Area



SAMPLE LOCATION MAP
OPHELIA 27 501H 1RP-4198
 EOG RESOURCES INC
 LEA COUNTY, NEW MEXICO

New Tech Global Environmental, LLC
 701 Tradewinds Blvd, Suite C
 Midland, Texas 79707
 T - 432.685.3898
 F - 281.872.4521
 Web: www.ntglobal.com



NOTES:

1. Base Image: ESRI Maps and Data 2017 (DigitalGlobe 2016 0.5m Digital Orthophoto)
2. Map Projection: NAD 1983

SCALE: AS SHOWN

DATE: 03/18/2021

PROJECT #: 213978



Tables

Table 1
EOG Resources
Ophelia 27 #501H 1RP-4198
Lea County, New Mexico

Sample ID	Date	Sample Depth (ft)	TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			GRO	DRO	MRO	Total						
S-1	3/2/2021	0-1	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	52.5
	"	1-1.5	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	26.4
S-2	3/2/2021	0-0.5	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	58.1
S-3	3/2/2021	0-0.5	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	28.8
S-4	3/2/2021	0-1	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	26.9
	"	1-1.5	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	19.3
S-5	3/2/2021	0-1	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	31.0
	"	1-1.5	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	53.9
H-1	3/2/2021	0-0.5	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	54.8
H-2	3/2/2021	0-0.5	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	23.1
H-3	3/2/2021	0-0.5	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	21.6
H-4	3/2/2021	0-0.5	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	43.1
Regulatory Limits			1,000 mg/kg			2,500 mg/kg	10 mg/kg	-	-	-	50 mg/kg	20,000 mg/kg

(-) Not Analyzed

A – Table 1 - 19.15.29 NMAC

mg/kg - milligram per kilogram

TPH- Total Petroleum Hydrocarbons

ft-feet



Photo Log

PHOTOGRAPHIC LOG

EOG Resources

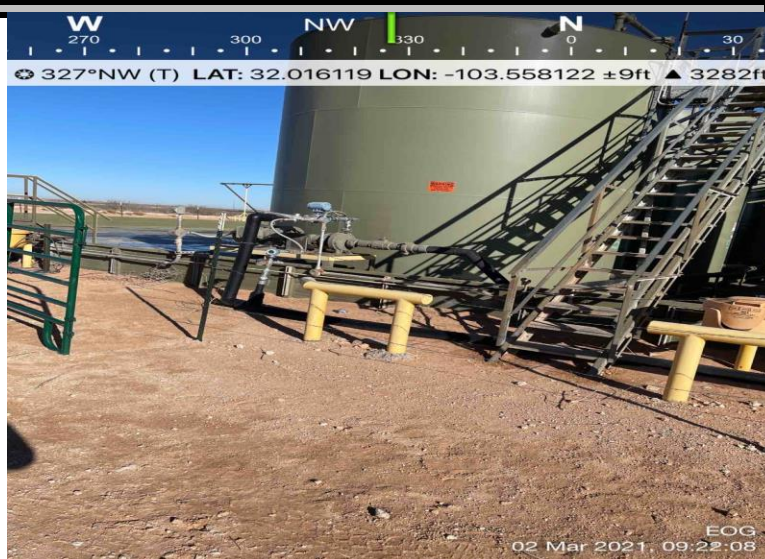
Photograph No. 1

Facility: Ophelia 27 501H 1RP-4198

County: Lea County, New Mexico

Description:

View Northwest of point of release



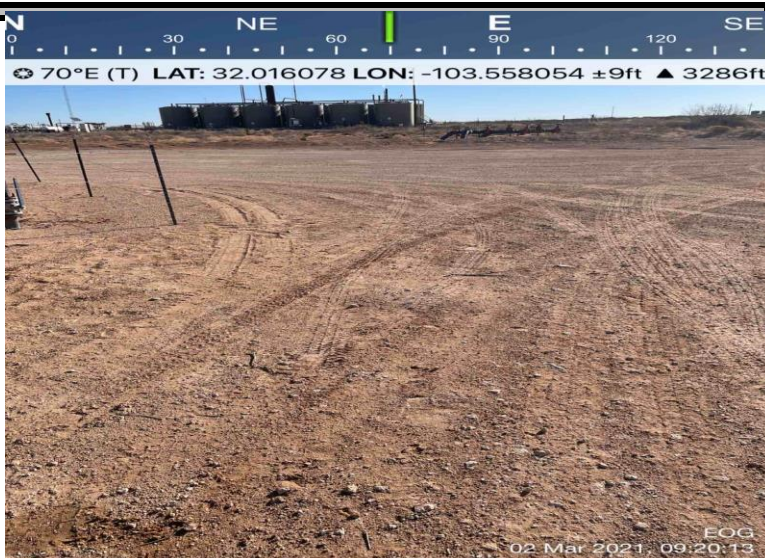
Photograph No. 2

Facility: Ophelia 27 501H 1RP-4198

County: Lea County, New Mexico

Description:

View East of Sample points



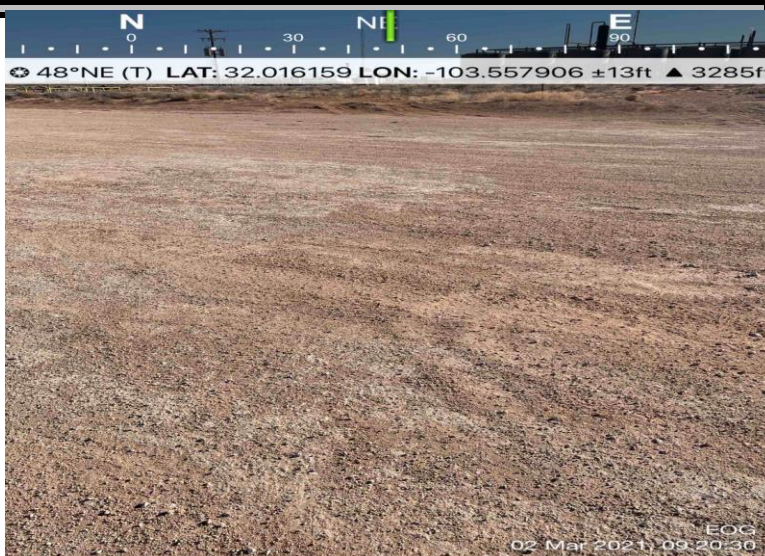
Photograph No. 3

Facility: Ophelia 27 501H 1RP-4198

County: Lea County, New Mexico

Description:

View Northeast of sample points





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

RECEIVED

By JKeyes at 9:27 am, Mar 04, 2016

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 EOG Resources, Inc.	Contact Zane Kurtz
Address 5509 Champions Drive, Midland, TX 79706	Telephone No. 432-425-2023
Facility Name Ophelia 27 CTB #501H	Facility Type CTB
Surface Owner EOG Resources, Inc.	Mineral Owner EOG Resources, Inc.
API No. 30-025-42044	

LOCATION OF RELEASE

Unit Letter G	Section 27	Township 26S	Range 33E	Feet from the 2,420	North/South Line N	Feet from the 1,625	East/West Line E	County Lea
------------------	---------------	-----------------	--------------	------------------------	-----------------------	------------------------	---------------------	---------------

Latitude 32.0151 Longitude -103.5570**NATURE OF RELEASE**

Type of Release Produced Water	Volume of Release 120 bbls	Volume Recovered 60 bbls
Source of Release Steel elbow on inlet to Heater failed	Date and Hour of Occurrence 2/29/2016 N/A	Date and Hour of Discovery 2/29/2016
Was Immediate Notice Given? X Yes No ☐ Not Required	If YES, To Whom? Antonio Gonzales	
By Whom? Flowback hand	Date and Hour 2/29/2016	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*

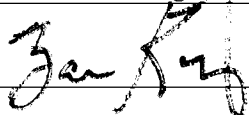
Describe Cause of Problem and Remedial Action Taken.*

4" Poly line split on the discharge side of waste transfer pump flowback hand was able to turn off equipment and isolate the line. Trucks were sent to vacuum standing fluids. The line was repaired.

Describe Area Affected and Cleanup Action Taken.*

Approximately 120 BBL's of produced water were released and 60 BBL's were recovered. The unrecovered barrels of produced water ran onto the site's caliche pad and into pasture. Assessment and excavation of the impacted soil will take place in the near future.

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: Zane Kurtz, EOG Resources	Approved by Environmental Specialist: 	
Title: Sr. Environmental Rep.	Approval Date: 03/04/2016	Expiration Date: 05/04/2016
E-mail Address: zane_kurtz@eogresources.com	Conditions of Approval: Discrete site samples only. Delineate and remediate per NMOCD guidelines.	
Date: 3-1-2016 Phone: 432-425-2023	Attached ☐ IRP 4198	

* Attach Additional Sheets If Necessary

Incident ID	
District RP	1RP-4198
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?	<u>110'</u> (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas not on an exploration, development, production, or storage site?	☒ Yes ☐ No

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

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

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

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

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	
District RP	1RP-4198
Facility ID	
Application ID	

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

Printed Name: James Kennedy Title: Environmental Specialist
Signature: *James Kennedy* Date: 03/18/2021
email: james_kennedy@eogresources.com Telephone: 432.848.9146

OCD Only

Received by: _____ Date: _____

Incident ID	
District RP	1RP-4198
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: James Kennedy

Title: Environmental Specialist

Signature: 

Date: 3/18/2021

email: james_kennedy@eogresources.com

Telephone: 432.848.9146

OCD Only

Received by: _____

Date: _____

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

Closure Approved by: 

Date: 10/12/2022

Printed Name: Brittany Hall

Title: Environmental Specialist



Appendix B

Legend

-  1/2 Mile Radius
-  Site Location





New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

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

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	DepthWell	DepthWater	Water Column
C 02270		CUB	LE	1	1	2	27	26S	33E	636063	3543722	150	125	25
C 02273		CUB	LE		1	2	21	26S	33E	634549	3545134*	160	120	40
C 02285 POD1		CUB	LE	1	4	4	03	26S	33E	636613	3548855	220	220	0
C 02286		CUB	LE	3	4	4	03	26S	33E	636470	3548714	220	175	45
C 02287		C	LE	3	4	4	03	26S	33E	636427	3548708	220		
C 02288		CUB	LE	4	4	4	03	26S	33E	636646	3548758	220	180	40
C 02289		CUB	LE	4	4	4	03	26S	33E	636612	3548675*	200	160	40
C 02290		CUB	LE	4	4	4	03	26S	33E	636538	3548770	200	160	40
C 02293		CUB	LE	2	2	1	14	26S	33E	637501	3546975	200	135	65
C 02294		CUB	LE	4	4	3	11	26S	33E	637465	3547003	200	145	55
C 02295		CUB	LE	2	2	4	12	26S	33E	639865	3547624	250	200	50
C 03577 POD1		CUB	LE	3	3	3	22	26S	33E	636010	3543771	750	110	640
C 03596 POD1		C	LE	3	3	4	22	26S	33E	636017	3543756	225		

Average Depth to Water: **157 feet**

Minimum Depth: **110 feet**

Maximum Depth: **220 feet**

Record Count: 13

PLSS Search:

Township: 26S **Range:** 33E

*UTM location was derived from PLSS - see Help

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

3/18/21 9:56 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER



New Mexico Office of the State Engineer

Point of Diversion Summary

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag	POD Number	Q64 Q16 Q4 Sec Tws Rng	X	Y
C	03577 POD1	3 3 3 22 26S 33E	636010	3543771 

Driller License: 1654 **Driller Company:** NOT WORKING FOR HIRE--SIRMAN DRILLING AND CONSTRUC

Driller Name:

Drill Start Date: 11/19/2012 **Drill Finish Date:** 11/20/2012 **Plug Date:**

Log File Date: 12/11/2012 **PCW Rev Date:** **Source:** Shallow

Pump Type: **Pipe Discharge Size:** **Estimated Yield:** 35 GPM

Casing Size: 6.00 **Depth Well:** 750 feet **Depth Water:** 110 feet

Water Bearing Stratifications:

Top	Bottom	Description
95	150	Sandstone/Gravel/Conglomerate
200	710	Sandstone/Gravel/Conglomerate

Casing Perforations:

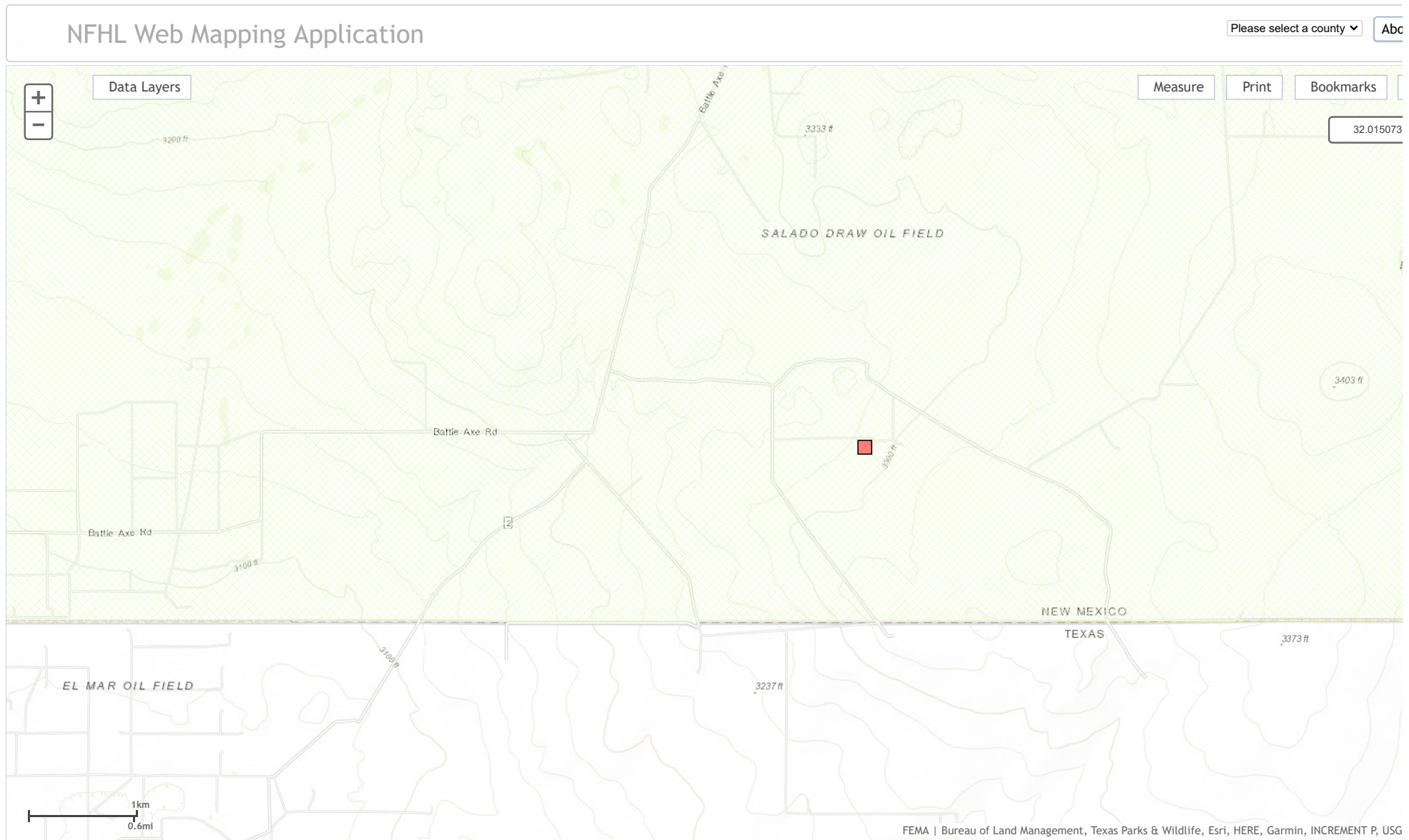
Top	Bottom
180	200
690	750

Meter Number:	16570	Meter Make:	MASTERMETER
Meter Serial Number:	6985354	Meter Multiplier:	100.0000
Number of Dials:	6	Meter Type:	Diversion
Unit of Measure:	Gallons	Return Flow Percent:	
Usage Multiplier:		Reading Frequency:	

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount Online
04/01/2014	2014	123440	A	RPT		0
07/01/2014	2014	160772	A	RPT		11.457
10/01/2014	2014	193527	A	RPT		10.052
12/31/2014	2014	237836	A	RPT		13.598
02/01/2015	2015	247102	A	RPT		2.844
03/02/2015	2015	260095	A	RPT		3.987
04/01/2015	2015	268444	A	RPT		2.562
04/30/2015	2015	284991	A	RPT		5.078
05/31/2015	2015	296985	A	RPT		3.681
07/01/2015	2015	313077	A	RPT		4.938
08/01/2015	2015	321571	A	RPT		2.607
08/31/2015	2015	333738	A	RPT		3.734
10/01/2015	2015	340361	A	RPT		2.033

**YTD Meter Amounts:	Year	Amount
	2014	35.107
	2015	31.464







Appendix C

Certificate of Analysis Summary 690339



NT Global, Midland, TX

Project Name: Ophelia 27 #501h 1RP-4198

Project Id: 213978
Contact: Mike Carmona
Project Location: Lea Co, NM

Date Received in Lab: Thu 03.04.2021 09:58**Report Date:** 03.08.2021 17:51**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	690339-001	690339-002	690339-003	690339-004	690339-005	690339-006
	<i>Field Id:</i>	S-1 (0-1')	S-1 (1-1.5')	S-2 (0-6")	S-3 (0-6")	S-4 (0-1')	S-4 (1-1.5')
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	03.02.2021 00:00	03.02.2021 00:00	03.02.2021 00:00	03.02.2021 00:00	03.02.2021 00:00	03.02.2021 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	03.05.2021 17:00	03.05.2021 17:00	03.05.2021 17:00	03.05.2021 17:00	03.05.2021 17:00	03.05.2021 17:00
	<i>Analyzed:</i>	03.07.2021 00:40	03.07.2021 01:06	03.07.2021 01:32	03.07.2021 01:58	03.07.2021 02:24	03.07.2021 02:50
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200
Toluene		<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200
Ethylbenzene		<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200
m,p-Xylenes		<0.00398 0.00398	<0.00404 0.00404	<0.00403 0.00403	<0.00403 0.00403	<0.00402 0.00402	<0.00399 0.00399
o-Xylene		<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200
Total Xylenes		<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200
Total BTEX		<0.00199 0.00199	<0.00202 0.00202	<0.00202 0.00202	<0.00202 0.00202	<0.00201 0.00201	<0.00200 0.00200
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	03.04.2021 19:20	03.04.2021 19:20	03.04.2021 19:20	03.04.2021 19:20	03.04.2021 19:20	03.04.2021 19:20
	<i>Analyzed:</i>	03.05.2021 07:57	03.05.2021 08:03	03.05.2021 08:08	03.05.2021 08:13	03.05.2021 08:19	03.05.2021 08:24
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		52.5 5.00	26.4 5.00	58.1 5.04	28.8 5.04	26.9 5.04	19.3 4.97
TPH By SW8015 Mod	<i>Extracted:</i>	03.05.2021 12:00	03.05.2021 12:00	03.05.2021 12:00	03.05.2021 12:00	03.05.2021 12:00	03.05.2021 12:00
	<i>Analyzed:</i>	03.05.2021 15:55	03.05.2021 16:16	03.05.2021 16:37	03.05.2021 17:20	03.05.2021 17:41	03.05.2021 18:02
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0
Total TPH		<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.9 49.9	<50.0 50.0	<50.0 50.0

BRL - Below Reporting Limit

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

Certificate of Analysis Summary 690339

NT Global, Midland, TX

Project Name: Ophelia 27 #501h 1RP-4198

Project Id: 213978
 Contact: Mike Carmona
 Project Location: Lea Co, NM

Date Received in Lab: Thu 03.04.2021 09:58
 Report Date: 03.08.2021 17:51
 Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	690339-007	690339-008				
	Field Id:	S-5 (0-1')	S-5 (1-1.5')				
	Depth:						
	Matrix:	SOIL	SOIL				
	Sampled:	03.02.2021 00:00	03.02.2021 00:00				
BTEX by EPA 8021B	Extracted:	03.05.2021 17:00	03.05.2021 17:00				
	Analyzed:	03.07.2021 03:15	03.07.2021 03:41				
	Units/RL:	mg/kg RL	mg/kg RL				
Benzene		<0.00199 0.00199	<0.00201 0.00201				
Toluene		<0.00199 0.00199	<0.00201 0.00201				
Ethylbenzene		<0.00199 0.00199	<0.00201 0.00201				
m,p-Xylenes		<0.00398 0.00398	<0.00402 0.00402				
o-Xylene		<0.00199 0.00199	<0.00201 0.00201				
Total Xylenes		<0.00199 0.00199	<0.00201 0.00201				
Total BTEX		<0.00199 0.00199	<0.00201 0.00201				
Inorganic Anions by EPA 300/300.1	Extracted:	03.04.2021 19:20	03.04.2021 19:20				
	Analyzed:	03.05.2021 08:40	03.05.2021 08:45				
	Units/RL:	mg/kg RL	mg/kg RL				
Chloride		31.0 4.96	53.9 5.00				
TPH By SW8015 Mod	Extracted:	03.05.2021 12:00	03.05.2021 12:00				
	Analyzed:	03.05.2021 18:23	03.05.2021 18:54				
	Units/RL:	mg/kg RL	mg/kg RL				
Gasoline Range Hydrocarbons (GRO)		<49.9 49.9	<50.0 50.0				
Diesel Range Organics (DRO)		<49.9 49.9	<50.0 50.0				
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<50.0 50.0				
Total TPH		<49.9 49.9	<50.0 50.0				

BRL - Below Reporting Limit

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



Analytical Report 690339

for

NT Global

Project Manager: Mike Carmona

Ophelia 27 #501h 1RP-4198

213978

03.08.2021

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

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

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

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



03.08.2021

Project Manager: **Mike Carmona**

NT Global

701 Tradewinds Blvd

Midland, TX 79706

Reference: Eurofins Xenco, LLC Report No(s): **690339**

Ophelia 27 #501h 1RP-4198

Project Address: Lea Co, NM

Mike Carmona:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 690339. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 690339 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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

**Sample Cross Reference 690339****NT Global, Midland, TX**

Ophelia 27 #501h 1RP-4198

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
S-1 (0-1')	S	03.02.2021 00:00		690339-001
S-1 (1-1.5')	S	03.02.2021 00:00		690339-002
S-2 (0-6")	S	03.02.2021 00:00		690339-003
S-3 (0-6")	S	03.02.2021 00:00		690339-004
S-4 (0-1')	S	03.02.2021 00:00		690339-005
S-4 (1-1.5')	S	03.02.2021 00:00		690339-006
S-5 (0-1')	S	03.02.2021 00:00		690339-007
S-5 (1-1.5')	S	03.02.2021 00:00		690339-008



CASE NARRATIVE

Client Name: NT Global

Project Name: Ophelia 27 #501h 1RP-4198

Project ID: 213978
Work Order Number(s): 690339

Report Date: 03.08.2021
Date Received: 03.04.2021

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3152791 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected;

Samples affected are: 690339-007,690339-005.



Certificate of Analytical Results 690339

NT Global, Midland, TX

Ophelia 27 #501h 1RP-4198

Sample Id: **S-1 (0-1')**
Lab Sample Id: 690339-001

Matrix: Soil
Date Collected: 03.02.2021 00:00

Date Received: 03.04.2021 09:58

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 03.04.2021 19:20

% Moisture:
Basis: Wet Weight

Seq Number: 3152661

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	52.5	5.00	mg/kg	03.05.2021 07:57		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.05.2021 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3152844

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.05.2021 15:55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.05.2021 15:55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.05.2021 15:55	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.05.2021 15:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-130	03.05.2021 15:55	
o-Terphenyl	84-15-1	101	%	70-130	03.05.2021 15:55	



Certificate of Analytical Results 690339

NT Global, Midland, TX

Ophelia 27 #501h 1RP-4198

Sample Id: **S-1 (0-1')**
Lab Sample Id: 690339-001

Matrix: Soil
Date Collected: 03.02.2021 00:00

Date Received: 03.04.2021 09:58

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 03.05.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3152791

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.07.2021 00:40	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.07.2021 00:40	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.07.2021 00:40	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.07.2021 00:40	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.07.2021 00:40	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.07.2021 00:40	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.07.2021 00:40	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	129	%	70-130	03.07.2021 00:40		
1,4-Difluorobenzene	540-36-3	100	%	70-130	03.07.2021 00:40		



Certificate of Analytical Results 690339

NT Global, Midland, TX

Ophelia 27 #501h 1RP-4198

Sample Id: S-1 (1-1.5')

Matrix: Soil

Date Received: 03.04.2021 09:58

Lab Sample Id: 690339-002

Date Collected: 03.02.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 03.04.2021 19:20

% Moisture:

Seq Number: 3152661

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	26.4	5.00	mg/kg	03.05.2021 08:03		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.05.2021 12:00

% Moisture:

Seq Number: 3152844

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.05.2021 16:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.05.2021 16:16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.05.2021 16:16	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.05.2021 16:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-130	03.05.2021 16:16	
o-Terphenyl	84-15-1	98	%	70-130	03.05.2021 16:16	



Certificate of Analytical Results 690339

NT Global, Midland, TX

Ophelia 27 #501h 1RP-4198

Sample Id: **S-1 (1-1.5')**

Matrix: Soil

Date Received: 03.04.2021 09:58

Lab Sample Id: 690339-002

Date Collected: 03.02.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 03.05.2021 17:00

% Moisture:

Basis: Wet Weight

Seq Number: 3152791

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.07.2021 01:06	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.07.2021 01:06	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.07.2021 01:06	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	03.07.2021 01:06	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.07.2021 01:06	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	03.07.2021 01:06	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.07.2021 01:06	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	119	%	70-130	03.07.2021 01:06		
1,4-Difluorobenzene	540-36-3	94	%	70-130	03.07.2021 01:06		



Certificate of Analytical Results 690339

NT Global, Midland, TX

Ophelia 27 #501h 1RP-4198

Sample Id: S-2 (0-6")
Lab Sample Id: 690339-003

Matrix: Soil
Date Collected: 03.02.2021 00:00

Date Received: 03.04.2021 09:58

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 03.04.2021 19:20

% Moisture:
Basis: Wet Weight

Seq Number: 3152661

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	58.1	5.04	mg/kg	03.05.2021 08:08		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.05.2021 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3152844

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.05.2021 16:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.05.2021 16:37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.05.2021 16:37	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.05.2021 16:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-130	03.05.2021 16:37	
o-Terphenyl	84-15-1	110	%	70-130	03.05.2021 16:37	



Certificate of Analytical Results 690339

NT Global, Midland, TX

Ophelia 27 #501h 1RP-4198

Sample Id: **S-2 (0-6")**
Lab Sample Id: 690339-003

Matrix: Soil
Date Collected: 03.02.2021 00:00

Date Received: 03.04.2021 09:58

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 03.05.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3152791

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.07.2021 01:32	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.07.2021 01:32	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.07.2021 01:32	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	03.07.2021 01:32	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.07.2021 01:32	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	03.07.2021 01:32	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.07.2021 01:32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	94	%	70-130	03.07.2021 01:32		
4-Bromofluorobenzene	460-00-4	122	%	70-130	03.07.2021 01:32		



Certificate of Analytical Results 690339

NT Global, Midland, TX

Ophelia 27 #501h 1RP-4198

Sample Id: **S-3 (0-6")**
Lab Sample Id: 690339-004

Matrix: Soil
Date Collected: 03.02.2021 00:00

Date Received: 03.04.2021 09:58

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 03.04.2021 19:20

% Moisture:
Basis: Wet Weight

Seq Number: 3152661

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	28.8	5.04	mg/kg	03.05.2021 08:13		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.05.2021 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3152844

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.05.2021 17:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.05.2021 17:20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.05.2021 17:20	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.05.2021 17:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-130	03.05.2021 17:20	
o-Terphenyl	84-15-1	115	%	70-130	03.05.2021 17:20	



Certificate of Analytical Results 690339

NT Global, Midland, TX

Ophelia 27 #501h 1RP-4198

Sample Id: **S-3 (0-6")**
Lab Sample Id: 690339-004

Matrix: Soil
Date Collected: 03.02.2021 00:00

Date Received: 03.04.2021 09:58

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 03.05.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3152791

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	03.07.2021 01:58	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	03.07.2021 01:58	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	03.07.2021 01:58	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	03.07.2021 01:58	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	03.07.2021 01:58	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	03.07.2021 01:58	U	1
Total BTEX		<0.00202	0.00202	mg/kg	03.07.2021 01:58	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	119	%	70-130	03.07.2021 01:58		
1,4-Difluorobenzene	540-36-3	89	%	70-130	03.07.2021 01:58		



Certificate of Analytical Results 690339

NT Global, Midland, TX

Ophelia 27 #501h 1RP-4198

Sample Id: **S-4 (0-1')**
Lab Sample Id: 690339-005

Matrix: Soil
Date Collected: 03.02.2021 00:00

Date Received: 03.04.2021 09:58

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 03.04.2021 19:20

% Moisture:
Basis: Wet Weight

Seq Number: 3152661

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	26.9	5.04	mg/kg	03.05.2021 08:19		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.05.2021 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3152844

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.05.2021 17:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.05.2021 17:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.05.2021 17:41	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.05.2021 17:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-130	03.05.2021 17:41	
o-Terphenyl	84-15-1	99	%	70-130	03.05.2021 17:41	



Certificate of Analytical Results 690339

NT Global, Midland, TX

Ophelia 27 #501h 1RP-4198

Sample Id: **S-4 (0-1')**
Lab Sample Id: 690339-005

Matrix: Soil
Date Collected: 03.02.2021 00:00

Date Received: 03.04.2021 09:58

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 03.05.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3152791

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.07.2021 02:24	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.07.2021 02:24	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.07.2021 02:24	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.07.2021 02:24	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.07.2021 02:24	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.07.2021 02:24	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.07.2021 02:24	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	104	%	70-130	03.07.2021 02:24		
4-Bromofluorobenzene	460-00-4	133	%	70-130	03.07.2021 02:24	**	



Certificate of Analytical Results 690339

NT Global, Midland, TX

Ophelia 27 #501h 1RP-4198

Sample Id: S-4 (1-1.5')

Matrix: Soil

Date Received: 03.04.2021 09:58

Lab Sample Id: 690339-006

Date Collected: 03.02.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 03.04.2021 19:20

% Moisture:

Seq Number: 3152661

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	19.3	4.97	mg/kg	03.05.2021 08:24		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.05.2021 12:00

% Moisture:

Seq Number: 3152844

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.05.2021 18:02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.05.2021 18:02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.05.2021 18:02	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.05.2021 18:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-130	03.05.2021 18:02	
o-Terphenyl	84-15-1	100	%	70-130	03.05.2021 18:02	



Certificate of Analytical Results 690339

NT Global, Midland, TX

Ophelia 27 #501h 1RP-4198

Sample Id: **S-4 (1-1.5')**

Matrix: Soil

Date Received: 03.04.2021 09:58

Lab Sample Id: 690339-006

Date Collected: 03.02.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 03.05.2021 17:00

% Moisture:

Seq Number: 3152791

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.07.2021 02:50	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.07.2021 02:50	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.07.2021 02:50	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.07.2021 02:50	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.07.2021 02:50	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.07.2021 02:50	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.07.2021 02:50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	90	%	70-130	03.07.2021 02:50		
4-Bromofluorobenzene	460-00-4	113	%	70-130	03.07.2021 02:50		



Certificate of Analytical Results 690339

NT Global, Midland, TX

Ophelia 27 #501h 1RP-4198

Sample Id: S-5 (0-1')
Lab Sample Id: 690339-007

Matrix: Soil
Date Collected: 03.02.2021 00:00

Date Received: 03.04.2021 09:58

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 03.04.2021 19:20

% Moisture:
Basis: Wet Weight

Seq Number: 3152661

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	31.0	4.96	mg/kg	03.05.2021 08:40		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.05.2021 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3152844

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.05.2021 18:23	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.05.2021 18:23	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.05.2021 18:23	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.05.2021 18:23	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-130	03.05.2021 18:23	
o-Terphenyl	84-15-1	99	%	70-130	03.05.2021 18:23	



Certificate of Analytical Results 690339

NT Global, Midland, TX

Ophelia 27 #501h 1RP-4198

Sample Id: **S-5 (0-1')**
Lab Sample Id: 690339-007

Matrix: Soil
Date Collected: 03.02.2021 00:00

Date Received: 03.04.2021 09:58

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 03.05.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3152791

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.07.2021 03:15	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.07.2021 03:15	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.07.2021 03:15	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.07.2021 03:15	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.07.2021 03:15	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.07.2021 03:15	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.07.2021 03:15	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	142	%	70-130	03.07.2021 03:15	**	
1,4-Difluorobenzene	540-36-3	105	%	70-130	03.07.2021 03:15		



Certificate of Analytical Results 690339

NT Global, Midland, TX

Ophelia 27 #501h 1RP-4198

Sample Id: S-5 (1-1.5')

Matrix: Soil

Date Received: 03.04.2021 09:58

Lab Sample Id: 690339-008

Date Collected: 03.02.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 03.04.2021 19:20

% Moisture:

Seq Number: 3152661

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	53.9	5.00	mg/kg	03.05.2021 08:45		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.05.2021 12:00

% Moisture:

Seq Number: 3152844

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.05.2021 18:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.05.2021 18:54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.05.2021 18:54	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.05.2021 18:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-130	03.05.2021 18:54	
o-Terphenyl	84-15-1	114	%	70-130	03.05.2021 18:54	



Certificate of Analytical Results 690339

NT Global, Midland, TX

Ophelia 27 #501h 1RP-4198

Sample Id: **S-5 (1-1.5')**

Matrix: Soil

Date Received: 03.04.2021 09:58

Lab Sample Id: 690339-008

Date Collected: 03.02.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 03.05.2021 17:00

% Moisture:

Seq Number: 3152791

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.07.2021 03:41	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.07.2021 03:41	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.07.2021 03:41	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.07.2021 03:41	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.07.2021 03:41	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.07.2021 03:41	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.07.2021 03:41	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	95	%	70-130	03.07.2021 03:41		
4-Bromofluorobenzene	460-00-4	122	%	70-130	03.07.2021 03:41		

Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



NT Global

Ophelia 27 #501h 1RP-4198

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3152661

Matrix: Solid

Prep Method: E300P

Date Prep: 03.04.2021

MB Sample Id: 7722551-1-BLK

LCS Sample Id: 7722551-1-BKS

LCSD Sample Id: 7722551-1-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	242	97	242	97	90-110	0	20	mg/kg	03.05.2021 06:59	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3152661

Matrix: Soil

Prep Method: E300P

Date Prep: 03.04.2021

Parent Sample Id: 690337-009

MS Sample Id: 690337-009 S

MSD Sample Id: 690337-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	7.98	250	261	101	262	102	90-110	0	20	mg/kg	03.05.2021 07:15	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3152661

Matrix: Soil

Prep Method: E300P

Date Prep: 03.04.2021

Parent Sample Id: 690339-006

MS Sample Id: 690339-006 S

MSD Sample Id: 690339-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	19.3	249	267	99	268	100	90-110	0	20	mg/kg	03.05.2021 08:29	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3152844

Matrix: Solid

Prep Method: SW8015P

Date Prep: 03.05.2021

MB Sample Id: 7722745-1-BLK

LCS Sample Id: 7722745-1-BKS

LCSD Sample Id: 7722745-1-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)	<50.0	1000	926	93	919	92	70-130	1	20	mg/kg	03.05.2021 12:03	
Diesel Range Organics (DRO)	<50.0	1000	872	87	874	87	70-130	0	20	mg/kg	03.05.2021 12:03	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag		LCSD %Rec	LCSD Flag		Limits	Units	Analysis Date	
1-Chlorooctane	86		87			86			70-130	%	03.05.2021 12:03	
o-Terphenyl	87		77			76			70-130	%	03.05.2021 12:03	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3152844

Matrix: Solid

Prep Method: SW8015P

Date Prep: 03.05.2021

MB Sample Id: 7722745-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	03.05.2021 11:42	

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



NT Global

Ophelia 27 #501h 1RP-4198

Analytical Method: TPH By SW8015 Mod

Seq Number: 3152844

Parent Sample Id: 690341-001

Matrix: Soil

MS Sample Id: 690341-001 S

Prep Method: SW8015P

Date Prep: 03.05.2021

MSD Sample Id: 690341-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	998	1030	103	1010	101	70-130	2	20	mg/kg	03.05.2021 13:06	
Diesel Range Organics (DRO)	<49.9	998	1000	100	981	98	70-130	2	20	mg/kg	03.05.2021 13:06	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	103		101		70-130	%	03.05.2021 13:06
o-Terphenyl	95		92		70-130	%	03.05.2021 13:06

Analytical Method: BTEX by EPA 8021B

Seq Number: 3152791

MB Sample Id: 7722669-1-BLK

Matrix: Solid

LCS Sample Id: 7722669-1-BKS

Prep Method: SW5035A

Date Prep: 03.05.2021

LCSD Sample Id: 7722669-1-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	0.108	108	0.126	126	70-130	15	35	mg/kg	03.06.2021 20:49	
Toluene	<0.00200	0.100	0.102	102	0.113	113	70-130	10	35	mg/kg	03.06.2021 20:49	
Ethylbenzene	<0.00200	0.100	0.0928	93	0.104	104	70-130	11	35	mg/kg	03.06.2021 20:49	
m,p-Xylenes	<0.00400	0.200	0.190	95	0.213	107	70-130	11	35	mg/kg	03.06.2021 20:49	
o-Xylene	<0.00200	0.100	0.0881	88	0.102	102	70-130	15	35	mg/kg	03.06.2021 20:49	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	76		89		107		70-130	%	03.06.2021 20:49
4-Bromofluorobenzene	94		101		123		70-130	%	03.06.2021 20:49

Analytical Method: BTEX by EPA 8021B

Seq Number: 3152791

Parent Sample Id: 690338-003

Matrix: Soil

MS Sample Id: 690338-003 S

Prep Method: SW5035A

Date Prep: 03.05.2021

MSD Sample Id: 690338-003 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	0.0983	98	0.112	112	70-130	13	35	mg/kg	03.06.2021 21:41	
Toluene	<0.00201	0.100	0.0869	87	0.102	102	70-130	16	35	mg/kg	03.06.2021 21:41	
Ethylbenzene	<0.00201	0.100	0.0791	79	0.0902	90	70-130	13	35	mg/kg	03.06.2021 21:41	
m,p-Xylenes	<0.00402	0.201	0.162	81	0.181	91	70-130	11	35	mg/kg	03.06.2021 21:41	
o-Xylene	<0.00201	0.100	0.0807	81	0.0902	90	70-130	11	35	mg/kg	03.06.2021 21:41	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		104		70-130	%	03.06.2021 21:41
4-Bromofluorobenzene	126		128		70-130	%	03.06.2021 21:41

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



Chain of Custody

Work Order No: 690339

Page 1 of 1

Project Manager:	Mike Carmona	Bill to: (if different)	James Kennedy
Company Name:	NTG Environmental	Company Name:	EOG Resources
Address:	701 Tradewinds Blvd	Address:	5509 Champions Dr
City, State ZIP:	Midland, TX 79706	City, State ZIP:	Midland, TX 79706
Phone:	432-813-0263	Email:	James_Kennedy@eogresources.com

Work Order Comments	
Program: UST/PST	PRP
Brownfields	RRC
Superfund	
State of Project:	
Reporting Level I	Level II
Level III	PST/UST
RRP	Level IV
Deliverables: EDD	ADAPT
Other:	

Project Name:	Ophelia 27 #501H 1RP-4198	Turn Around	Pres. Code	ANALYSIS REQUEST												Preservative Codes		
Project Number:	213978	☐ Routine ☒ Rush															None: NO	DI Water: H ₂ O
Project Location:	Lea Co. NM	Due Date:	7/2/14														Cool: Cool	MeOH: Me
Sampler's Name:	Conner M	TAT starts the day received by the lab, if received by 4:30pm															HCL: HC	HNO ₃ : HN
PO #:																	H ₂ SO ₄ : H ₂	NaOH: Na
SAMPLE RECEIPT	Tapp Blank:	Yes	No	Wet Ice:	Yes	No											H ₃ PO ₄ : HP	
Received Intact:	Thermometer ID:	Yes	No		Yes	No											NaHSO ₄ : NABIS	
Cooler Custody Seals:	Correction Factor:	Yes	No		Yes	No											Na ₂ S ₂ O ₃ : NaSO ₃	
Sample Custody Seals:	Temperature Reading:	Yes	No		Yes	No											Zn Acetate+NaOH: Zn	
Total Containers:	Corrected Temperature:				Yes	No											NaOH+Ascorbic Acid: SAPC	
Sample Identification	Date	Time	Soil	Water	Grab/Comp	# of Cont											Sample Comments	
S-1 (0-1')	3/2/2021		X		Grab	1	X	X	X									
S-1 (1-1.5')	3/2/2021		X		Grab	1	X	X	X									
S-2 (0-6')	3/2/2021		X		Grab	1	X	X	X									
S-3 (0-6')	3/2/2021		X		Grab	1	X	X	X									
S-4 (0-1')	3/2/2021		X		Grab	1	X	X	X									
S-4 (1-1.5')	3/2/2021		X		Grab	1	X	X	X									
S-5 (0-1')	3/2/2021		X		Grab	1	X	X	X									
S-5 (1-1.5')	3/2/2021		X		Grab	1	X	X	X									

Additional Comments:

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 \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1. <i>Conner M</i>	<i>James Kennedy</i>	3/4/21	2.		
3.		4:50	4.		
5.			6.		

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: NT Global

Date/ Time Received: 03.04.2021 09:58.00 AM

Work Order #: 690339

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	4
#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:



Brianna Teel

Date: 03.04.2021

Checklist reviewed by:



Jessica Kramer

Date: 03.04.2021

Certificate of Analysis Summary 690338

NT Global, Midland, TX

Project Name: Ophelia 27 #501h 1RP-4198

Project Id: 213978
Contact: Mike Carmona
Project Location: Lea Co, NM

Date Received in Lab: Thu 03.04.2021 09:58
Report Date: 03.08.2021 17:50
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	690338-001	690338-002	690338-003	690338-004		
	<i>Field Id:</i>	H-1 (0-6")	H-2 (0-6")	H-3 (0-6")	H-4 (0-6")		
	<i>Depth:</i>						
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL		
	<i>Sampled:</i>	03.02.2021 00:00	03.02.2021 00:00	03.02.2021 00:00	03.02.2021 00:00		
BTEX by EPA 8021B	<i>Extracted:</i>	03.05.2021 16:00	03.05.2021 16:00	03.05.2021 17:00	03.05.2021 17:00		
	<i>Analyzed:</i>	03.06.2021 04:13	03.06.2021 04:33	03.06.2021 23:49	03.07.2021 00:15		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200		
Toluene		<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200		
Ethylbenzene		<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200		
m,p-Xylenes		<0.00398 0.00398	<0.00399 0.00399	<0.00402 0.00402	<0.00399 0.00399		
o-Xylene		<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200		
Total Xylenes		<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200		
Total BTEX		<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200		
Inorganic Anions by EPA 300/300.1	<i>Extracted:</i>	03.04.2021 19:20	03.04.2021 19:20	03.04.2021 19:20	03.04.2021 19:20		
	<i>Analyzed:</i>	03.05.2021 07:25	03.05.2021 07:31	03.05.2021 07:36	03.05.2021 07:41		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		54.8 4.97	23.1 5.03	21.6 4.96	43.1 5.00		
TPH By SW8015 Mod	<i>Extracted:</i>	03.05.2021 12:00	03.05.2021 12:00	03.05.2021 12:00	03.05.2021 12:00		
	<i>Analyzed:</i>	03.05.2021 19:14	03.05.2021 19:36	03.05.2021 19:57	03.05.2021 20:18		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0		
Diesel Range Organics (DRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0		
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0		
Total TPH		<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0		

BRL - Below Reporting Limit

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



Analytical Report 690338

for

NT Global

Project Manager: Mike Carmona

Ophelia 27 #501h 1RP-4198

213978

03.08.2021

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

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

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

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



03.08.2021

Project Manager: **Mike Carmona**

NT Global

701 Tradewinds Blvd

Midland, TX 79706

Reference: Eurofins Xenco, LLC Report No(s): **690338**

Ophelia 27 #501h 1RP-4198

Project Address: Lea Co, NM

Mike Carmona:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 690338. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 690338 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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

**Sample Cross Reference 690338****NT Global, Midland, TX**

Ophelia 27 #501h 1RP-4198

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
H-1 (0-6")	S	03.02.2021 00:00		690338-001
H-2 (0-6")	S	03.02.2021 00:00		690338-002
H-3 (0-6")	S	03.02.2021 00:00		690338-003
H-4 (0-6")	S	03.02.2021 00:00		690338-004



CASE NARRATIVE

Client Name: NT Global

Project Name: Ophelia 27 #501h 1RP-4198

Project ID: 213978
Work Order Number(s): 690338

Report Date: 03.08.2021
Date Received: 03.04.2021

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 690338

NT Global, Midland, TX

Ophelia 27 #501h 1RP-4198

Sample Id: **H-1 (0-6")**

Matrix: Soil

Date Received: 03.04.2021 09:58

Lab Sample Id: 690338-001

Date Collected: 03.02.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 03.04.2021 19:20

% Moisture:

Seq Number: 3152661

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	54.8	4.97	mg/kg	03.05.2021 07:25		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.05.2021 12:00

% Moisture:

Seq Number: 3152844

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.05.2021 19:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.05.2021 19:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.05.2021 19:14	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.05.2021 19:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-130	03.05.2021 19:14	
o-Terphenyl	84-15-1	103	%	70-130	03.05.2021 19:14	



Certificate of Analytical Results 690338

NT Global, Midland, TX

Ophelia 27 #501h 1RP-4198

Sample Id: **H-1 (0-6")**

Matrix: Soil

Date Received: 03.04.2021 09:58

Lab Sample Id: 690338-001

Date Collected: 03.02.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.05.2021 16:00

% Moisture:

Seq Number: 3152743

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	03.06.2021 04:13	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	03.06.2021 04:13	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	03.06.2021 04:13	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	03.06.2021 04:13	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	03.06.2021 04:13	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	03.06.2021 04:13	U	1
Total BTEX		<0.00199	0.00199	mg/kg	03.06.2021 04:13	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	101	%	70-130	03.06.2021 04:13		
1,4-Difluorobenzene	540-36-3	80	%	70-130	03.06.2021 04:13		



Certificate of Analytical Results 690338

NT Global, Midland, TX

Ophelia 27 #501h 1RP-4198

Sample Id: **H-2 (0-6")**

Matrix: Soil

Date Received: 03.04.2021 09:58

Lab Sample Id: 690338-002

Date Collected: 03.02.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 03.04.2021 19:20

% Moisture:

Seq Number: 3152661

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	23.1	5.03	mg/kg	03.05.2021 07:31		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.05.2021 12:00

% Moisture:

Seq Number: 3152844

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	03.05.2021 19:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	03.05.2021 19:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	03.05.2021 19:36	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	03.05.2021 19:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-130	03.05.2021 19:36	
o-Terphenyl	84-15-1	100	%	70-130	03.05.2021 19:36	



Certificate of Analytical Results 690338

NT Global, Midland, TX

Ophelia 27 #501h 1RP-4198

Sample Id: **H-2 (0-6")**

Matrix: Soil

Date Received: 03.04.2021 09:58

Lab Sample Id: 690338-002

Date Collected: 03.02.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 03.05.2021 16:00

% Moisture:

Seq Number: 3152743

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.06.2021 04:33	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.06.2021 04:33	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.06.2021 04:33	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.06.2021 04:33	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.06.2021 04:33	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.06.2021 04:33	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.06.2021 04:33	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	99	%	70-130	03.06.2021 04:33		
1,4-Difluorobenzene	540-36-3	91	%	70-130	03.06.2021 04:33		



Certificate of Analytical Results 690338

NT Global, Midland, TX

Ophelia 27 #501h 1RP-4198

Sample Id: **H-3 (0-6")**

Matrix: Soil

Date Received: 03.04.2021 09:58

Lab Sample Id: 690338-003

Date Collected: 03.02.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 03.04.2021 19:20

% Moisture:

Seq Number: 3152661

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	21.6	4.96	mg/kg	03.05.2021 07:36		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.05.2021 12:00

% Moisture:

Seq Number: 3152844

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.05.2021 19:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.05.2021 19:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.05.2021 19:57	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.05.2021 19:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-130	03.05.2021 19:57	
o-Terphenyl	84-15-1	99	%	70-130	03.05.2021 19:57	



Certificate of Analytical Results 690338

NT Global, Midland, TX

Ophelia 27 #501h 1RP-4198

Sample Id: **H-3 (0-6")**

Matrix: Soil

Date Received: 03.04.2021 09:58

Lab Sample Id: 690338-003

Date Collected: 03.02.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 03.05.2021 17:00

% Moisture:

Seq Number: 3152791

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	03.06.2021 23:49	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	03.06.2021 23:49	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	03.06.2021 23:49	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	03.06.2021 23:49	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	03.06.2021 23:49	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	03.06.2021 23:49	U	1
Total BTEX		<0.00201	0.00201	mg/kg	03.06.2021 23:49	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	127	%	70-130	03.06.2021 23:49		
1,4-Difluorobenzene	540-36-3	71	%	70-130	03.06.2021 23:49		



Certificate of Analytical Results 690338

NT Global, Midland, TX

Ophelia 27 #501h 1RP-4198

Sample Id: **H-4 (0-6")**

Matrix: Soil

Date Received: 03.04.2021 09:58

Lab Sample Id: 690338-004

Date Collected: 03.02.2021 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 03.04.2021 19:20

% Moisture:

Seq Number: 3152661

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	43.1	5.00	mg/kg	03.05.2021 07:41		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 03.05.2021 12:00

% Moisture:

Seq Number: 3152844

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	03.05.2021 20:18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	03.05.2021 20:18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	03.05.2021 20:18	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	03.05.2021 20:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-130	03.05.2021 20:18	
o-Terphenyl	84-15-1	109	%	70-130	03.05.2021 20:18	



Certificate of Analytical Results 690338

NT Global, Midland, TX

Ophelia 27 #501h 1RP-4198

Sample Id: **H-4 (0-6")**

Matrix: Soil

Date Received: 03.04.2021 09:58

Lab Sample Id: 690338-004

Date Collected: 03.02.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 03.05.2021 17:00

% Moisture:

Seq Number: 3152791

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	03.07.2021 00:15	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	03.07.2021 00:15	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	03.07.2021 00:15	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	03.07.2021 00:15	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	03.07.2021 00:15	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	03.07.2021 00:15	U	1
Total BTEX		<0.00200	0.00200	mg/kg	03.07.2021 00:15	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	113	%	70-130	03.07.2021 00:15		
1,4-Difluorobenzene	540-36-3	91	%	70-130	03.07.2021 00:15		

Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

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

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

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

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

+ NELAC certification not offered for this compound.

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



NT Global

Ophelia 27 #501h 1RP-4198

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3152661

Matrix: Solid

Prep Method: E300P

Date Prep: 03.04.2021

MB Sample Id: 7722551-1-BLK

LCS Sample Id: 7722551-1-BKS

LCSD Sample Id: 7722551-1-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	242	97	242	97	90-110	0	20	mg/kg	03.05.2021 06:59	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3152661

Matrix: Soil

Prep Method: E300P

Date Prep: 03.04.2021

Parent Sample Id: 690337-009

MS Sample Id: 690337-009 S

MSD Sample Id: 690337-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	7.98	250	261	101	262	102	90-110	0	20	mg/kg	03.05.2021 07:15	

Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3152661

Matrix: Soil

Prep Method: E300P

Date Prep: 03.04.2021

Parent Sample Id: 690339-006

MS Sample Id: 690339-006 S

MSD Sample Id: 690339-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	19.3	249	267	99	268	100	90-110	0	20	mg/kg	03.05.2021 08:29	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3152844

Matrix: Solid

Prep Method: SW8015P

Date Prep: 03.05.2021

MB Sample Id: 7722745-1-BLK

LCS Sample Id: 7722745-1-BKS

LCSD Sample Id: 7722745-1-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)	<50.0	1000	926	93	919	92	70-130	1	20	mg/kg	03.05.2021 12:03	
Diesel Range Organics (DRO)	<50.0	1000	872	87	874	87	70-130	0	20	mg/kg	03.05.2021 12:03	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag		LCSD %Rec	LCSD Flag		Limits	Units	Analysis Date	
1-Chlorooctane	86		87			86			70-130	%	03.05.2021 12:03	
o-Terphenyl	87		77			76			70-130	%	03.05.2021 12:03	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3152844

Matrix: Solid

Prep Method: SW8015P

Date Prep: 03.05.2021

MB Sample Id: 7722745-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	03.05.2021 11:42	

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



NT Global

Ophelia 27 #501h 1RP-4198

Analytical Method: TPH By SW8015 Mod

Seq Number: 3152844

Parent Sample Id: 690341-001

Matrix: Soil

MS Sample Id: 690341-001 S

Prep Method: SW8015P

Date Prep: 03.05.2021

MSD Sample Id: 690341-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	998	1030	103	1010	101	70-130	2	20	mg/kg	03.05.2021 13:06	
Diesel Range Organics (DRO)	<49.9	998	1000	100	981	98	70-130	2	20	mg/kg	03.05.2021 13:06	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	103		101		70-130	%	03.05.2021 13:06
o-Terphenyl	95		92		70-130	%	03.05.2021 13:06

Analytical Method: BTEX by EPA 8021B

Seq Number: 3152743

MB Sample Id: 7722661-1-BLK

Matrix: Solid

LCS Sample Id: 7722661-1-BKS

Prep Method: SW5035A

Date Prep: 03.05.2021

LCSD Sample Id: 7722661-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.107	107	0.100	100	70-130	7	35	mg/kg	03.05.2021 19:43	
Toluene	<0.00200	0.100	0.101	101	0.0946	95	70-130	7	35	mg/kg	03.05.2021 19:43	
Ethylbenzene	<0.00200	0.100	0.106	106	0.100	100	70-130	6	35	mg/kg	03.05.2021 19:43	
m,p-Xylenes	<0.00400	0.200	0.213	107	0.200	100	70-130	6	35	mg/kg	03.05.2021 19:43	
o-Xylene	<0.00200	0.100	0.106	106	0.0997	100	70-130	6	35	mg/kg	03.05.2021 19:43	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	88		102		101		70-130	%	03.05.2021 19:43
4-Bromofluorobenzene	96		99		99		70-130	%	03.05.2021 19:43

Analytical Method: BTEX by EPA 8021B

Seq Number: 3152791

MB Sample Id: 7722669-1-BLK

Matrix: Solid

LCS Sample Id: 7722669-1-BKS

Prep Method: SW5035A

Date Prep: 03.05.2021

LCSD Sample Id: 7722669-1-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	0.108	108	0.126	126	70-130	15	35	mg/kg	03.06.2021 20:49	
Toluene	<0.00200	0.100	0.102	102	0.113	113	70-130	10	35	mg/kg	03.06.2021 20:49	
Ethylbenzene	<0.00200	0.100	0.0928	93	0.104	104	70-130	11	35	mg/kg	03.06.2021 20:49	
m,p-Xylenes	<0.00400	0.200	0.190	95	0.213	107	70-130	11	35	mg/kg	03.06.2021 20:49	
o-Xylene	<0.00200	0.100	0.0881	88	0.102	102	70-130	15	35	mg/kg	03.06.2021 20:49	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	76		89		107		70-130	%	03.06.2021 20:49
4-Bromofluorobenzene	94		101		123		70-130	%	03.06.2021 20:49

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



NT Global

Ophelia 27 #501h 1RP-4198

Analytical Method: BTEX by EPA 8021B

Seq Number: 3152743

Parent Sample Id: 690333-001

Matrix: Soil

MS Sample Id: 690333-001 S

Prep Method: SW5035A

Date Prep: 03.05.2021

MSD Sample Id: 690333-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0992	0.0104	10	0.00992	10	70-130	5	35	mg/kg	03.05.2021 20:24	X
Toluene	<0.00198	0.0992	0.00596	6	0.00559	6	70-130	6	35	mg/kg	03.05.2021 20:24	X
Ethylbenzene	<0.00198	0.0992	0.00545	5	0.00462	5	70-130	16	35	mg/kg	03.05.2021 20:24	X
m,p-Xylenes	<0.00397	0.198	0.0118	6	0.00985	5	70-130	18	35	mg/kg	03.05.2021 20:24	X
o-Xylene	<0.00198	0.0992	0.00919	9	0.00772	8	70-130	17	35	mg/kg	03.05.2021 20:24	X

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		98		70-130	%	03.05.2021 20:24
4-Bromofluorobenzene	105		101		70-130	%	03.05.2021 20:24

Analytical Method: BTEX by EPA 8021B

Seq Number: 3152791

Parent Sample Id: 690338-003

Matrix: Soil

MS Sample Id: 690338-003 S

Prep Method: SW5035A

Date Prep: 03.05.2021

MSD Sample Id: 690338-003 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	0.0983	98	0.112	112	70-130	13	35	mg/kg	03.06.2021 21:41	
Toluene	<0.00201	0.100	0.0869	87	0.102	102	70-130	16	35	mg/kg	03.06.2021 21:41	
Ethylbenzene	<0.00201	0.100	0.0791	79	0.0902	90	70-130	13	35	mg/kg	03.06.2021 21:41	
m,p-Xylenes	<0.00402	0.201	0.162	81	0.181	91	70-130	11	35	mg/kg	03.06.2021 21:41	
o-Xylene	<0.00201	0.100	0.0807	81	0.0902	90	70-130	11	35	mg/kg	03.06.2021 21:41	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		104		70-130	%	03.06.2021 21:41
4-Bromofluorobenzene	126		128		70-130	%	03.06.2021 21:41

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



Chain of Custody

Work Order No: 690338

Project Manager:	Mike Cammona	Bill to: (if different)	James Kennedy
Company Name:	NTG Environmental	Company Name:	EOG Resources
Address:	701 Tradewinds BLVD	Address:	5509 Champions Dr
City, State ZIP:	Midland, TX 79706	City, State ZIP:	Midland, Tx 79706
Phone:	432-813-0263	Email:	James_Kennedy@eogresources

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐

State of Project:

Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐

Deliverables: EDD ☐ ADAPT ☐ Other: _____

[illegible][illegible]

Additoinal Comments:

Notice: Signature of this document and reimbursement of samples constitutes a valid purchase order from client company to Xenoco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenoco 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 Xenoco. A minimum charge of \$65.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenoco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>(Signature)</i>	<i>(Signature)</i>	3/4/21	2		
3		9:53	4		
5			6		

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: NT Global

Date/ Time Received: 03.04.2021 09.58.00 AM

Work Order #: 690338

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	4
#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:



Brianna Teel

Date: 03.04.2021

Checklist reviewed by:



Jessica Kramer

Date: 03.04.2021

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 58238

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 58238
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bhall	None	10/12/2022