Site Information

Closure Report
Spruce Goose Federal 2H (10.15.21)
Lea County, New Mexico
Unit C Sec 32 T20S R34E
32.679593°, -103.815580°

Crude Oil Release
Source: Wellhead malfunction.
Release Date: 10.15.21
Volume Released: 7 bbls/crude oil
Volume Recovered: 2 bbls/crude oil

Prepared for:
Concho Operating, LLC
15 West London Rd
Loving, NM 88256

Prepared by:
NTG Environmental
701 Tradewinds Blvd
Suite C
Midland, TX 79706

TABLE OF CONTENTS

FIGURES

TABLES/PHOTOLOG

APPENDICES

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

January 25, 2022

New Mexico Oil Conservation Division
1220 South St, Francis Drive
Sante Fe, NM 87505

Re: Closure Report
Spruce Goose Federal Com 002H (10.15.21)
Concho Operating, LLC
Site Location: Unit C, S32, T20S, R34E
(Lat 32.679593º, Long , -103.815580º)
Lea County, New Mexico

To Whom it may concern:

On behalf of Concho Operating, LLC (COG), New Tech Global Environmental, LLC (NTGE) has prepared this letter to document site assessment and remediation activities for the Spruce Goose Federal Com 002H (10.15.21). The site is located at 32.679593º, -103.815580º within Unit C, S32, T20S, R34E, 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 October 15, 2021, due to a wellhead malfunction. It resulted in the release of approximately seven (7) barrels of crude oil, and two (2) barrels were recovered. The impacted area measured around 133' x 12' and 105' x 41'', 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 Engineers and USGS databases, no known water sources are within a 0.50-mile radius of the location. The closest well is located approximately 1.75 miles East of the site in S34, T20S, R34E. The well has a reported depth to groundwater of 1,005' below ground surface (bgs) drilled in 2015A copy of the associated *USGS – National Water Information System* 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: 100 mg/kg (GRO + DRO + MRO).
- Chloride: 600 mg/kg

Site Assessment & Trenching

On November 11, 2021, and December 6, 2021, NTGE conducted site assessment activities to assess soil impacts resulting from the release. A total of three(3) trenches and sample points were advanced to depths ranging surface – 3.0 ft bgs within the release area to assess the vertical and horizontal extent of potential impacts. The soil sample locations are shown on Figure 3. For chemical analysis, 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 Eurofins Laboratories in Midland, Texas. 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.

The areas of (S-1, S-2, and S-3) had chloride concentration values ranging from 17,200 mg/kg to 45,600 mg/kg and TPH concentration values ranging from less than 15,100 mg/kg to 16,300 mg/kg at a depth from the surface to 0.5' below the surface.

The site was trenched, and all areas were vertically delineated. Refer to Table 1.

Horizontal Delineation

The areas of H-1 through H-7 were below the 19.15.29.12 NMAC criteria.

Remediation Activities and Confirmation Sampling

New Tech Global Environmental personnel were onsite from January 20-24, 2021, supervising the remediation activities and collecting confirmation samples. A total of twenty-one (21) confirmation samples were collected (CS-1 through CS-21), and twelve (12) sidewall samples (SW-1 through SW-12) were collected every 200 square feet to ensure proper removal of the contaminated soils. 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. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The results of the sampling are summarized in Table 2. The excavation depths and confirmation sample locations are shown in Figure 4.

The site was remediated to 8" below the surface, and all final confirmation samples were below 19.15.29.12 NMAC criteria.

Once the remediation activities were completed, the excavated areas were backfilled with clean material to surface grade. Approximately 190 cubic yards of material were excavated and transported offsite for proper disposal.

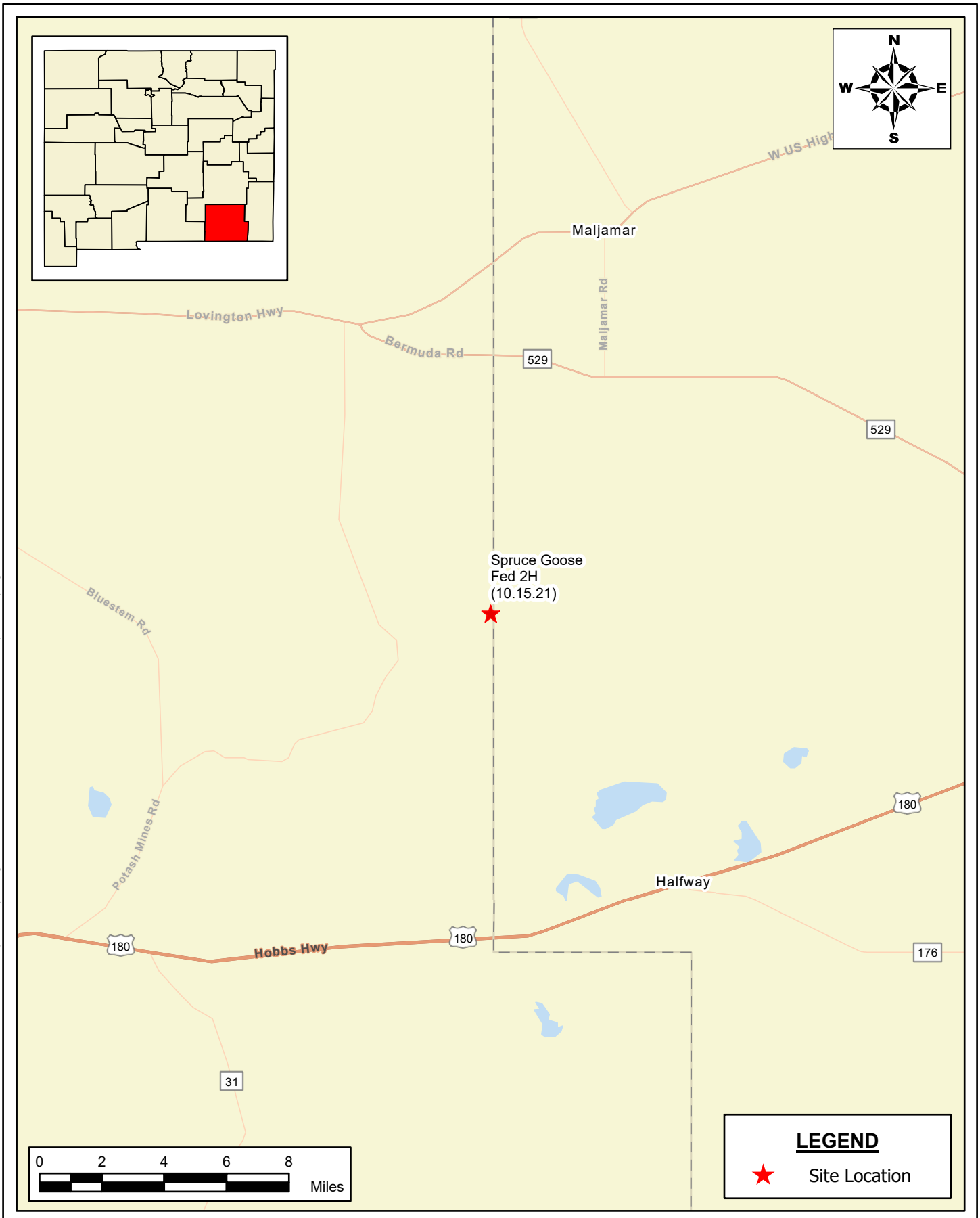
Conclusions

Based on the assessment finding and the analytical results, no further actions are required at the site. The final C-141 is attached, and COG 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

Figures



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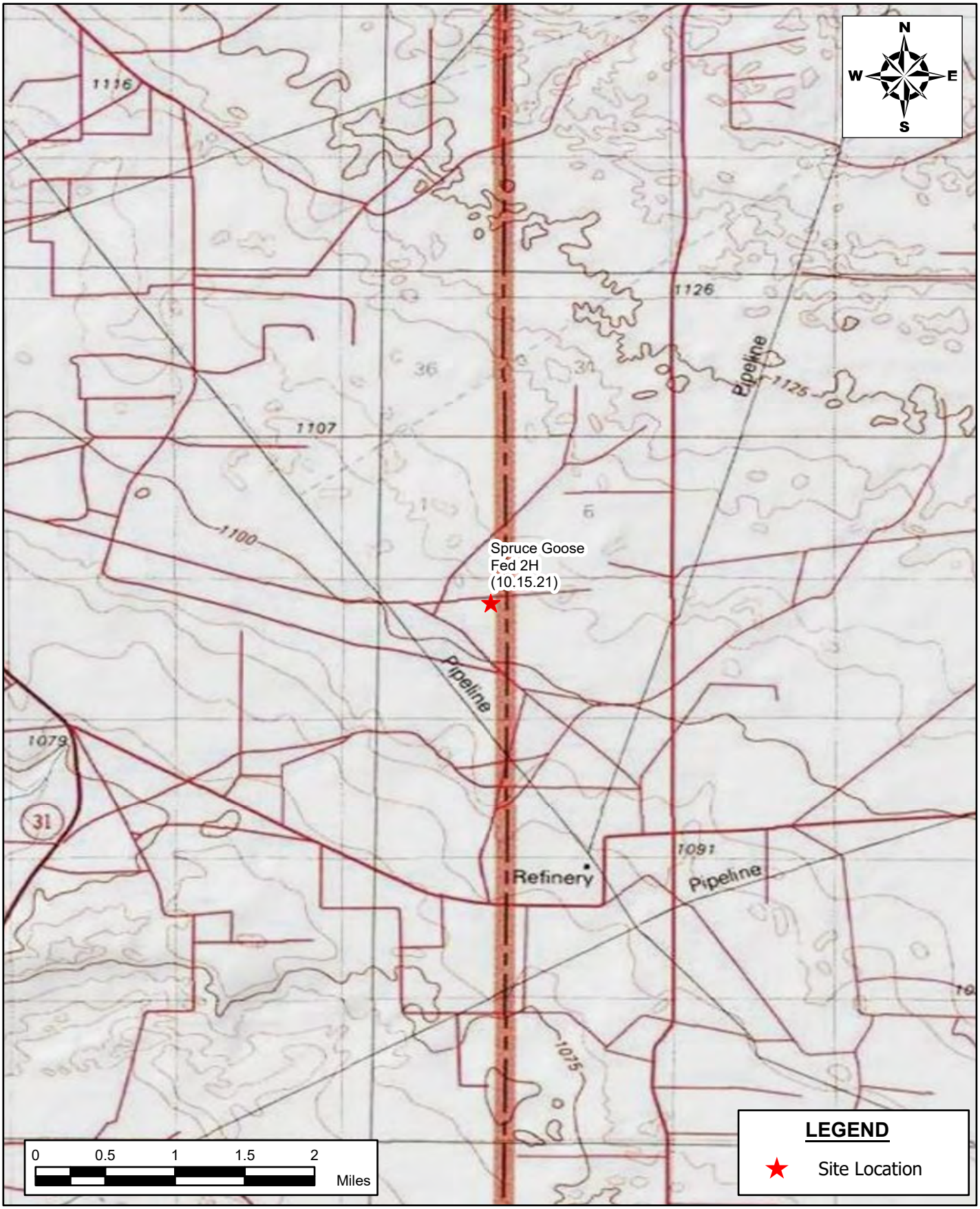
SITE LOCATION MAP
COG OPERATING, LLC
SPRUCE GOOSE FED 2H (10.15.21)
EDDY COUNTY, NEW MEXICO
32.679593, -103.815580

SCALE: As Shown | Date: 11/22/2021 | PROJECT #: 214872

New Tech Global Environmental, LLC
911 Regional Park Drive
Houston, Texas 77060
T - 281.872.9300
F - 281.872.4521
Web: www.ntglobal.com

NOTES:
1. Base Image: ESRI Maps & Data 2013
2. Map Projection: NAD 1983 UTM Zone 13N

DRAWING NUMBER:
FIGURE 1
SHEET NUMBER:
1 of 1



AREA MAP
COG OPERATING, LLC
SPRUCE GOOSE FED 2H (10.15.21)
EDDY COUNTY, NEW MEXICO
32.679593, -103.815580

SCALE: As Shown	Date: 11/22/2021	PROJECT #: 214872

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NOTES:
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2. Map Projection: NAD 1983 UTM Zone 13N

DRAWING NUMBER:
FIGURE 2
SHEET NUMBER:
1 of 1

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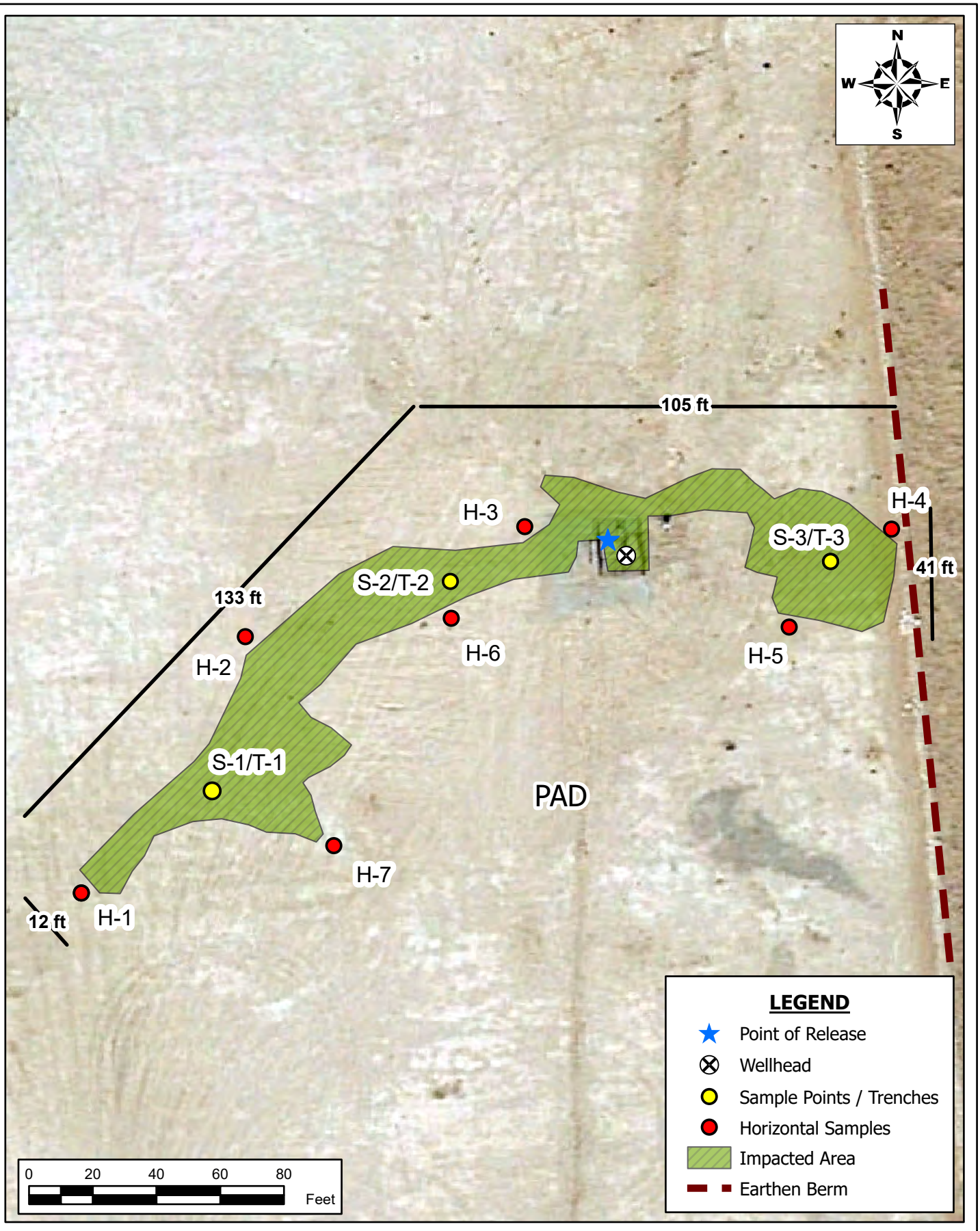

SAMPLE LOCATION MAP
COG OPERATING, LLC
SPRUCE GOOSE FED 2H (10.15.21)
EDDY COUNTY, NEW MEXICO
32.679593, -103.815580

SCALE: As Shown | Date: 1/24/2022 | PROJECT #: 214872

New Tech Global Environmental, LLC
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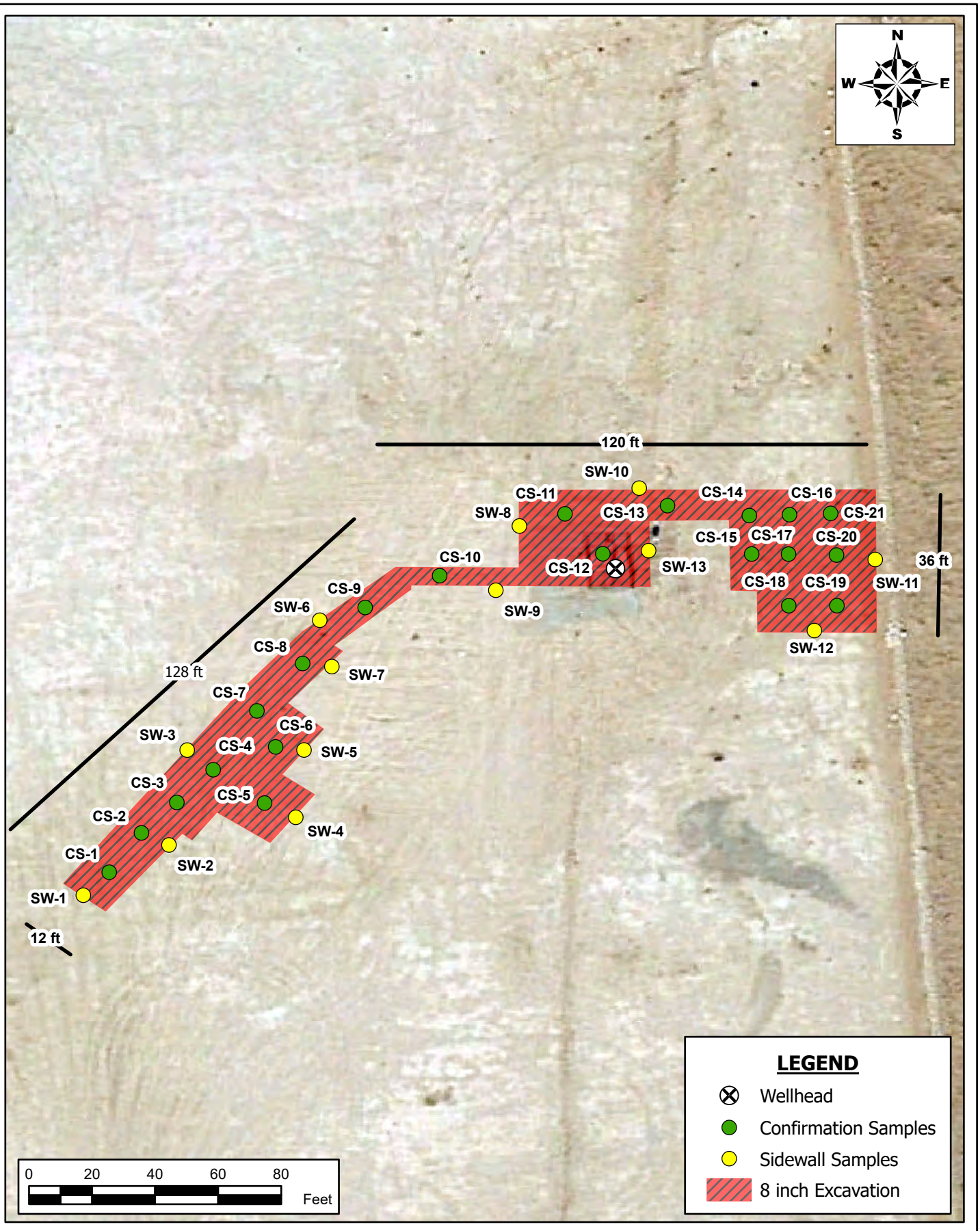
NOTES:
1. Base Image: ESRI Maps & Data 2013
2. Map Projection: NAD 1983 UTM Zone 13N

DRAWING NUMBER:
FIGURE 3
SHEET NUMBER:
1 of 1

Document Path: P:\2021 PROJECTS\COG\RSC\214872 - Spruce Goose Fed 2H (10.15.21)\7 - Figures\GIS\Geodatabase\Spruce Goose Fed 2H (10.15.21) Figures.aprx



EXCAVATION DEPTH MAP
COG OPERATING, LLC
SPRUCE GOOSE FED 2H (10.15.21)
EDDY COUNTY, NEW MEXICO
32.679593, -103.815580

SCALE: As Shown | Date: 1/24/2022 | PROJECT #: 214872

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NOTES:
1. Base Image: ESRI Maps & Data 2013
2. Map Projection: NAD 1983 UTM Zone 13N

DRAWING NUMBER:
FIGURE 4
SHEET NUMBER:
1 of 1

Document Path: P:\2021 PROJECTS\COG\RSC\214872 - Spruce Goose Fed 2H (10.15.21)\7 - Figures\GIS\Geodatabase\Spruce Goose Fed 2H (10.15.21) Figures.aprx

Tables

PHOTOGRAPHIC LOG

Concho Operating, LLC

Photograph No. 1

Facility: Spruce Goose Federal 2H (10.15.21)

County: Lea County, New Mexico

Description:
View Southwest, area of CS-1 through CS-9.

Photograph No. 2

Facility: Spruce Goose Federal 2H (10.15.21)

County: Lea County, New Mexico

Description:
View South, area of CS-9 through CS-13.

Photograph No. 3

Facility: Spruce Goose Federal 2H (10.15.21)

County: Lea County, New Mexico

Description:
View Southwest, area of CS-11 through CS-21.

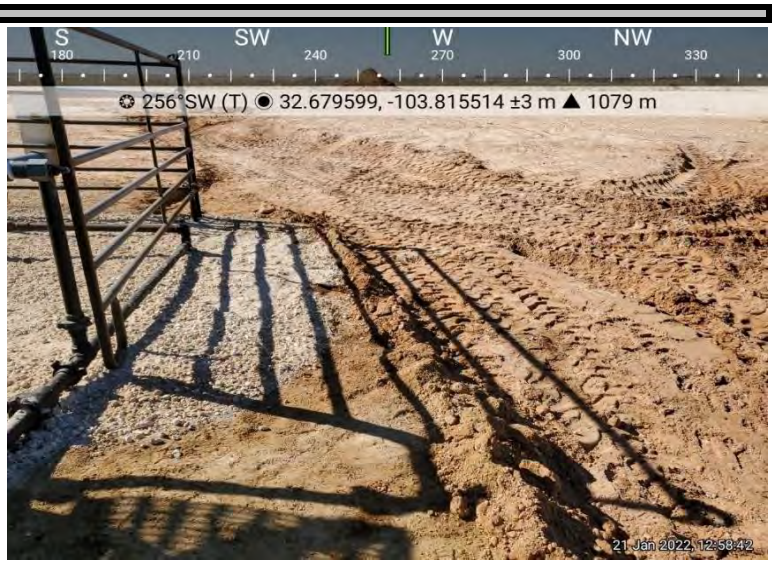

Table 1
COG Operating, LLC
Spruce Goose Fed 2H (10.15.21)
Eddy County, New Mexico

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	11/10/2021	0-0.5	<499	**16,000**	<499	**16,000**	0.0201	0.159	0.0551	0.0601	0.294	**17,200**
T-1	12/6/2021	1	<10.0	12.6	<10.0	12.6	<0.50	<0.50	<0.50	<0.150	<0.300	96.0
	"	2	<10.0	<10.0	<10.0	<10.0	<0.50	<0.50	<0.50	<0.150	<0.300	160
	"	3	<10.0	<10.0	<10.0	<10.0	<0.50	<0.50	<0.50	<0.150	<0.300	128
S-2	11/10/2021	0-0.5	<498	**16,300**	<498	**16,300**	0.00676	0.0775	0.0566	0.0558	0.197	**35,100**
T-2	12/6/2021	1	<10.0	<10.0	<10.0	<10.0	<0.50	<0.50	<0.50	<0.150	<0.300	160
	"	2	<10.0	<10.0	<10.0	<10.0	<0.50	<0.50	<0.50	<0.150	<0.300	16.0
S-3	11/10/2021	0-0.5	<499	**15,100**	<499	**15,100**	0.00709	0.0683	0.0919	0.0530	0.220	**45,600**
T-3	12/6/2021	1	<10.0	<10.0	<10.0	<10.0	<0.50	<0.50	<0.50	<0.150	<0.300	112
	"	2	<10.0	<10.0	<10.0	<10.0	<0.50	<0.50	<0.50	<0.150	<0.300	16.0
H-1	11/2/2021	-	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	96.8
H-2	11/10/2021	-	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	44.9
H-3	11/10/2021	-	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	24.7
H-4	11/10/2021	-	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	11.6
H-5	11/10/2021	-	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	15.8
H-6	11/10/2021	-	<49.7	<49.7	<49.7	<49.7	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	27.4
H-7	11/10/2021	-	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	14.4
Regulatory Limits						**100 mg/kg**	**10 mg/kg**	-	-	-	**50 mg/kg**	**600 mg/kg**

Removed

(-) Not Analyzed

A – Table 1 - 19.15.29 NMAC

mg/kg - milligram per kilogram

TPH- Total Petroleum Hydrocarbons

ft-feet

Table 2
COG Operating, LLC
Spruce Goose Fed 2H (10.15.21)
Eddy County, New Mexico

Sample ID	Date	Sample Depth (In)	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						
CS-1	1/21/2022	8"	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	28.0
CS-2	1/21/2022	8"	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	11.6
CS-3	1/21/2022	8"	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	6.22
CS-4	1/21/2022	8"	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	6.05
CS-5	1/21/2022	8"	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	<4.99
CS-6	1/21/2022	8"	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<4.98
CS-7	1/21/2022	8"	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	5.83
CS-8	1/21/2022	8"	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	6.33
CS-9	1/21/2022	8"	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	<5.02
CS-10	1/21/2022	8"	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	6.12
CS-11	1/21/2022	8"	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<4.97
CS-12	1/21/2022	8"	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	97.5
CS-13	1/21/2022	8"	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	117
CS-14	1/21/2022	8"	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	108
CS-15	1/21/2022	8"	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	103
CS-16	1/21/2022	8"	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	109
CS-17	1/21/2022	8"	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	96.2
CS-18	1/21/2022	8"	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	102
CS-19	1/21/2022	8"	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	101
CS-20	1/21/2022	8"	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	98.6
CS-21	1/21/2022	8"	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	91.8

Table 2
COG Operating, LLC
Spruce Goose Fed 2H (10.15.21)
Eddy County, New Mexico

Sample ID	Date	Sample Depth (In)	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						
SW-1	1/21/2022	--	<49.9	<49.9	<49.9	<49.9	<0.00200	0.0118	<0.00200	<0.00400	0.0118	8.22
SW-2	1/21/2022	--	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	6.37
SW-3	1/21/2022	--	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<4.95
SW-4	1/21/2022	--	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	<4.98
SW-5	1/21/2022	--	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	5.24
SW-6	1/21/2022	--	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	5.34
SW-7	1/21/2022	--	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	5.64
SW-8	1/21/2022	--	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	<5.05
SW-9	1/21/2022	--	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	105
SW-10	1/21/2022	--	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	105
SW-11	1/21/2022	--	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	100
SW-12	1/21/2022	--	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	100
SW-13	1/21/2022	--	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	98.1
Regulatory Limits						**100 mg/kg**	**10 mg/kg**	**-**	**-**	**-**	**50 mg/kg**	**600 mg/kg**

(-) Not Analyzed

A – Table 1 - 19.15.29 NMAC

mg/kg - milligram per kilogram

TPH- Total Petroleum Hydrocarbons

ft-feet

Photo Log

Appendix A

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

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

Location of Release Source

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

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

Unit Letter	Section	Township	Range	County

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

Nature and Volume of Release

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

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

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Initial Response

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

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

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

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

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

Printed Name _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

L48 Spill Volume Estimate Form

Well Name:	JUICE GOOSE FEDERAL COM 2H
Asset Area:	ROTO FLEX PAD
Release Discovery Date & Time:	10/15/2021 11:00AM MT TIME
Release Type:	Oil
Provide any known details about the event:	2" TOP CHECK VALVE

Spill Calculation - On Pad Surface Pool Spill

Convert Irregular shape into a series of rectangles	Length (ft.)	Width (ft.)	Deepest point in each of the areas (in.)	No. of boundaries of "shore" in each area	Estimated *Pool* Area (sq. ft.)	Estimated Average Depth (ft.)	Estimated volume of each pool area (bbl.)	Penetration allowance (ft.)	Total Estimated Volume of Spill (bbl.)	Percentage of Oil if Spilled Fluid is a Mixture	Total Estimated Volume of Spilled Oil (bbl.)	Total Estimated Volume of Spilled Liquid other than Oil (bbl.)
Rectangle A	200.0	25.0	0.10	1	5000.000	0.008	7.417	0.000	7.420			
Rectangle B					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			
Rectangle C					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			
Rectangle D					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			
Rectangle E					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			
Rectangle F					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			
Rectangle G					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			
Rectangle H					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			
Rectangle I					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			
Rectangle J					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			
								Total Volume Release:	7.420			

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature: Jacqui Harris _____ Date: 4/5/2022

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☐ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: _____ Title: _____

Signature: Jacqui Harris _____ Date: 4/5/2022

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: Jennifer Nobui Date: _____

Printed Name: _____ Title: _____

Appendix B

Nearest Water Well

COG Operating, LLC

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

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

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

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 01860 POD1	CP	LE	3	3	2	30	20S	34E	631560	3600891	1362	112		
CP 01867 POD2	CP	LE	1	2	4	20	20S	34E	633513	3603189	2488	200		
CP 01867 POD1	CP	LE	1	2	4	20	20S	34E	633584	3603189	2506	200		
CP 01867 POD4	CP	LE	1	2	4	20	20S	34E	633513	3603245	2542	220		
CP 01867 POD3	CP	LE	1	2	4	20	20S	34E	633580	3603242	2556	220		
CP 01389 POD1	CP	LE	1	1	1	34	20S	34E	635726	3600733	2808	1250	1005	245
CP 01330 POD1	CP	LE	4	2	1	34	20S	34E	636197	3600483	3292	1349	684	665
CP 00657 POD1	CP	LE		3	3	17	20S	34E	632465	3604239*	3495	165		
CP 01352 POD1	CP	LE	3	1	4	34	20S	34E	636559	3599716	3791	1270	785	485

Average Depth to Water: **824 feet**

Minimum Depth: **684 feet**

Maximum Depth: **1005 feet**

Record Count: 9

UTMNAD83 Radius Search (in meters):

Easting (X): 632917.62 **Northing (Y):** 3600773.3 **Radius:** 4000

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

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	Twn	Rng	X	Y
	CP 01330 POD1	4	2	1	34	20S	34E	636197	3600483

Driller License: 421 **Driller Company:** GLENN'S WATER WELL SERVICE

Driller Name: GLENN, CLARK A."CORKY"

Drill Start Date: 05/29/2014 **Drill Finish Date:** 06/05/2014 **Plug Date:**

Log File Date: 09/10/2014 **PCW Rcv Date:** **Source:** Artesian

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

Casing Size: 7.00 **Depth Well:** 1349 feet **Depth Water:** 684 feet

Water Bearing Stratifications:

Top	Bottom	Description
965	1020	Sandstone/Gravel/Conglomerate
1020	1065	Sandstone/Gravel/Conglomerate
1065	1140	Sandstone/Gravel/Conglomerate
1140	1185	Sandstone/Gravel/Conglomerate

Casing Perforations:

Top	Bottom
905	1349

Meter Number: 17853 **Meter Make:** SEAMETRICS

Meter Serial Number: 09191916 **Meter Multiplier:** 1.0000

Number of Dials: 9 **Meter Type:** Diversion

Unit of Measure: Barrels 42 gal. **Return Flow Percent:**

Usage Multiplier: **Reading Frequency:** Monthly

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount	Online
12/31/2016	2016	953444	A	ap		0	
01/31/2017	2017	955168	A	ap		22.221	
03/01/2017	2017	964878	A	ap		125.155	
04/01/2017	2017	964878	A	ap		0	
05/01/2017	2017	964878	A	ap		0	
06/01/2017	2017	964878	A	ap		0	
06/30/2017	2017	996259	A	ap		404.480	
07/31/2017	2017	1030202	A	ap		437.502	
10/31/2017	2017	1120771	A	ap		1167.373	
11/30/2017	2017	1152803	A	ap		412.871	
12/29/2017	2017	1188095	A	ap		454.890	
01/31/2018	2018	1222646	A	ap		445.339	
02/28/2018	2018	1251444	A	ap		371.187	
03/30/2018	2018	1281588	A	ap		388.536	
04/30/2018	2018	1298034	A	ap		211.978	
06/01/2018	2018	1312770	A	ap		189.937	
06/29/2018	2018	1316727	A	ap		51.003	

07/31/2018	2018	1321964	A	ap		67.501	
09/01/2018	2018	1356780	A	ap		448.755	
10/01/2018	2018	1397324	A	ap		522.585	
11/01/2018	2018	1414872	A	ap		226.182	
11/30/2018	2018	1469408	A	ap		702.932	
03/01/2019	2019	1530963	A	ap		793.403	
04/01/2019	2019	1537352	A	ap		82.350	
05/01/2019	2019	1566041	A	ap		369.782	
05/31/2019	2019	1588026	A	ap		283.372	
06/30/2019	2019	1588026	A	ap		0	
08/01/2019	2019	1596265	A	RPT		1.062	
09/01/2019	2019	1602800	A	RPT		0.842	
09/30/2019	2019	1609572	A	RPT		0.873	
10/31/2019	2019	1646801	A	RPT		4.799	
11/30/2019	2019	1681656	A	RPT		4.493	
12/31/2019	2019	1716832	A	RPT		4.534	
02/01/2020	2020	1740772	A	RPT		3.086	
03/01/2020	2020	1740772	A	RPT		0	
04/01/2020	2020	1740772	A	RPT		0	
05/01/2020	2020	1740772	A	RPT		0	
06/01/2020	2020	1740772	A	RPT		0	
08/01/2020	2020	1740981	A	RPT		0.027	
08/19/2020	2020	1741173	A	RPT	Final meter reading	0.025	
08/19/2020	2020	0	A	RPT	new approved meter.	0	
09/01/2020	2020	3362	A	RPT		0.433	
10/01/2020	2020	6884	A	RPT		0.454	
10/31/2020	2020	7678	A	WEB		0.102	X
11/30/2020	2020	7678	A	WEB		0	X
12/31/2020	2020	7686	A	WEB		0.001	X
01/31/2021	2021	7686	A	WEB		0	X

**YTD Meter Amounts:	Year	Amount
	2016	0
	2017	3024.492
	2018	3625.935
	2019	1545.510
	2020	4.128
	2021	0

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
	CP 01352 POD1	3	1	4	34	20S	34E	636559	3599716

Driller License: 421 **Driller Company:** GLENN'S WATER WELL SERVICE

Driller Name: GLENN, CLARK A."CORKY"

Drill Start Date: 07/29/2016 **Drill Finish Date:** 07/30/2016 **Plug Date:**

Log File Date: 08/09/2016 **PCW Rcv Date:** **Source:** Artesian

Pump Type: **Pipe Discharge Size:** **Estimated Yield:** 42 GPM

Casing Size: 6.50 **Depth Well:** 1270 feet **Depth Water:** 785 feet

Water Bearing Stratifications:

Top	Bottom	Description
999	1022	Sandstone/Gravel/Conglomerate
1022	1085	Sandstone/Gravel/Conglomerate
1085	1107	Sandstone/Gravel/Conglomerate
1107	1128	Sandstone/Gravel/Conglomerate
1128	1234	Sandstone/Gravel/Conglomerate
1234	1270	Shale/Mudstone/Siltstone

Casing Perforations:

Top	Bottom
947	1270

Meter Number: 17856 **Meter Make:** BLANCETT

Meter Serial Number: 112 211 502 **Meter Multiplier:** 1.0000

Number of Dials: 8 **Meter Type:** Diversion

Unit of Measure: Barrels 42 gal. **Return Flow Percent:**

Usage Multiplier: **Reading Frequency:** Monthly

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount	Online
12/31/2016	2016	20083	A	ap		0	
01/31/2017	2017	20352	A	ap		3.467	
03/01/2017	2017	24169	A	ap		49.199	
04/01/2017	2017	24169	A	ap		0	
05/01/2017	2017	24169	A	ap		0	
06/01/2017	2017	24169	A	ap		0	
06/30/2017	2017	50671	A	ap		341.593	
07/31/2017	2017	73096	A	ap		289.043	
10/31/2017	2017	128138	A	ap		709.454	
11/30/2017	2017	138961	A	ap		139.501	
12/29/2017	2017	138961	A	ap		0	
01/31/2018	2018	198987	A	ap		773.695	
02/28/2018	2018	219209	A	ap		260.648	
03/30/2018	2018	236399	A	ap		221.568	
04/30/2018	2018	254856	A	ap		237.898	

06/01/2018	2018	260493	A	ap	72.657	
06/29/2018	2018	265385	A	ap	63.055	
07/31/2018	2018	265385	A	ap	0	
09/01/2018	2018	265385	A	ap	0	
10/01/2018	2018	265385	A	ap	0	
11/01/2018	2018	265385	A	ap	0	
11/30/2018	2018	265385	A	ap	0	
03/01/2019	2019	273371	A	ap	102.934	
04/01/2019	2019	282740	A	Ap	120.760	
05/01/2019	2019	303670	A	Ap	269.774	
05/31/2019	2019	318821	A	Ap	195.286	
06/30/2019	2019	318821	A	Ap	0	
08/01/2019	2019	323078	A	RPT	0.549	
09/01/2019	2019	330695	A	RPT	0.982	
09/30/2019	2019	335482	A	RPT	0.617	
10/31/2019	2019	345706	A	RPT	1.318	
11/30/2019	2019	365264	A	RPT	2.521	
12/31/2019	2019	387964	A	RPT	2.926	
02/01/2020	2020	404703	A	RPT	2.158	
03/01/2020	2020	404703	A	RPT	0	
04/01/2020	2020	404703	A	RPT	0	
05/01/2020	2020	404703	A	RPT	0	
06/01/2020	2020	404703	A	RPT	0	
09/01/2020	2020	410299	A	RPT	0.721	
10/01/2020	2020	413825	A	RPT	0.454	
10/31/2020	2020	413825	A	WEB	0	X
11/30/2020	2020	415371	A	WEB	0.199	X
12/30/2020	2020	415371	A	RPT	0	
12/31/2020	2020	0	A	RPT	0	

**YTD Meter Amounts:	Year	Amount
	2016	0
	2017	1532.257
	2018	1629.521
	2019	697.667
	2020	3.532

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
	CP 01389 POD1	1	1	1	34	20S	34E	635726	3600733

Driller License: 421 **Driller Company:** GLENN'S WATER WELL SERVICE

Driller Name: GLENN, CLARK A."CORKY"

Drill Start Date: 01/05/2015 **Drill Finish Date:** 01/13/2015 **Plug Date:**

Log File Date: 02/04/2015 **PCW Rcv Date:** **Source:** Artesian

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

Casing Size: 6.50 **Depth Well:** 1250 feet **Depth Water:** 1005 feet

Water Bearing Stratifications:

Top	Bottom	Description
995	1014	Sandstone/Gravel/Conglomerate
1014	1199	Sandstone/Gravel/Conglomerate
1199	1230	Sandstone/Gravel/Conglomerate
1230	1240	Sandstone/Gravel/Conglomerate

Casing Perforations:

Top	Bottom
912	1250

Meter Number: 17857 **Meter Make:** BLANCETT

Meter Serial Number: 021 501 437 **Meter Multiplier:** 1.0000

Number of Dials: 8 **Meter Type:** Diversion

Unit of Measure: Barrels 42 gal. **Return Flow Percent:**

Usage Multiplier: **Reading Frequency:** Monthly

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount	Online
12/31/2016	2016	643200	A	ym		0	
01/31/2017	2017	659677	A	ym		212.377	
03/01/2017	2017	668463	A	ap		113.246	
04/01/2017	2017	668463	A	ap		0	
05/01/2017	2017	668463	A	ap		0	
06/01/2017	2017	668463	A	ap		0	
06/30/2017	2017	753526	A	ap		1096.405	
07/31/2017	2017	790940	A	ap		482.241	
10/31/2017	2017	887028	A	ap		1238.510	
11/30/2017	2017	931714	A	ap		575.972	
12/29/2017	2017	978472	A	ap		602.679	
01/31/2018	2018	1025480	A	ap		605.901	
02/28/2018	2018	1064561	A	ap		503.728	
03/30/2018	2018	1064561	A	ap		0	
04/30/2018	2018	1124101	A	ap		767.431	
06/01/2018	2018	1166461	A	ap		545.992	
06/29/2018	2018	1181122	A	ap		188.970	

07/31/2018	2018	1198381	A	ap	222.457	
09/01/2018	2018	1246600	A	ap	621.510	
10/01/2018	2018	1280459	A	ap	436.420	
11/01/2018	2018	1299657	A	ap	247.449	
11/30/2018	2018	1351407	A	ap	667.023	
03/01/2019	2019	1416173	A	ap	834.790	
04/01/2019	2019	1430857	A	ap	189.267	
05/01/2019	2019	1459823	A	ap	373.352	
05/31/2019	2019	1482018	A	ap	286.079	
06/30/2019	2019	1482018	A	ap	0	
08/01/2019	2019	1507510	A	RPT	3.286	
09/01/2019	2019	1523727	A	RPT	2.090	
09/30/2019	2019	1556952	A	RPT	4.282	
10/31/2019	2019	1558164	A	RPT	0.156	
11/30/2019	2019	1558164	A	RPT	0	
12/31/2019	2019	1563212	A	RPT	0.651	
02/01/2020	2020	1587959	A	RPT	3.190	
03/01/2020	2020	1587959	A	RPT	0	
04/01/2020	2020	1587959	A	RPT	0	
05/01/2020	2020	1587959	A	RPT	0	
06/01/2020	2020	1587959	A	RPT	0	
08/01/2020	2020	1593314	A	RPT	0.690	
09/01/2020	2020	1604044	A	RPT	1.383	
10/01/2020	2020	1608382	A	RPT	0.559	
10/31/2020	2020	1608900	A	WEB	0.067	X
11/30/2020	2020	1608900	A	WEB	0	X
12/31/2020	2020	1612278	A	WEB	0.435	X
01/31/2021	2021	1612278	A	WEB	0	X

**YTD Meter Amounts:	Year	Amount
	2016	0
	2017	4321.430
	2018	4806.881
	2019	1693.953
	2020	6.324
	2021	0

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: New Mexico | GO

Click to hideNews Bulletins

- Explore the *NEW* USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.
- Full News

Groundwater levels for New Mexico

Click to hide state-specific text

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 323109103323801

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 323109103323801 20S.34E.34.43421

Lea County, New Mexico
Latitude 32°31'26.6", Longitude 103°32'40.6" NAD83
Land-surface elevation 3,776 feet above NAVD88
The depth of the well is 100 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measu
1972-10-02		D	62610		3684.90	NGVD29	3	Z		
1972-10-02		D	62611		3686.50	NAVD88	3	Z		
1972-10-02		D	72019	89.50			3	Z		
1976-01-28		D	62610		3689.46	NGVD29	1	Z		
1976-01-28		D	62611		3691.06	NAVD88	1	Z		
1976-01-28		D	72019	84.94			1	Z		
1981-02-18		D	62610		3690.72	NGVD29	1	Z		
1981-02-18		D	62611		3692.32	NAVD88	1	Z		
1981-02-18		D	72019	83.68			1	Z		
1986-04-01		D	62610		3690.26	NGVD29	1	Z		
1986-04-01		D	62611		3691.86	NAVD88	1	Z		
1986-04-01		D	72019	84.14			1	Z		
1996-02-02		D	62610		3692.43	NGVD29	1	S		
1996-02-02		D	62611		3694.03	NAVD88	1	S		

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measu
1996-02-02		D	72019	81.97			1	S		
2015-12-17	22:40 UTC	m	62610		3703.94	NGVD29	1	S	USGS	
2015-12-17	22:40 UTC	m	62611		3705.54	NAVD88	1	S	USGS	
2015-12-17	22:40 UTC	m	72019	70.46			1	S	USGS	
2021-01-21	21:30 UTC	m	62610		3695.98	NGVD29	1	V	USGS	
2021-01-21	21:30 UTC	m	62611		3697.58	NAVD88	1	V	USGS	
2021-01-21	21:30 UTC	m	72019	78.42			1	V	USGS	

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level date-time accuracy	m	Date is accurate to the Minute
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Status	3	True value is above reported value due to local conditions
Method of measurement	S	Steel-tape measurement.
Method of measurement	V	Calibrated electric-tape measurement.
Method of measurement	Z	Other.
Measuring agency		Not determined
Measuring agency	USGS	U.S. Geological Survey
Source of measurement		Not determined
Source of measurement	S	Measured by personnel of reporting agency.
Water-level approval status	A	Approved for publication -- Processing and review completed.

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

Accessibility FOIA Privacy Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey

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

Page Contact Information: New Mexico Water Data Maintainer
Page Last Modified: 2021-11-05 09:35:01 EDT
0.35 0.32 nadww02

National Water Information System: Web Interface

USGS Water Resources | Data Category: Groundwater | Geographic Area: New Mexico | GO

Click to hideNews Bulletins

- Explore the *NEW* USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.
- Full News

Groundwater levels for New Mexico

Click to hide state-specific text

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 323345103351101

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 323345103351101 20S.34E.17.33442

Lea County, New Mexico
Latitude 32°34'00", Longitude 103°35'14" NAD27
Land-surface elevation 3,639.00 feet above NGVD29
The depth of the well is 160 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Chinle Formation (231CHNL) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measu
1965-11-16		D	62610		3508.78	NGVD29	1	Z		
1965-11-16		D	62611		3510.34	NAVD88	1	Z		
1965-11-16		D	72019	130.22			1	Z		
1968-03-19		D	62610		3510.30	NGVD29	1	Z		
1968-03-19		D	62611		3511.86	NAVD88	1	Z		
1968-03-19		D	72019	128.70			1	Z		
1971-02-03		D	62610		3495.28	NGVD29	3	Z		
1971-02-03		D	62611		3496.84	NAVD88	3	Z		
1971-02-03		D	72019	143.72			3	Z		
1972-10-02		D	62610		3508.62	NGVD29	3	Z		
1972-10-02		D	62611		3510.18	NAVD88	3	Z		
1972-10-02		D	72019	130.38			3	Z		
1976-01-28		D	62610		3506.83	NGVD29	1	Z		
1976-01-28		D	62611		3508.39	NAVD88	1	Z		

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measu
1976-01-28		D	72019	132.17			1	Z		
1981-02-19		D	62610		3508.61	NGVD29	1	Z		
1981-02-19		D	62611		3510.17	NAVD88	1	Z		
1981-02-19		D	72019	130.39			1	Z		
1986-04-01		D	62610		3508.26	NGVD29	1	Z		
1986-04-01		D	62611		3509.82	NAVD88	1	Z		
1986-04-01		D	72019	130.74			1	Z		
1996-01-26		D	62610		3511.42	NGVD29	1	S		
1996-01-26		D	62611		3512.98	NAVD88	1	S		
1996-01-26		D	72019	127.58			1	S		

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Status	3	True value is above reported value due to local conditions
Method of measurement	S	Steel-tape measurement.
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

Click to hideNews Bulletins

- Explore the *NEW* USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.
- Full News

Groundwater levels for New Mexico

Click to hide state-specific text

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 323335103370601

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 323335103370601 20S.33E.24.12411

Lea County, New Mexico
Latitude 32°33'35", Longitude 103°37'06" NAD27
Land-surface elevation 3,641 feet above NAVD88
The depth of the well is 676 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Santa Rosa Sandstone (231SNRS) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measu
1968-03-19		D	62610		3242.63	NGVD29	1	Z		
1968-03-19		D	62611		3244.19	NAVD88	1	Z		
1968-03-19		D	72019	396.81			1	Z		
1971-02-03		D	62610		3225.89	NGVD29	3	Z		
1971-02-03		D	62611		3227.45	NAVD88	3	Z		
1971-02-03		D	72019	413.55			3	Z		
1972-09-22		D	62610		3234.74	NGVD29	1	Z		
1972-09-22		D	62611		3236.30	NAVD88	1	Z		
1972-09-22		D	72019	404.70			1	Z		
1976-02-20		D	62610		3200.13	NGVD29	3	Z		
1976-02-20		D	62611		3201.69	NAVD88	3	Z		
1976-02-20		D	72019	439.31			3	Z		
1976-04-15		D	62610		3465.45	NGVD29	1	Z		
1976-04-15		D	62611		3467.01	NAVD88	1	Z		

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measu
1976-04-15		D	72019	173.99			1	Z		

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Status	3	True value is above reported value due to local conditions
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

Low Karst

COG Operating, LLC

Legend

LOW

Spruce Goose Fed 2H (10.15.21)

Google Earth

N

2000 ft

New Mexico NFHL Data

November 5, 2021

1:36,112

0 0.3 0.6 1.2 mi

0 0.5 1 2 km

FEMA

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS,

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USGS science for a changing world

National Water Information System: Mapper

Site Information

Appendix C

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-8220-1
Laboratory Sample Delivery Group: Eddy Co, NM
Client Project/Site: Spruce Goose Fed 2H (10.15.21)

For:
NT Global
701 Tradewinds Blvd
Midland, Texas 79706

Attn: Mike Carmona

JKramer

Authorized for release by:
11/17/2021 11:18:51 AM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Laboratory Job ID: 880-8220-1
SDG: Eddy Co, NM

Table of Contents

Definitions/Glossary

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8220-1
SDG: Eddy Co, NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8220-1
SDG: Eddy Co, NM

Job ID: 880-8220-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative
880-8220-1

Receipt
The samples were received on 11/11/2021 10:50 AM and 11/11/2021 10:54 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -1.3°C

GC VOA
Method 8021B: The continuing calibration verification (CCV) associated with batch 880-12207 recovered under the lower control limit for < Benzene, Ethylbenzene, Toluene, m-Xylene & p-Xylene and o-Xylene>. The samples associated with this CCV were ran within passing CCV in 12 hour span; therefore, the data have been reported. The associated samples are impacted: H-1 (880-8220-1), H-2 (880-8220-2), H-3 (880-8220-3), H-4 (880-8220-4), H-5 (880-8220-5), H-6 (880-8220-6), H-7 (880-8220-7), (CCV 880-12207/33), (LCS 880-12020/1-A), (LCSD 880-12020/2-A), (MB 880-12020/5-A), (880-8220-A-1-A MS) and (880-8220-A-1-B MSD).

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-12020 and analytical batch 880-12207 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: H-1 (880-8220-1), (MB 880-12019/5-A) and (MB 880-12020/5-A). Evidence of matrix interferences is not obvious.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (MB 880-12047/1-A). Evidence of matrix interferences is not obvious.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8220-1
SDG: Eddy Co, NM

Client Sample ID: H-1

Lab Sample ID: 880-8220-1
Matrix: Solid
Date Collected: 11/10/21 00:00
Date Received: 11/11/21 10:54

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U F1	0.00201		mg/Kg		11/11/21 12:41	11/14/21 18:00	1
Toluene	<0.00201	U F1	0.00201		mg/Kg		11/11/21 12:41	11/14/21 18:00	1
Ethylbenzene	<0.00201	U F1	0.00201		mg/Kg		11/11/21 12:41	11/14/21 18:00	1
m-Xylene & p-Xylene	<0.00402	U F1	0.00402		mg/Kg		11/11/21 12:41	11/14/21 18:00	1
o-Xylene	<0.00201	U F1	0.00201		mg/Kg		11/11/21 12:41	11/14/21 18:00	1
Xylenes, Total	<0.00402	U F1	0.00402		mg/Kg		11/11/21 12:41	11/14/21 18:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*141*	*S1+*	*70 - 130*	*11/11/21 12:41*	*11/14/21 18:00*	*1*
1,4-Difluorobenzene (Surr)	*77*		*70 - 130*	*11/11/21 12:41*	*11/14/21 18:00*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			11/15/21 12:40	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			11/16/21 09:36	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/11/21 15:47	11/12/21 12:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/11/21 15:47	11/12/21 12:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/11/21 15:47	11/12/21 12:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*11/11/21 15:47*	*11/12/21 12:52*	*1*
o-Terphenyl	*102*		*70 - 130*	*11/11/21 15:47*	*11/12/21 12:52*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**96.8**		5.01		mg/Kg			11/17/21 01:52	1

Client Sample ID: H-2

Lab Sample ID: 880-8220-2
Matrix: Solid
Date Collected: 11/10/21 00:00
Date Received: 11/11/21 10:54

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/11/21 12:41	11/14/21 18:26	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/11/21 12:41	11/14/21 18:26	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/11/21 12:41	11/14/21 18:26	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/11/21 12:41	11/14/21 18:26	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/11/21 12:41	11/14/21 18:26	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/11/21 12:41	11/14/21 18:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*11/11/21 12:41*	*11/14/21 18:26*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*11/11/21 12:41*	*11/14/21 18:26*	*1*

Eurofins Xenco, Midland

Client Sample Results

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8220-1
SDG: Eddy Co, NM

Client Sample ID: H-2

Lab Sample ID: 880-8220-2
Date Collected: 11/10/21 00:00
Matrix: Solid
Date Received: 11/11/21 10:54

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/15/21 12:40	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/16/21 09:36	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/11/21 15:47	11/12/21 13:54	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/11/21 15:47	11/12/21 13:54	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/11/21 15:47	11/12/21 13:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*11/11/21 15:47*	*11/12/21 13:54*	*1*
o-Terphenyl	*116*		*70 - 130*	*11/11/21 15:47*	*11/12/21 13:54*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**44.9**		4.98		mg/Kg			11/17/21 01:57	1

Client Sample ID: H-3

Lab Sample ID: 880-8220-3
Date Collected: 11/10/21 00:00
Matrix: Solid
Date Received: 11/11/21 10:54

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/11/21 12:41	11/14/21 18:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/11/21 12:41	11/14/21 18:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/11/21 12:41	11/14/21 18:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/11/21 12:41	11/14/21 18:52	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/11/21 12:41	11/14/21 18:52	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/11/21 12:41	11/14/21 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*11/11/21 12:41*	*11/14/21 18:52*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*11/11/21 12:41*	*11/14/21 18:52*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			11/15/21 12:40	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			11/16/21 09:36	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/11/21 15:47	11/12/21 14:14	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/11/21 15:47	11/12/21 14:14	1

Client Sample Results

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8220-1
SDG: Eddy Co, NM

Client Sample ID: H-3

Lab Sample ID: 880-8220-3
Matrix: Solid
Date Collected: 11/10/21 00:00
Date Received: 11/11/21 10:54

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/11/21 15:47	11/12/21 14:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*11/11/21 15:47*	*11/12/21 14:14*	*1*
o-Terphenyl	*100*		*70 - 130*	*11/11/21 15:47*	*11/12/21 14:14*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**24.7**		5.04		mg/Kg			11/17/21 02:12	1

Client Sample ID: H-4

Lab Sample ID: 880-8220-4
Matrix: Solid
Date Collected: 11/10/21 00:00
Date Received: 11/11/21 10:54

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/11/21 12:41	11/14/21 19:17	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/11/21 12:41	11/14/21 19:17	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/11/21 12:41	11/14/21 19:17	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/11/21 12:41	11/14/21 19:17	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/11/21 12:41	11/14/21 19:17	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/11/21 12:41	11/14/21 19:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*11/11/21 12:41*	*11/14/21 19:17*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*11/11/21 12:41*	*11/14/21 19:17*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/15/21 12:40	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			11/16/21 09:36	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/11/21 15:47	11/12/21 14:34	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/11/21 15:47	11/12/21 14:34	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/11/21 15:47	11/12/21 14:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*11/11/21 15:47*	*11/12/21 14:34*	*1*
o-Terphenyl	*110*		*70 - 130*	*11/11/21 15:47*	*11/12/21 14:34*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11.6**		4.97		mg/Kg			11/17/21 02:17	1

Client Sample Results

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8220-1
SDG: Eddy Co, NM

Client Sample ID: H-5

Lab Sample ID: 880-8220-5
Date Collected: 11/10/21 00:00
Matrix: Solid
Date Received: 11/11/21 10:54

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		11/11/21 12:41	11/14/21 19:43	1
Toluene	<0.00198	U	0.00198		mg/Kg		11/11/21 12:41	11/14/21 19:43	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/11/21 12:41	11/14/21 19:43	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		11/11/21 12:41	11/14/21 19:43	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/11/21 12:41	11/14/21 19:43	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		11/11/21 12:41	11/14/21 19:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*11/11/21 12:41*	*11/14/21 19:43*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*11/11/21 12:41*	*11/14/21 19:43*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			11/15/21 12:40	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			11/16/21 09:36	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/11/21 15:47	11/12/21 14:55	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/11/21 15:47	11/12/21 14:55	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/11/21 15:47	11/12/21 14:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*11/11/21 15:47*	*11/12/21 14:55*	*1*
o-Terphenyl	*87*		*70 - 130*	*11/11/21 15:47*	*11/12/21 14:55*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**15.8**		4.95		mg/Kg			11/17/21 02:31	1

Client Sample ID: H-6

Lab Sample ID: 880-8220-6
Date Collected: 11/10/21 00:00
Matrix: Solid
Date Received: 11/11/21 10:50

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/11/21 12:41	11/14/21 20:09	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/11/21 12:41	11/14/21 20:09	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/11/21 12:41	11/14/21 20:09	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/11/21 12:41	11/14/21 20:09	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/11/21 12:41	11/14/21 20:09	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/11/21 12:41	11/14/21 20:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*11/11/21 12:41*	*11/14/21 20:09*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*11/11/21 12:41*	*11/14/21 20:09*	*1*

Client Sample Results

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8220-1
SDG: Eddy Co, NM

Client Sample ID: H-6

Lab Sample ID: 880-8220-6
Matrix: Solid
Date Collected: 11/10/21 00:00
Date Received: 11/11/21 10:50

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			11/15/21 12:40	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			11/16/21 09:36	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		11/11/21 15:47	11/12/21 15:16	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		11/11/21 15:47	11/12/21 15:16	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		11/11/21 15:47	11/12/21 15:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*11/11/21 15:47*	*11/12/21 15:16*	*1*
o-Terphenyl	*104*		*70 - 130*	*11/11/21 15:47*	*11/12/21 15:16*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**27.4**		4.95		mg/Kg			11/17/21 02:36	1

Client Sample ID: H-7

Lab Sample ID: 880-8220-7
Matrix: Solid
Date Collected: 11/10/21 00:00
Date Received: 11/11/21 10:50

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/11/21 12:41	11/14/21 20:35	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/11/21 12:41	11/14/21 20:35	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/11/21 12:41	11/14/21 20:35	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/11/21 12:41	11/14/21 20:35	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/11/21 12:41	11/14/21 20:35	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/11/21 12:41	11/14/21 20:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*11/11/21 12:41*	*11/14/21 20:35*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*11/11/21 12:41*	*11/14/21 20:35*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/15/21 12:40	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			11/16/21 09:36	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/11/21 15:47	11/12/21 15:37	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/11/21 15:47	11/12/21 15:37	1

Client Sample Results

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8220-1
SDG: Eddy Co, NM

Client Sample ID: H-7
Date Collected: 11/10/21 00:00
Date Received: 11/11/21 10:50

Lab Sample ID: 880-8220-7
Matrix: Solid

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/11/21 15:47	11/12/21 15:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*11/11/21 15:47*	*11/12/21 15:37*	*1*
o-Terphenyl	*106*		*70 - 130*	*11/11/21 15:47*	*11/12/21 15:37*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**14.4**		4.95		mg/Kg			11/17/21 02:41	1

Surrogate Summary

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8220-1
SDG: Eddy Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-8220-1	H-1	141 S1+	77
880-8220-1 MS	H-1	98	111
880-8220-1 MSD	H-1	96	75
880-8220-2	H-2	102	101
880-8220-3	H-3	93	97
880-8220-4	H-4	106	106
880-8220-5	H-5	94	101
880-8220-6	H-6	107	107
880-8220-7	H-7	106	109
LCS 880-12020/1-A	Lab Control Sample	114	116
LCSD 880-12020/2-A	Lab Control Sample Dup	106	111
MB 880-12019/5-A	Method Blank	61 S1-	87
MB 880-12020/5-A	Method Blank	63 S1-	102

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-8220-1	H-1	95	102
880-8220-1 MS	H-1	102	93
880-8220-1 MSD	H-1	120	111
880-8220-2	H-2	107	116
880-8220-3	H-3	91	100
880-8220-4	H-4	105	110
880-8220-5	H-5	84	87
880-8220-6	H-6	97	104
880-8220-7	H-7	99	106
LCS 880-12047/2-A	Lab Control Sample	118	118
LCSD 880-12047/3-A	Lab Control Sample Dup	115	116
MB 880-12047/1-A	Method Blank	107	135 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8220-1
SDG: Eddy Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-12019/5-A
Matrix: Solid
Analysis Batch: 12207

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12019

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/11/21 12:38	11/13/21 18:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/11/21 12:38	11/13/21 18:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/11/21 12:38	11/13/21 18:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/11/21 12:38	11/13/21 18:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/11/21 12:38	11/13/21 18:50	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/11/21 12:38	11/13/21 18:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*61*	*S1-*	*70 - 130*	*11/11/21 12:38*	*11/13/21 18:50*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*11/11/21 12:38*	*11/13/21 18:50*	*1*

Lab Sample ID: MB 880-12020/5-A
Matrix: Solid
Analysis Batch: 12207

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12020

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/11/21 12:41	11/14/21 17:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/11/21 12:41	11/14/21 17:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/11/21 12:41	11/14/21 17:34	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/11/21 12:41	11/14/21 17:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/11/21 12:41	11/14/21 17:34	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/11/21 12:41	11/14/21 17:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*63*	*S1-*	*70 - 130*	*11/11/21 12:41*	*11/14/21 17:34*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*11/11/21 12:41*	*11/14/21 17:34*	*1*

Lab Sample ID: LCS 880-12020/1-A
Matrix: Solid
Analysis Batch: 12207

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12020

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1086		mg/Kg		109	70 - 130
Toluene	0.100	0.09554		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.09613		mg/Kg		96	70 - 130
m-Xylene & p-Xylene	0.200	0.2124		mg/Kg		106	70 - 130
o-Xylene	0.100	0.1039		mg/Kg		104	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*

Lab Sample ID: LCSD 880-12020/2-A
Matrix: Solid
Analysis Batch: 12207

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 12020

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09458		mg/Kg		95	70 - 130	14	35

QC Sample Results

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8220-1
SDG: Eddy Co, NM

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-12020/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 12207 — **Prep Batch: 12020**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene			0.100	0.08370		mg/Kg		84	70 - 130	13	35
Ethylbenzene			0.100	0.08379		mg/Kg		84	70 - 130	14	35
m-Xylene & p-Xylene			0.200	0.1851		mg/Kg		93	70 - 130	14	35
o-Xylene			0.100	0.09241		mg/Kg		92	70 - 130	12	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: 880-8220-1 MS — **Client Sample ID: H-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 12207 — **Prep Batch: 12020**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00201	U F1	0.100	0.003593	F1	mg/Kg		4	70 - 130
Toluene	<0.00201	U F1	0.100	0.003716	F1	mg/Kg		4	70 - 130
Ethylbenzene	<0.00201	U F1	0.100	0.004981	F1	mg/Kg		5	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1	0.201	0.01071	F1	mg/Kg		5	70 - 130
o-Xylene	<0.00201	U F1	0.100	0.008528	F1	mg/Kg		8	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: 880-8220-1 MSD — **Client Sample ID: H-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 12207 — **Prep Batch: 12020**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00201	U F1	0.100	<0.00200	U F1	mg/Kg		0	70 - 130	NC	35
Toluene	<0.00201	U F1	0.100	<0.00200	U F1	mg/Kg		0	70 - 130	NC	35
Ethylbenzene	<0.00201	U F1	0.100	<0.00200	U F1	mg/Kg		0	70 - 130	NC	35
m-Xylene & p-Xylene	<0.00402	U F1	0.200	<0.00401	U F1	mg/Kg		0	70 - 130	NC	35
o-Xylene	<0.00201	U F1	0.100	<0.00200	U F1	mg/Kg		0	70 - 130	NC	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*75*		*70 - 130*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-12047/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 12086 — **Prep Batch: 12047**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/11/21 15:47	11/12/21 11:51	1

QC Sample Results

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8220-1
SDG: Eddy Co, NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-12047/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 12086 — **Prep Batch: 12047**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/11/21 15:47	11/12/21 11:51	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/11/21 15:47	11/12/21 11:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*11/11/21 15:47*	*11/12/21 11:51*	*1*
o-Terphenyl	*135*	*S1+*	*70 - 130*	*11/11/21 15:47*	*11/12/21 11:51*	*1*

Lab Sample ID: LCS 880-12047/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 12086 — **Prep Batch: 12047**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	958.1		mg/Kg		96	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1139		mg/Kg		114	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*118*		*70 - 130*
o-Terphenyl	*118*		*70 - 130*

Lab Sample ID: LCSD 880-12047/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 12086 — **Prep Batch: 12047**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1077		mg/Kg		108	70 - 130	12	20
Diesel Range Organics (Over C10-C28)			1000	1208		mg/Kg		121	70 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*115*		*70 - 130*
o-Terphenyl	*116*		*70 - 130*

Lab Sample ID: 880-8220-1 MS — **Client Sample ID: H-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 12086 — **Prep Batch: 12047**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	997	958.7		mg/Kg		94	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	997	928.5		mg/Kg		91	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*102*		*70 - 130*
o-Terphenyl	*93*		*70 - 130*

Eurofins Xenco, Midland

QC Sample Results

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8220-1
SDG: Eddy Co, NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 880-8220-1 MSD — **Client Sample ID: H-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 12086 — **Prep Batch: 12047**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	1048		mg/Kg		103	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	1092		mg/Kg		107	70 - 130	16	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*120*		*70 - 130*
o-Terphenyl	*111*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-12137/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 12212

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/17/21 00:34	1

Lab Sample ID: LCS 880-12137/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 12212

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	254.0		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-12137/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 12212

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	257.2		mg/Kg		103	90 - 110	1	20

Lab Sample ID: 880-8220-2 MS — **Client Sample ID: H-2**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 12212

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	44.9		249	316.4		mg/Kg		109	90 - 110

Lab Sample ID: 880-8220-2 MSD — **Client Sample ID: H-2**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 12212

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	44.9		249	317.0		mg/Kg		109	90 - 110	0	20

QC Association Summary

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8220-1
SDG: Eddy Co, NM

GC VOA

Prep Batch: 12019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-12019/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 12020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8220-1	H-1	Total/NA	Solid	5035	
880-8220-2	H-2	Total/NA	Solid	5035	
880-8220-3	H-3	Total/NA	Solid	5035	
880-8220-4	H-4	Total/NA	Solid	5035	
880-8220-5	H-5	Total/NA	Solid	5035	
880-8220-6	H-6	Total/NA	Solid	5035	
880-8220-7	H-7	Total/NA	Solid	5035	
MB 880-12020/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-12020/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-12020/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-8220-1 MS	H-1	Total/NA	Solid	5035	
880-8220-1 MSD	H-1	Total/NA	Solid	5035	

Analysis Batch: 12207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8220-1	H-1	Total/NA	Solid	8021B	12020
880-8220-2	H-2	Total/NA	Solid	8021B	12020
880-8220-3	H-3	Total/NA	Solid	8021B	12020
880-8220-4	H-4	Total/NA	Solid	8021B	12020
880-8220-5	H-5	Total/NA	Solid	8021B	12020
880-8220-6	H-6	Total/NA	Solid	8021B	12020
880-8220-7	H-7	Total/NA	Solid	8021B	12020
MB 880-12019/5-A	Method Blank	Total/NA	Solid	8021B	12019
MB 880-12020/5-A	Method Blank	Total/NA	Solid	8021B	12020
LCS 880-12020/1-A	Lab Control Sample	Total/NA	Solid	8021B	12020
LCSD 880-12020/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	12020
880-8220-1 MS	H-1	Total/NA	Solid	8021B	12020
880-8220-1 MSD	H-1	Total/NA	Solid	8021B	12020

Analysis Batch: 12310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8220-1	H-1	Total/NA	Solid	Total BTEX	
880-8220-2	H-2	Total/NA	Solid	Total BTEX	
880-8220-3	H-3	Total/NA	Solid	Total BTEX	
880-8220-4	H-4	Total/NA	Solid	Total BTEX	
880-8220-5	H-5	Total/NA	Solid	Total BTEX	
880-8220-6	H-6	Total/NA	Solid	Total BTEX	
880-8220-7	H-7	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 12047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8220-1	H-1	Total/NA	Solid	8015NM Prep	
880-8220-2	H-2	Total/NA	Solid	8015NM Prep	
880-8220-3	H-3	Total/NA	Solid	8015NM Prep	
880-8220-4	H-4	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8220-1
SDG: Eddy Co, NM

GC Semi VOA (Continued)

Prep Batch: 12047 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8220-5	H-5	Total/NA	Solid	8015NM Prep	
880-8220-6	H-6	Total/NA	Solid	8015NM Prep	
880-8220-7	H-7	Total/NA	Solid	8015NM Prep	
MB 880-12047/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-12047/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-12047/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-8220-1 MS	H-1	Total/NA	Solid	8015NM Prep	
880-8220-1 MSD	H-1	Total/NA	Solid	8015NM Prep	

Analysis Batch: 12086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8220-1	H-1	Total/NA	Solid	8015B NM	12047
880-8220-2	H-2	Total/NA	Solid	8015B NM	12047
880-8220-3	H-3	Total/NA	Solid	8015B NM	12047
880-8220-4	H-4	Total/NA	Solid	8015B NM	12047
880-8220-5	H-5	Total/NA	Solid	8015B NM	12047
880-8220-6	H-6	Total/NA	Solid	8015B NM	12047
880-8220-7	H-7	Total/NA	Solid	8015B NM	12047
MB 880-12047/1-A	Method Blank	Total/NA	Solid	8015B NM	12047
LCS 880-12047/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	12047
LCSD 880-12047/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	12047
880-8220-1 MS	H-1	Total/NA	Solid	8015B NM	12047
880-8220-1 MSD	H-1	Total/NA	Solid	8015B NM	12047

Analysis Batch: 12429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8220-1	H-1	Total/NA	Solid	8015 NM	
880-8220-2	H-2	Total/NA	Solid	8015 NM	
880-8220-3	H-3	Total/NA	Solid	8015 NM	
880-8220-4	H-4	Total/NA	Solid	8015 NM	
880-8220-5	H-5	Total/NA	Solid	8015 NM	
880-8220-6	H-6	Total/NA	Solid	8015 NM	
880-8220-7	H-7	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 12137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8220-1	H-1	Soluble	Solid	DI Leach	
880-8220-2	H-2	Soluble	Solid	DI Leach	
880-8220-3	H-3	Soluble	Solid	DI Leach	
880-8220-4	H-4	Soluble	Solid	DI Leach	
880-8220-5	H-5	Soluble	Solid	DI Leach	
880-8220-6	H-6	Soluble	Solid	DI Leach	
880-8220-7	H-7	Soluble	Solid	DI Leach	
MB 880-12137/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-12137/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-12137/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-8220-2 MS	H-2	Soluble	Solid	DI Leach	
880-8220-2 MSD	H-2	Soluble	Solid	DI Leach	

QC Association Summary

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8220-1
SDG: Eddy Co, NM

HPLC/IC

Analysis Batch: 12212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8220-1	H-1	Soluble	Solid	300.0	12137
880-8220-2	H-2	Soluble	Solid	300.0	12137
880-8220-3	H-3	Soluble	Solid	300.0	12137
880-8220-4	H-4	Soluble	Solid	300.0	12137
880-8220-5	H-5	Soluble	Solid	300.0	12137
880-8220-6	H-6	Soluble	Solid	300.0	12137
880-8220-7	H-7	Soluble	Solid	300.0	12137
MB 880-12137/1-A	Method Blank	Soluble	Solid	300.0	12137
LCS 880-12137/2-A	Lab Control Sample	Soluble	Solid	300.0	12137
LCSD 880-12137/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	12137
880-8220-2 MS	H-2	Soluble	Solid	300.0	12137
880-8220-2 MSD	H-2	Soluble	Solid	300.0	12137

Lab Chronicle

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8220-1
SDG: Eddy Co, NM

Client Sample ID: H-1

Lab Sample ID: 880-8220-1
Matrix: Solid
Date Collected: 11/10/21 00:00
Date Received: 11/11/21 10:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	12020	11/11/21 12:41	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	12207	11/14/21 18:00	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			12310	11/15/21 12:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			12429	11/16/21 09:36	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	12047	11/11/21 15:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			12086	11/12/21 12:52	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	12137	11/12/21 12:50	CH	XEN MID
Soluble	Analysis	300.0		1			12212	11/17/21 01:52	CH	XEN MID

Client Sample ID: H-2

Lab Sample ID: 880-8220-2
Matrix: Solid
Date Collected: 11/10/21 00:00
Date Received: 11/11/21 10:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	12020	11/11/21 12:41	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	12207	11/14/21 18:26	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			12310	11/15/21 12:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			12429	11/16/21 09:36	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	12047	11/11/21 15:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			12086	11/12/21 13:54	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	12137	11/12/21 12:50	CH	XEN MID
Soluble	Analysis	300.0		1			12212	11/17/21 01:57	CH	XEN MID

Client Sample ID: H-3

Lab Sample ID: 880-8220-3
Matrix: Solid
Date Collected: 11/10/21 00:00
Date Received: 11/11/21 10:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	12020	11/11/21 12:41	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	12207	11/14/21 18:52	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			12310	11/15/21 12:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			12429	11/16/21 09:36	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	12047	11/11/21 15:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			12086	11/12/21 14:14	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	12137	11/12/21 12:50	CH	XEN MID
Soluble	Analysis	300.0		1			12212	11/17/21 02:12	CH	XEN MID

Client Sample ID: H-4

Lab Sample ID: 880-8220-4
Matrix: Solid
Date Collected: 11/10/21 00:00
Date Received: 11/11/21 10:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	12020	11/11/21 12:41	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	12207	11/14/21 19:17	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			12310	11/15/21 12:40	AJ	XEN MID

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Lab Chronicle

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8220-1
SDG: Eddy Co, NM

Client Sample ID: H-4

Lab Sample ID: 880-8220-4
Date Collected: 11/10/21 00:00
Matrix: Solid
Date Received: 11/11/21 10:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			12429	11/16/21 09:36	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	12047	11/11/21 15:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			12086	11/12/21 14:34	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	12137	11/12/21 12:50	CH	XEN MID
Soluble	Analysis	300.0		1			12212	11/17/21 02:17	CH	XEN MID

Client Sample ID: H-5

Lab Sample ID: 880-8220-5
Date Collected: 11/10/21 00:00
Matrix: Solid
Date Received: 11/11/21 10:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	12020	11/11/21 12:41	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	12207	11/14/21 19:43	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			12310	11/15/21 12:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			12429	11/16/21 09:36	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	12047	11/11/21 15:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			12086	11/12/21 14:55	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	12137	11/12/21 12:50	CH	XEN MID
Soluble	Analysis	300.0		1			12212	11/17/21 02:31	CH	XEN MID

Client Sample ID: H-6

Lab Sample ID: 880-8220-6
Date Collected: 11/10/21 00:00
Matrix: Solid
Date Received: 11/11/21 10:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	12020	11/11/21 12:41	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	12207	11/14/21 20:09	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			12310	11/15/21 12:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			12429	11/16/21 09:36	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	12047	11/11/21 15:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			12086	11/12/21 15:16	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	12137	11/12/21 12:50	CH	XEN MID
Soluble	Analysis	300.0		1			12212	11/17/21 02:36	CH	XEN MID

Client Sample ID: H-7

Lab Sample ID: 880-8220-7
Date Collected: 11/10/21 00:00
Matrix: Solid
Date Received: 11/11/21 10:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	12020	11/11/21 12:41	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	12207	11/14/21 20:35	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			12310	11/15/21 12:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			12429	11/16/21 09:36	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	12047	11/11/21 15:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1			12086	11/12/21 15:37	AJ	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8220-1
SDG: Eddy Co, NM

Client Sample ID: H-7
Date Collected: 11/10/21 00:00
Date Received: 11/11/21 10:50

Lab Sample ID: 880-8220-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.05 g	50 mL	12137	11/12/21 12:50	CH	XEN MID
Soluble	Analysis	300.0		1			12212	11/17/21 02:41	CH	XEN MID

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8220-1
SDG: Eddy Co, NM

Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8220-1
SDG: Eddy Co, NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8220-1
SDG: Eddy Co, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-8220-1	H-1	Solid	11/10/21 00:00	11/11/21 10:54
880-8220-2	H-2	Solid	11/10/21 00:00	11/11/21 10:54
880-8220-3	H-3	Solid	11/10/21 00:00	11/11/21 10:54
880-8220-4	H-4	Solid	11/10/21 00:00	11/11/21 10:54
880-8220-5	H-5	Solid	11/10/21 00:00	11/11/21 10:54
880-8220-6	H-6	Solid	11/10/21 00:00	11/11/21 10:50
880-8220-7	H-7	Solid	11/10/21 00:00	11/11/21 10:50

Chain of Custody

880-8220 Chain of Custody

11/17/2021

Page 1 of 1

Project Manager	Mike Carmona	Bill to: (if different)	Jacqui Harris
Company Name	NTG Environmental	Company Name:	COG
Address.	701 Tradewinds BLVD	Address:	15 W Loving Rd
City, State ZIP	Midland, TX 79706	City, State ZIP	Loving,NM 88256
Phone	432-813-0263	Email:	jacqui harris@conocophillips com

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:

Project Name	Spruce Goose Fed 2H (10 15 21)	Turn Around	
Project Number	214872	☐ Routine ☑ Rush	
Project Location	Eddy Co, NM	Due Date	72 hr
Sampler's Name	CCM	TAT starts the day received by the lab if received by 4 30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank.	Yes (No)	Wet Ice:	(Yes) No
Received Intact:	(Yes) No	Thermometer ID	IR8
Cooler Custody Seals.	Yes No (N/A)	Correction Factor	10
Sample Custody Seals.	Yes No (N/A)	Temperature Reading.	-1.2°C
Total Containers:		Corrected Temperature.	-1.3°C

ANALYSIS REQUEST

Preservative Codes

None NO DI Water H_2O

Cool Cool MeOH Me

HCL HC HNO_3 HN

H_2S0_4 H_2 NaOH Na

H_3PO_4 HP

$NaHSO_4$ NABIS

$Na_2S_2O_3$. $NaSO_3$

Zn Acetate+NaOH Zn

NaOH+Ascorbic Acid SAPC

Sample Identification	Date	Time	Soil	Water	Grab/ Comp	# of Cont	Pres. Code	BTEX 8021B	TPH 8015M (GRO + DRO + MRO)	Chloride 300 0	HOLD	Sample Comments
H-1	11/10/2021		X		G	1		X	X	X		(1) 4oz
H-2	11/10/2021		X		G	1		X	X	X		
H-3	11/10/2021		X		G	1		X	X	X		
H-4	11/10/2021		X		G	1		X	X	X		
H-5	11/10/2021		X		G	1		X	X	X		
H-6	11/10/2021		X		G	1		X	X	X		
H-7	11/10/2021		X		G	1		X	X	X		

Additoinal 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	Leticia R	11/11 10 50	2		
3			4		
5			6		

Revised Date 05012020 Rev 2020.1

Login Sample Receipt Checklist

Client: NT Global

Job Number: 880-8220-1
SDG Number: Eddy Co, NM

Login Number: 8220
List Number: 1
Creator: Teel, Brianna

List Source: Eurofins Xenco, Midland

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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ANALYTICAL REPORT

Eurofins Xenco, Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-8221-1
Laboratory Sample Delivery Group: Eddy Co, NM
Client Project/Site: Spruce Goose Fed 2H (10.15.21)
Revision: 1

For:
NT Global
701 Tradewinds Blvd
Midland, Texas 79706

Attn: Mike Carmona

JKramer

Authorized for release by:
11/17/2021 4:12:05 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Laboratory Job ID: 880-8221-1
SDG: Eddy Co, NM

Table of Contents

Definitions/Glossary

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8221-1
SDG: Eddy Co, NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8221-1
SDG: Eddy Co, NM

Job ID: 880-8221-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative
880-8221-1

REVISION

The report being provided is a revision of the original report sent on 11/17/2021. The report (revision 1) is being revised due to Diltuions are incorrect on original report.

Report revision history

Receipt
The samples were received on 11/11/2021 10:56 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -1.3°C

GC VOA
Method 8021B: The continuing calibration verification (CCV) associated with batch 880-12207 recovered under the lower control limit for < Benzene, Ethylbenzene, Toluene, m-Xylene & p-Xylene and o-Xylene>. The samples associated with this CCV were ran within passing CCV in 12 hour span; therefore, the data have been reported. The associated samples are impacted: (CCV 880-12207/33), (LCS 880-12020/1-A), (LCSD 880-12020/2-A), (MB 880-12020/5-A), (880-8220-A-1-C), (880-8220-A-1-A MS) and (880-8220-A-1-B MSD).

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-12020 and analytical batch 880-12207 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: S-1 (0-6") (880-8221-1), (MB 880-12019/5-A), (MB 880-12020/5-A) and (880-8220-A-1-C). Evidence of matrix interferences is not obvious.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: S-2 (0-6") (880-8221-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (MB 880-12047/1-A). Evidence of matrix interferences is not obvious.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8221-1
SDG: Eddy Co, NM

Client Sample ID: S-1 (0-6")

Date Collected: 11/10/21 00:00
Date Received: 11/11/21 10:56

Lab Sample ID: 880-8221-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.0201**		0.00200		mg/Kg		11/11/21 12:41	11/15/21 10:43	1
Toluene	**0.159**		0.00200		mg/Kg		11/11/21 12:41	11/15/21 10:43	1
Ethylbenzene	**0.0551**		0.00200		mg/Kg		11/11/21 12:41	11/15/21 10:43	1
m-Xylene & p-Xylene	**0.0601**		0.00399		mg/Kg		11/11/21 12:41	11/15/21 10:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/11/21 12:41	11/15/21 10:43	1
Xylenes, Total	**0.0601**		0.00399		mg/Kg		11/11/21 12:41	11/15/21 10:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*133*	*S1+*	*70 - 130*	*11/11/21 12:41*	*11/15/21 10:43*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*11/11/21 12:41*	*11/15/21 10:43*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.294**		0.00399		mg/Kg			11/15/21 12:40	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**16000**		499		mg/Kg			11/16/21 09:36	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<499	U	499		mg/Kg		11/11/21 15:47	11/12/21 15:58	10
Diesel Range Organics (Over C10-C28)	**16000**		499		mg/Kg		11/11/21 15:47	11/12/21 15:58	10
Oil Range Organics (Over C28-C36)	<499	U	499		mg/Kg		11/11/21 15:47	11/12/21 15:58	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*11/11/21 15:47*	*11/12/21 15:58*	*10*
o-Terphenyl	*116*		*70 - 130*	*11/11/21 15:47*	*11/12/21 15:58*	*10*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**17200**		100		mg/Kg			11/17/21 02:46	20

Client Sample ID: S-2 (0-6")

Date Collected: 11/10/21 00:00
Date Received: 11/11/21 10:56

Lab Sample ID: 880-8221-2

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00676**		0.00202		mg/Kg		11/11/21 12:41	11/15/21 11:10	1
Toluene	**0.0775**		0.00202		mg/Kg		11/11/21 12:41	11/15/21 11:10	1
Ethylbenzene	**0.0566**		0.00202		mg/Kg		11/11/21 12:41	11/15/21 11:10	1
m-Xylene & p-Xylene	**0.0558**		0.00403		mg/Kg		11/11/21 12:41	11/15/21 11:10	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/11/21 12:41	11/15/21 11:10	1
Xylenes, Total	**0.0558**		0.00403		mg/Kg		11/11/21 12:41	11/15/21 11:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*11/11/21 12:41*	*11/15/21 11:10*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*11/11/21 12:41*	*11/15/21 11:10*	*1*

Client Sample Results

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8221-1
SDG: Eddy Co, NM

Client Sample ID: S-2 (0-6")

Date Collected: 11/10/21 00:00
Date Received: 11/11/21 10:56

Lab Sample ID: 880-8221-2

Matrix: Solid

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.197**		0.00403		mg/Kg			11/15/21 12:40	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**16300**		498		mg/Kg			11/16/21 09:36	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<498	U	498		mg/Kg		11/11/21 15:47	11/12/21 16:18	10
Diesel Range Organics (Over C10-C28)	**16300**		498		mg/Kg		11/11/21 15:47	11/12/21 16:18	10
OII Range Organics (Over C28-C36)	<498	U	498		mg/Kg		11/11/21 15:47	11/12/21 16:18	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*11/11/21 15:47*	*11/12/21 16:18*	*10*
o-Terphenyl	*131*	*S1+*	*70 - 130*	*11/11/21 15:47*	*11/12/21 16:18*	*10*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**35100**		249		mg/Kg			11/17/21 02:51	50

Client Sample ID: S-3 (0-6")

Date Collected: 11/10/21 00:00
Date Received: 11/11/21 10:56

Lab Sample ID: 880-8221-3

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00709**		0.00200		mg/Kg		11/11/21 12:41	11/15/21 11:36	1
Toluene	**0.0683**		0.00200		mg/Kg		11/11/21 12:41	11/15/21 11:36	1
Ethylbenzene	**0.0919**		0.00200		mg/Kg		11/11/21 12:41	11/15/21 11:36	1
m-Xylene & p-Xylene	**0.0530**		0.00401		mg/Kg		11/11/21 12:41	11/15/21 11:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/11/21 12:41	11/15/21 11:36	1
Xylenes, Total	**0.0530**		0.00401		mg/Kg		11/11/21 12:41	11/15/21 11:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*74*		*70 - 130*	*11/11/21 12:41*	*11/15/21 11:36*	*1*
1,4-Difluorobenzene (Surr)	*120*		*70 - 130*	*11/11/21 12:41*	*11/15/21 11:36*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.220**		0.00401		mg/Kg			11/15/21 12:40	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**15100**		499		mg/Kg			11/16/21 09:36	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<499	U	499		mg/Kg		11/11/21 15:47	11/12/21 16:39	10
Diesel Range Organics (Over C10-C28)	**15100**		499		mg/Kg		11/11/21 15:47	11/12/21 16:39	10

Eurofins Xenco, Midland

Client Sample Results

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8221-1
SDG: Eddy Co, NM

Client Sample ID: S-3 (0-6")

Date Collected: 11/10/21 00:00
Date Received: 11/11/21 10:56

Lab Sample ID: 880-8221-3

Matrix: Solid

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<499	U	499		mg/Kg		11/11/21 15:47	11/12/21 16:39	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*114*		*70 - 130*	*11/11/21 15:47*	*11/12/21 16:39*	*10*
o-Terphenyl	*128*		*70 - 130*	*11/11/21 15:47*	*11/12/21 16:39*	*10*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**45600**		250		mg/Kg			11/17/21 02:56	50

Surrogate Summary

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8221-1
SDG: Eddy Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-8220-A-1-A MS	Matrix Spike	98	111
880-8220-A-1-B MSD	Matrix Spike Duplicate	96	75
880-8221-1	S-1 (0-6")	133 S1+	99
880-8221-2	S-2 (0-6")	97	109
880-8221-3	S-3 (0-6")	74	120
LCS 880-12020/1-A	Lab Control Sample	114	116
LCSD 880-12020/2-A	Lab Control Sample Dup	106	111
MB 880-12019/5-A	Method Blank	61 S1-	87
MB 880-12020/5-A	Method Blank	63 S1-	102

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-8220-A-1-E MS	Matrix Spike	102	93
880-8220-A-1-F MSD	Matrix Spike Duplicate	120	111
880-8221-1	S-1 (0-6")	94	116
880-8221-2	S-2 (0-6")	112	131 S1+
880-8221-3	S-3 (0-6")	114	128
LCS 880-12047/2-A	Lab Control Sample	118	118
LCSD 880-12047/3-A	Lab Control Sample Dup	115	116
MB 880-12047/1-A	Method Blank	107	135 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8221-1
SDG: Eddy Co, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-12019/5-A
Matrix: Solid
Analysis Batch: 12207

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12019

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/11/21 12:38	11/13/21 18:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/11/21 12:38	11/13/21 18:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/11/21 12:38	11/13/21 18:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/11/21 12:38	11/13/21 18:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/11/21 12:38	11/13/21 18:50	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/11/21 12:38	11/13/21 18:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*61*	*S1-*	*70 - 130*	*11/11/21 12:38*	*11/13/21 18:50*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*11/11/21 12:38*	*11/13/21 18:50*	*1*

Lab Sample ID: MB 880-12020/5-A
Matrix: Solid
Analysis Batch: 12207

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12020

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/11/21 12:41	11/14/21 17:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/11/21 12:41	11/14/21 17:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/11/21 12:41	11/14/21 17:34	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/11/21 12:41	11/14/21 17:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/11/21 12:41	11/14/21 17:34	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/11/21 12:41	11/14/21 17:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*63*	*S1-*	*70 - 130*	*11/11/21 12:41*	*11/14/21 17:34*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*11/11/21 12:41*	*11/14/21 17:34*	*1*

Lab Sample ID: LCS 880-12020/1-A
Matrix: Solid
Analysis Batch: 12207

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12020

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1086		mg/Kg		109	70 - 130
Toluene	0.100	0.09554		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.09613		mg/Kg		96	70 - 130
m-Xylene & p-Xylene	0.200	0.2124		mg/Kg		106	70 - 130
o-Xylene	0.100	0.1039		mg/Kg		104	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*

Lab Sample ID: LCSD 880-12020/2-A
Matrix: Solid
Analysis Batch: 12207

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 12020

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09458		mg/Kg		95	70 - 130	14	35

QC Sample Results

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8221-1
SDG: Eddy Co, NM

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-12020/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 12207 — **Prep Batch: 12020**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene			0.100	0.08370		mg/Kg		84	70 - 130	13	35
Ethylbenzene			0.100	0.08379		mg/Kg		84	70 - 130	14	35
m-Xylene & p-Xylene			0.200	0.1851		mg/Kg		93	70 - 130	14	35
o-Xylene			0.100	0.09241		mg/Kg		92	70 - 130	12	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: 880-8220-A-1-A MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 12207 — **Prep Batch: 12020**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00201	U F1	0.100	0.003593	F1	mg/Kg		4	70 - 130
Toluene	<0.00201	U F1	0.100	0.003716	F1	mg/Kg		4	70 - 130
Ethylbenzene	<0.00201	U F1	0.100	0.004981	F1	mg/Kg		5	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1	0.201	0.01071	F1	mg/Kg		5	70 - 130
o-Xylene	<0.00201	U F1	0.100	0.008528	F1	mg/Kg		8	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: 880-8220-A-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 12207 — **Prep Batch: 12020**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00201	U F1	0.100	<0.00200	U F1	mg/Kg		0	70 - 130	NC	35
Toluene	<0.00201	U F1	0.100	<0.00200	U F1	mg/Kg		0	70 - 130	NC	35
Ethylbenzene	<0.00201	U F1	0.100	<0.00200	U F1	mg/Kg		0	70 - 130	NC	35
m-Xylene & p-Xylene	<0.00402	U F1	0.200	<0.00401	U F1	mg/Kg		0	70 - 130	NC	35
o-Xylene	<0.00201	U F1	0.100	<0.00200	U F1	mg/Kg		0	70 - 130	NC	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*75*		*70 - 130*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-12047/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 12086 — **Prep Batch: 12047**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/11/21 15:47	11/12/21 11:51	1

Eurofins Xenco, Midland

QC Sample Results

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8221-1
SDG: Eddy Co, NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-12047/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 12086 — **Prep Batch: 12047**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/11/21 15:47	11/12/21 11:51	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/11/21 15:47	11/12/21 11:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*11/11/21 15:47*	*11/12/21 11:51*	*1*
o-Terphenyl	*135*	*S1+*	*70 - 130*	*11/11/21 15:47*	*11/12/21 11:51*	*1*

Lab Sample ID: LCS 880-12047/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 12086 — **Prep Batch: 12047**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	958.1		mg/Kg		96	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1139		mg/Kg		114	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*118*		*70 - 130*
o-Terphenyl	*118*		*70 - 130*

Lab Sample ID: LCSD 880-12047/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 12086 — **Prep Batch: 12047**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1077		mg/Kg		108	70 - 130	12	20
Diesel Range Organics (Over C10-C28)			1000	1208		mg/Kg		121	70 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*115*		*70 - 130*
o-Terphenyl	*116*		*70 - 130*

Lab Sample ID: 880-8220-A-1-E MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 12086 — **Prep Batch: 12047**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	997	958.7		mg/Kg		94	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	997	928.5		mg/Kg		91	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*102*		*70 - 130*
o-Terphenyl	*93*		*70 - 130*

QC Sample Results

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8221-1
SDG: Eddy Co, NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 880-8220-A-1-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 12086 — **Prep Batch: 12047**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	1048		mg/Kg		103	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	1092		mg/Kg		107	70 - 130	16	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*120*		*70 - 130*
o-Terphenyl	*111*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-12137/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 12212

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			11/17/21 00:34	1

Lab Sample ID: LCS 880-12137/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 12212

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	254.0		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-12137/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 12212

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	257.2		mg/Kg		103	90 - 110	1	20

Lab Sample ID: 880-8220-A-2-G MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 12212

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	44.9		249	316.4		mg/Kg		109	90 - 110

Lab Sample ID: 880-8220-A-2-H MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 12212

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	44.9		249	317.0		mg/Kg		109	90 - 110	0	20

QC Association Summary

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8221-1
SDG: Eddy Co, NM

GC VOA

Prep Batch: 12019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-12019/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 12020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8221-1	S-1 (0-6")	Total/NA	Solid	5035	
880-8221-2	S-2 (0-6")	Total/NA	Solid	5035	
880-8221-3	S-3 (0-6")	Total/NA	Solid	5035	
MB 880-12020/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-12020/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-12020/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-8220-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-8220-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 12207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8221-1	S-1 (0-6")	Total/NA	Solid	8021B	12020
880-8221-2	S-2 (0-6")	Total/NA	Solid	8021B	12020
880-8221-3	S-3 (0-6")	Total/NA	Solid	8021B	12020
MB 880-12019/5-A	Method Blank	Total/NA	Solid	8021B	12019
MB 880-12020/5-A	Method Blank	Total/NA	Solid	8021B	12020
LCS 880-12020/1-A	Lab Control Sample	Total/NA	Solid	8021B	12020
LCSD 880-12020/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	12020
880-8220-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	12020
880-8220-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	12020

Analysis Batch: 12313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8221-1	S-1 (0-6")	Total/NA	Solid	Total BTEX	
880-8221-2	S-2 (0-6")	Total/NA	Solid	Total BTEX	
880-8221-3	S-3 (0-6")	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 12047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8221-1	S-1 (0-6")	Total/NA	Solid	8015NM Prep	
880-8221-2	S-2 (0-6")	Total/NA	Solid	8015NM Prep	
880-8221-3	S-3 (0-6")	Total/NA	Solid	8015NM Prep	
MB 880-12047/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-12047/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-12047/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-8220-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-8220-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 12086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8221-1	S-1 (0-6")	Total/NA	Solid	8015B NM	12047
880-8221-2	S-2 (0-6")	Total/NA	Solid	8015B NM	12047
880-8221-3	S-3 (0-6")	Total/NA	Solid	8015B NM	12047
MB 880-12047/1-A	Method Blank	Total/NA	Solid	8015B NM	12047
LCS 880-12047/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	12047

QC Association Summary

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8221-1
SDG: Eddy Co, NM

GC Semi VOA (Continued)

Analysis Batch: 12086 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-12047/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	12047
880-8220-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	12047
880-8220-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	12047

Analysis Batch: 12429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8221-1	S-1 (0-6")	Total/NA	Solid	8015 NM	
880-8221-2	S-2 (0-6")	Total/NA	Solid	8015 NM	
880-8221-3	S-3 (0-6")	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 12137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8221-1	S-1 (0-6")	Soluble	Solid	DI Leach	
880-8221-2	S-2 (0-6")	Soluble	Solid	DI Leach	
880-8221-3	S-3 (0-6")	Soluble	Solid	DI Leach	
MB 880-12137/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-12137/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-12137/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-8220-A-2-G MS	Matrix Spike	Soluble	Solid	DI Leach	
880-8220-A-2-H MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 12212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-8221-1	S-1 (0-6")	Soluble	Solid	300.0	12137
880-8221-2	S-2 (0-6")	Soluble	Solid	300.0	12137
880-8221-3	S-3 (0-6")	Soluble	Solid	300.0	12137
MB 880-12137/1-A	Method Blank	Soluble	Solid	300.0	12137
LCS 880-12137/2-A	Lab Control Sample	Soluble	Solid	300.0	12137
LCSD 880-12137/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	12137
880-8220-A-2-G MS	Matrix Spike	Soluble	Solid	300.0	12137
880-8220-A-2-H MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	12137

Lab Chronicle

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8221-1
SDG: Eddy Co, NM

Client Sample ID: S-1 (0-6")

Date Collected: 11/10/21 00:00
Date Received: 11/11/21 10:56

Lab Sample ID: 880-8221-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	12020	11/11/21 12:41	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	12207	11/15/21 10:43	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			12313	11/15/21 12:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			12429	11/16/21 09:36	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	12047	11/11/21 15:47	DM	XEN MID
Total/NA	Analysis	8015B NM		10			12086	11/12/21 15:58	AJ	XEN MID
Soluble	Leach	DI Leach			4.99 g	50 mL	12137	11/12/21 12:50	CH	XEN MID
Soluble	Analysis	300.0		20			12212	11/17/21 02:46	CH	XEN MID

Client Sample ID: S-2 (0-6")

Date Collected: 11/10/21 00:00
Date Received: 11/11/21 10:56

Lab Sample ID: 880-8221-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	12020	11/11/21 12:41	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	12207	11/15/21 11:10	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			12313	11/15/21 12:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			12429	11/16/21 09:36	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	12047	11/11/21 15:47	DM	XEN MID
Total/NA	Analysis	8015B NM		10			12086	11/12/21 16:18	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	12137	11/12/21 12:50	CH	XEN MID
Soluble	Analysis	300.0		50			12212	11/17/21 02:51	CH	XEN MID

Client Sample ID: S-3 (0-6")

Date Collected: 11/10/21 00:00
Date Received: 11/11/21 10:56

Lab Sample ID: 880-8221-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	12020	11/11/21 12:41	KL	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	12207	11/15/21 11:36	KL	XEN MID
Total/NA	Analysis	Total BTEX		1			12313	11/15/21 12:40	AJ	XEN MID
Total/NA	Analysis	8015 NM		1			12429	11/16/21 09:36	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	12047	11/11/21 15:47	DM	XEN MID
Total/NA	Analysis	8015B NM		10			12086	11/12/21 16:39	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	12137	11/12/21 12:50	CH	XEN MID
Soluble	Analysis	300.0		50			12212	11/17/21 02:56	CH	XEN MID

Laboratory References:
XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8221-1
SDG: Eddy Co, NM

Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8221-1
SDG: Eddy Co, NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

ASTM = ASTM International
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-8221-1
SDG: Eddy Co, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-8221-1	S-1 (0-6")	Solid	11/10/21 00:00	11/11/21 10:56
880-8221-2	S-2 (0-6")	Solid	11/10/21 00:00	11/11/21 10:56
880-8221-3	S-3 (0-6")	Solid	11/10/21 00:00	11/11/21 10:56

Chain of Custody

NTG ENVIRONMENTAL

880-8221 Chain of Custody

11/17/2021 (Rev. 1)

Page ___1___ of __1____

Project Manager:	Mike Carmona	Bill to: (if different)	Jacqui Harris
Company Name:	NTG Environmental	Company Name:	COG
Address:	701 Tradewinds BLVD	Address:	15 W Loving Rd
City, State ZIP:	Midland, TX 79706	City, State ZIP:	Loving,NM 88256
Phone:	432-813-0263	Email	jacqui.harris@conocophillips.com

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:

Project Name:	Spruce Goose Fed 2H (10 15 21)	Turn Around	☐ Routine ☑ Rush
Project Number:	214872	Due Date	72 hr
Project Location	Eddy Co, NM	TAT starts the day received by the lab if received by 4 30pm	
Sampler's Name:	CCM		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Received Intact:	(Yes) No	Thermometer ID:	IR8
Cooler Custody Seals.	Yes No (N/A)	Correction Factor:	.10
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	-1.2
Total Containers.		Corrected Temperature.	-1 3

ANALYSIS REQUEST

Sample Identification	Date	Time	Soil	Water	Grab/ Comp	# of Cont	Pres. Code	BTEX 8021B	TPH 8015M (GRO + DRO + MRO)	Chloride 300 0	HOLD
S-1 (0-6")	11/10/2021		X		G	1		X	X	X	
S-2 (0-6")	11/10/2021		X		G	1		X	X	X	
S-3 (0-6")	11/10/2021		X		G	1		X	X	X	

Parameters

Preservative Codes

None NO	DI Water H_2O
Cool Cool	MeOH Me
HCL HC	HNO_3 HN
H_2S0_4 H_2	NaOH Na
H_3PO_4 HP	
$NaHSO_4$ NABIS	
$Na_2S_2O_3$ $NaSO_3$	
Zn Acetate+NaOH Zn	
NaOH+Ascorbic Acid SAPC	

Sample Comments

(3) 4oz

Additoinal 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	Leticia R	11/11 10:50	2		
3			4		
5			6		

Revised Date 05012020 Rev 2020.1

Login Sample Receipt Checklist

Client: NT Global

Job Number: 880-8221-1
SDG Number: Eddy Co, NM

Login Number: 8221
List Number: 1
Creator: Teel, Brianna

List Source: Eurofins Xenco, Midland

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

CARDINAL Laboratories

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

December 10, 2021

MIKE CARMONA

NTG ENVIRONMENTAL

701 TRADEWINDS BLVD. SUITE C

MIDLAND, TX 79706

RE: SPRUCE GOOSE FED 2H

Enclosed are the results of analyses for samples received by the laboratory on 12/08/21 14:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

NTG ENVIRONMENTAL
MIKE CARMONA
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706
Fax To:

Received:	12/08/2021	Sampling Date:	12/06/2021
Reported:	12/10/2021	Sampling Type:	Soil
Project Name:	SPRUCE GOOSE FED 2H	Sampling Condition:	Cool & Intact
Project Number:	214872 (10.15.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: T - 1 (1') (H213546-01)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/09/2021	ND	1.83	91.5	2.00	11.4	
Toluene*	<0.050	0.050	12/09/2021	ND	1.94	96.8	2.00	5.99	
Ethylbenzene*	<0.050	0.050	12/09/2021	ND	1.95	97.4	2.00	3.98	
Total Xylenes*	<0.150	0.150	12/09/2021	ND	5.91	98.5	6.00	4.28	
Total BTEX	<0.300	0.300	12/09/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.9 %* *69.9-140*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**96.0**	16.0	12/09/2021	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/10/2021	ND	189	94.3	200	15.9	
DRO >C10-C28*	**12.6**	10.0	12/10/2021	ND	207	104	200	4.87	
EXT DRO >C28-C36	<10.0	10.0	12/10/2021	ND					

Surrogate: 1-Chlorooctane *99.2 %* *44.3-133*

Surrogate: 1-Chlorooctadecane *97.4 %* *38.9-142*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

NTG ENVIRONMENTAL
MIKE CARMONA
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706
Fax To:

Received:	12/08/2021	Sampling Date:	12/06/2021
Reported:	12/10/2021	Sampling Type:	Soil
Project Name:	SPRUCE GOOSE FED 2H	Sampling Condition:	Cool & Intact
Project Number:	214872 (10.15.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: T - 1 (2') (H213546-02)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/09/2021	ND	1.83	91.5	2.00	11.4	
Toluene*	<0.050	0.050	12/09/2021	ND	1.94	96.8	2.00	5.99	
Ethylbenzene*	<0.050	0.050	12/09/2021	ND	1.95	97.4	2.00	3.98	
Total Xylenes*	<0.150	0.150	12/09/2021	ND	5.91	98.5	6.00	4.28	
Total BTEX	<0.300	0.300	12/09/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.2 %* *69.9-140*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**160**	16.0	12/09/2021	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/10/2021	ND	189	94.3	200	15.9	
DRO >C10-C28*	<10.0	10.0	12/10/2021	ND	207	104	200	4.87	
EXT DRO >C28-C36	<10.0	10.0	12/10/2021	ND					

Surrogate: 1-Chlorooctane *100 %* *44.3-133*

Surrogate: 1-Chlorooctadecane *98.6 %* *38.9-142*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

NTG ENVIRONMENTAL
MIKE CARMONA
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706
Fax To:

Received:	12/08/2021	Sampling Date:	12/06/2021
Reported:	12/10/2021	Sampling Type:	Soil
Project Name:	SPRUCE GOOSE FED 2H	Sampling Condition:	Cool & Intact
Project Number:	214872 (10.15.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: T - 1 (3') (H213546-03)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/09/2021	ND	1.83	91.5	2.00	11.4	
Toluene*	<0.050	0.050	12/09/2021	ND	1.94	96.8	2.00	5.99	
Ethylbenzene*	<0.050	0.050	12/09/2021	ND	1.95	97.4	2.00	3.98	
Total Xylenes*	<0.150	0.150	12/09/2021	ND	5.91	98.5	6.00	4.28	
Total BTEX	<0.300	0.300	12/09/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.5 %* *69.9-140*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**128**	16.0	12/09/2021	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/10/2021	ND	189	94.3	200	15.9	
DRO >C10-C28*	<10.0	10.0	12/10/2021	ND	207	104	200	4.87	
EXT DRO >C28-C36	<10.0	10.0	12/10/2021	ND					

Surrogate: 1-Chlorooctane *98.8 %* *44.3-133*

Surrogate: 1-Chlorooctadecane *101 %* *38.9-142*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

NTG ENVIRONMENTAL
MIKE CARMONA
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706
Fax To:

Received:	12/08/2021	Sampling Date:	12/06/2021
Reported:	12/10/2021	Sampling Type:	Soil
Project Name:	SPRUCE GOOSE FED 2H	Sampling Condition:	Cool & Intact
Project Number:	214872 (10.15.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: T - 2 (1') (H213546-04)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/09/2021	ND	1.83	91.5	2.00	11.4	
Toluene*	<0.050	0.050	12/09/2021	ND	1.94	96.8	2.00	5.99	
Ethylbenzene*	<0.050	0.050	12/09/2021	ND	1.95	97.4	2.00	3.98	
Total Xylenes*	<0.150	0.150	12/09/2021	ND	5.91	98.5	6.00	4.28	
Total BTEX	<0.300	0.300	12/09/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.0 %* *69.9-140*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**160**	16.0	12/09/2021	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/10/2021	ND	189	94.3	200	15.9	
DRO >C10-C28*	<10.0	10.0	12/10/2021	ND	207	104	200	4.87	
EXT DRO >C28-C36	<10.0	10.0	12/10/2021	ND					

Surrogate: 1-Chlorooctane *99.4 %* *44.3-133*

Surrogate: 1-Chlorooctadecane *109 %* *38.9-142*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

NTG ENVIRONMENTAL
MIKE CARMONA
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706
Fax To:

Received:	12/08/2021	Sampling Date:	12/06/2021
Reported:	12/10/2021	Sampling Type:	Soil
Project Name:	SPRUCE GOOSE FED 2H	Sampling Condition:	Cool & Intact
Project Number:	214872 (10.15.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: T - 2 (2') (H213546-05)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/09/2021	ND	1.83	91.5	2.00	11.4	
Toluene*	<0.050	0.050	12/09/2021	ND	1.94	96.8	2.00	5.99	
Ethylbenzene*	<0.050	0.050	12/09/2021	ND	1.95	97.4	2.00	3.98	
Total Xylenes*	<0.150	0.150	12/09/2021	ND	5.91	98.5	6.00	4.28	
Total BTEX	<0.300	0.300	12/09/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.8 %* *69.9-140*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	12/09/2021	ND	416	104	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/10/2021	ND	189	94.3	200	15.9	
DRO >C10-C28*	<10.0	10.0	12/10/2021	ND	207	104	200	4.87	
EXT DRO >C28-C36	<10.0	10.0	12/10/2021	ND					

Surrogate: 1-Chlorooctane *99.6 %* *44.3-133*

Surrogate: 1-Chlorooctadecane *112 %* *38.9-142*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

NTG ENVIRONMENTAL
MIKE CARMONA
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706
Fax To:

Received:	12/08/2021	Sampling Date:	12/06/2021
Reported:	12/10/2021	Sampling Type:	Soil
Project Name:	SPRUCE GOOSE FED 2H	Sampling Condition:	Cool & Intact
Project Number:	214872 (10.15.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: T - 3 (1') (H213546-06)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/09/2021	ND	1.83	91.5	2.00	11.4	
Toluene*	<0.050	0.050	12/09/2021	ND	1.94	96.8	2.00	5.99	
Ethylbenzene*	<0.050	0.050	12/09/2021	ND	1.95	97.4	2.00	3.98	
Total Xylenes*	<0.150	0.150	12/09/2021	ND	5.91	98.5	6.00	4.28	
Total BTEX	<0.300	0.300	12/09/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.7 %* *69.9-140*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**112**	16.0	12/09/2021	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/10/2021	ND	189	94.3	200	15.9	
DRO >C10-C28*	<10.0	10.0	12/10/2021	ND	207	104	200	4.87	
EXT DRO >C28-C36	<10.0	10.0	12/10/2021	ND					

Surrogate: 1-Chlorooctane *97.9 %* *44.3-133*

Surrogate: 1-Chlorooctadecane *108 %* *38.9-142*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

NTG ENVIRONMENTAL
MIKE CARMONA
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706
Fax To:

Received:	12/08/2021	Sampling Date:	12/06/2021
Reported:	12/10/2021	Sampling Type:	Soil
Project Name:	SPRUCE GOOSE FED 2H	Sampling Condition:	Cool & Intact
Project Number:	214872 (10.15.21)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: T - 3 (2') (H213546-07)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/09/2021	ND	1.83	91.5	2.00	11.4	
Toluene*	<0.050	0.050	12/09/2021	ND	1.94	96.8	2.00	5.99	
Ethylbenzene*	<0.050	0.050	12/09/2021	ND	1.95	97.4	2.00	3.98	
Total Xylenes*	<0.150	0.150	12/09/2021	ND	5.91	98.5	6.00	4.28	
Total BTEX	<0.300	0.300	12/09/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID *96.5 %* *69.9-140*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	12/09/2021	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/10/2021	ND	189	94.3	200	15.9	
DRO >C10-C28*	<10.0	10.0	12/10/2021	ND	207	104	200	4.87	
EXT DRO >C28-C36	<10.0	10.0	12/10/2021	ND					

Surrogate: 1-Chlorooctane *93.7 %* *44.3-133*

Surrogate: 1-Chlorooctadecane *102 %* *38.9-142*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

QR-04	The RPD for the BS/BSD was outside of historical limits.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

Chain of Custody

NTG ENVIRONMENTAL

Work Order No: H213546

Page 1 of 1

Project Manager:	Mike Carmona	Bill to: (if different)	Jacqui Harris
Company Name:	NTG Environmental	Company Name:	COG
Address:	701 Tradewinds BLVD	Address:	15 W Loving Rd
City, State ZIP:	Midland, TX 79706	City, State ZIP:	Loving,NM 88256
Phone:	432-813-0263	Email:	jacqui.harris@conocophillips.com

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:

Project Name:	Spruce Goose Fed 2H (10.15.21)	Turn Around	☐ Routine ☑ Rush
Project Number:	214872	Due Date:	72 hr
Project Location	Eddy Co, NM	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	ES		
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Received Intact:	(Yes) No	Thermometer ID:	113	
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.5°C	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	2.8°C	
Total Containers:		Corrected Temperature:	2.3°C	

Preservative Codes

None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO_3: HN; H_2S0_4: H_2; NaOH: Na; H_3PO_4: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

	Sample Identification	Date	Time	Soil	Water	Grab/ Comp	# of Cont	Pres. Code	BTEX 8021B	TPH 8015M (GRO + DRO + MRO)	Chloride 4500	HOLD	Sample Comments
1	T-1 (1')	12/6/2021		X		G	1		X	X	X		
2	T-1 (2')	12/6/2021		X		G	1		X	X	X		
3	T-1 (3')	12/6/2021		X		G	1		X	X	X		
4	T-2 (1')	12/6/2021		X		G	1		X	X	X		
5	T-2 (2')	12/6/2021		X		G	1		X	X	X		
6	T-3 (1')	12/6/2021		X		G	1		X	X	X		
7	T-3 (2')	12/6/2021		X		G	1		X	X	X		

Additoinal 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		Tamara Oldaker	12-8-21 1420	2			
3				4			
5				6			

Revised Date 05012020 Rev. 2020.1

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-10483-1
Laboratory Sample Delivery Group: Eddy Co NM
Client Project/Site: Spruce Goose Fed 2H (10.15.21)

For:
NT Global
701 Tradewinds Blvd
Midland, Texas 79706

Attn: Mike Carmona

JKramer

Authorized for release by:
1/25/2022 5:25:58 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Laboratory Job ID: 880-10483-1
SDG: Eddy Co NM

Table of Contents

Definitions/Glossary

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-10483-1
SDG: Eddy Co NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-10483-1
SDG: Eddy Co NM

Job ID: 880-10483-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-10483-1

Receipt
The samples were received on 1/24/2022 10:38 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.2°C

GC VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA
Method 8015MOD_NM: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 880-17627 and analytical batch 880-17551 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10 These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-17627 and analytical batch 880-17551 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-17585 and analytical batch 880-17589 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (LCSD 880-17627/3-A). Evidence of matrix interferences is not obvious.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-17583 and analytical batch 880-17637 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-17584 and analytical batch 880-17638 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-10483-1
SDG: Eddy Co NM

Client Sample ID: CS-1 (8")

Date Collected: 01/21/22 00:00
Date Received: 01/24/22 10:38

Lab Sample ID: 880-10483-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		01/24/22 11:15	01/24/22 15:26	1
Toluene	<0.00201	U	0.00201		mg/Kg		01/24/22 11:15	01/24/22 15:26	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		01/24/22 11:15	01/24/22 15:26	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		01/24/22 11:15	01/24/22 15:26	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		01/24/22 11:15	01/24/22 15:26	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		01/24/22 11:15	01/24/22 15:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*01/24/22 11:15*	*01/24/22 15:26*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*01/24/22 11:15*	*01/24/22 15:26*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			01/25/22 11:35	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			01/25/22 09:24	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1 F2	49.9		mg/Kg		01/24/22 11:46	01/24/22 16:51	1
Diesel Range Organics (Over C10-C28)	<49.9	U F1	49.9		mg/Kg		01/24/22 11:46	01/24/22 16:51	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/24/22 11:46	01/24/22 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*01/24/22 11:46*	*01/24/22 16:51*	*1*
o-Terphenyl	*93*		*70 - 130*	*01/24/22 11:46*	*01/24/22 16:51*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**28.0**		4.97		mg/Kg			01/24/22 20:48	1

Client Sample ID: CS-2 (8")

Date Collected: 01/21/22 00:00
Date Received: 01/24/22 10:38

Lab Sample ID: 880-10483-2

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/24/22 11:15	01/24/22 15:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/24/22 11:15	01/24/22 15:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/24/22 11:15	01/24/22 15:46	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/24/22 11:15	01/24/22 15:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/24/22 11:15	01/24/22 15:46	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/24/22 11:15	01/24/22 15:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*129*		*70 - 130*	*01/24/22 11:15*	*01/24/22 15:46*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*01/24/22 11:15*	*01/24/22 15:46*	*1*

Client Sample Results

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-10483-1
SDG: Eddy Co NM

Client Sample ID: CS-2 (8")

Lab Sample ID: 880-10483-2
Matrix: Solid
Date Collected: 01/21/22 00:00
Date Received: 01/24/22 10:38

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			01/25/22 11:35	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			01/25/22 09:24	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		01/24/22 11:46	01/24/22 18:15	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/24/22 11:46	01/24/22 18:15	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/24/22 11:46	01/24/22 18:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*01/24/22 11:46*	*01/24/22 18:15*	*1*
o-Terphenyl	*104*		*70 - 130*	*01/24/22 11:46*	*01/24/22 18:15*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11.6**		4.99		mg/Kg			01/24/22 20:56	1

Client Sample ID: CS-3 (8")

Lab Sample ID: 880-10483-3
Matrix: Solid
Date Collected: 01/21/22 00:00
Date Received: 01/24/22 10:38

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/24/22 11:15	01/24/22 16:07	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/24/22 11:15	01/24/22 16:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/24/22 11:15	01/24/22 16:07	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		01/24/22 11:15	01/24/22 16:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/24/22 11:15	01/24/22 16:07	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		01/24/22 11:15	01/24/22 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*01/24/22 11:15*	*01/24/22 16:07*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*01/24/22 11:15*	*01/24/22 16:07*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			01/25/22 11:35	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/25/22 09:24	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/24/22 11:46	01/24/22 18:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/24/22 11:46	01/24/22 18:36	1

Client Sample Results

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-10483-1
SDG: Eddy Co NM

Client Sample ID: CS-3 (8")

Date Collected: 01/21/22 00:00
Date Received: 01/24/22 10:38

Lab Sample ID: 880-10483-3

Matrix: Solid

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/24/22 11:46	01/24/22 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*01/24/22 11:46*	*01/24/22 18:36*	*1*
o-Terphenyl	*94*		*70 - 130*	*01/24/22 11:46*	*01/24/22 18:36*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.22**		4.95		mg/Kg			01/24/22 21:03	1

Client Sample ID: CS-4 (8")

Date Collected: 01/21/22 00:00
Date Received: 01/24/22 10:38

Lab Sample ID: 880-10483-4

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		01/24/22 11:15	01/24/22 16:27	1
Toluene	<0.00198	U	0.00198		mg/Kg		01/24/22 11:15	01/24/22 16:27	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		01/24/22 11:15	01/24/22 16:27	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		01/24/22 11:15	01/24/22 16:27	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		01/24/22 11:15	01/24/22 16:27	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		01/24/22 11:15	01/24/22 16:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*01/24/22 11:15*	*01/24/22 16:27*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*01/24/22 11:15*	*01/24/22 16:27*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			01/25/22 11:35	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			01/25/22 09:24	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		01/24/22 11:46	01/24/22 18:57	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/24/22 11:46	01/24/22 18:57	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/24/22 11:46	01/24/22 18:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*01/24/22 11:46*	*01/24/22 18:57*	*1*
o-Terphenyl	*94*		*70 - 130*	*01/24/22 11:46*	*01/24/22 18:57*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.05**		5.05		mg/Kg			01/24/22 21:11	1

Client Sample Results

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-10483-1
SDG: Eddy Co NM

Client Sample ID: CS-5 (8")

Date Collected: 01/21/22 00:00
Date Received: 01/24/22 10:38

Lab Sample ID: 880-10483-5

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		01/24/22 11:15	01/24/22 16:47	1
Toluene	<0.00202	U	0.00202		mg/Kg		01/24/22 11:15	01/24/22 16:47	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		01/24/22 11:15	01/24/22 16:47	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		01/24/22 11:15	01/24/22 16:47	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		01/24/22 11:15	01/24/22 16:47	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		01/24/22 11:15	01/24/22 16:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*01/24/22 11:15*	*01/24/22 16:47*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*01/24/22 11:15*	*01/24/22 16:47*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			01/25/22 11:35	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/25/22 09:24	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/24/22 11:46	01/24/22 19:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/24/22 11:46	01/24/22 19:18	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/24/22 11:46	01/24/22 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*117*		*70 - 130*	*01/24/22 11:46*	*01/24/22 19:18*	*1*
o-Terphenyl	*107*		*70 - 130*	*01/24/22 11:46*	*01/24/22 19:18*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.99	U F1	4.99		mg/Kg			01/24/22 21:18	1

Client Sample ID: CS-6 (8")

Date Collected: 01/21/22 00:00
Date Received: 01/24/22 10:38

Lab Sample ID: 880-10483-6

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/24/22 11:15	01/24/22 17:08	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/24/22 11:15	01/24/22 17:08	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/24/22 11:15	01/24/22 17:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/24/22 11:15	01/24/22 17:08	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/24/22 11:15	01/24/22 17:08	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/24/22 11:15	01/24/22 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*01/24/22 11:15*	*01/24/22 17:08*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*01/24/22 11:15*	*01/24/22 17:08*	*1*

Client Sample Results

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-10483-1
SDG: Eddy Co NM

Client Sample ID: CS-6 (8")

Date Collected: 01/21/22 00:00
Date Received: 01/24/22 10:38

Lab Sample ID: 880-10483-6

Matrix: Solid

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			01/25/22 11:35	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/25/22 09:24	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/24/22 11:46	01/24/22 19:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/24/22 11:46	01/24/22 19:40	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/24/22 11:46	01/24/22 19:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*01/24/22 11:46*	*01/24/22 19:40*	*1*
o-Terphenyl	*99*		*70 - 130*	*01/24/22 11:46*	*01/24/22 19:40*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.98	U	4.98		mg/Kg			01/24/22 21:41	1

Client Sample ID: CS-7 (8")

Date Collected: 01/21/22 00:00
Date Received: 01/24/22 10:38

Lab Sample ID: 880-10483-7

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		01/24/22 11:15	01/24/22 17:28	1
Toluene	<0.00201	U	0.00201		mg/Kg		01/24/22 11:15	01/24/22 17:28	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		01/24/22 11:15	01/24/22 17:28	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		01/24/22 11:15	01/24/22 17:28	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		01/24/22 11:15	01/24/22 17:28	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		01/24/22 11:15	01/24/22 17:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*01/24/22 11:15*	*01/24/22 17:28*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*01/24/22 11:15*	*01/24/22 17:28*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			01/25/22 11:35	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/25/22 09:24	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/24/22 11:46	01/24/22 20:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/24/22 11:46	01/24/22 20:01	1

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Client Sample Results

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-10483-1
SDG: Eddy Co NM

Client Sample ID: CS-7 (8")

Date Collected: 01/21/22 00:00
Date Received: 01/24/22 10:38

Lab Sample ID: 880-10483-7

Matrix: Solid

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/24/22 11:46	01/24/22 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*01/24/22 11:46*	*01/24/22 20:01*	*1*
o-Terphenyl	*98*		*70 - 130*	*01/24/22 11:46*	*01/24/22 20:01*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.83**		5.00		mg/Kg			01/24/22 21:49	1

Client Sample ID: CS-8 (8")

Date Collected: 01/21/22 00:00
Date Received: 01/24/22 10:38

Lab Sample ID: 880-10483-8

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/24/22 11:15	01/24/22 17:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/24/22 11:15	01/24/22 17:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/24/22 11:15	01/24/22 17:49	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		01/24/22 11:15	01/24/22 17:49	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/24/22 11:15	01/24/22 17:49	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		01/24/22 11:15	01/24/22 17:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*01/24/22 11:15*	*01/24/22 17:49*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*01/24/22 11:15*	*01/24/22 17:49*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			01/25/22 11:35	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			01/25/22 09:24	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		01/24/22 11:46	01/24/22 20:22	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/24/22 11:46	01/24/22 20:22	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/24/22 11:46	01/24/22 20:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*01/24/22 11:46*	*01/24/22 20:22*	*1*
o-Terphenyl	*95*		*70 - 130*	*01/24/22 11:46*	*01/24/22 20:22*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.33**		4.95		mg/Kg			01/24/22 22:11	1

Client Sample Results

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-10483-1
SDG: Eddy Co NM

Client Sample ID: CS-9 (8")

Date Collected: 01/21/22 00:00
Date Received: 01/24/22 10:38

Lab Sample ID: 880-10483-9

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/24/22 11:15	01/24/22 18:09	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/24/22 11:15	01/24/22 18:09	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/24/22 11:15	01/24/22 18:09	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/24/22 11:15	01/24/22 18:09	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/24/22 11:15	01/24/22 18:09	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/24/22 11:15	01/24/22 18:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*01/24/22 11:15*	*01/24/22 18:09*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*01/24/22 11:15*	*01/24/22 18:09*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			01/25/22 11:35	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/25/22 09:24	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/24/22 11:46	01/24/22 20:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/24/22 11:46	01/24/22 20:43	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/24/22 11:46	01/24/22 20:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*01/24/22 11:46*	*01/24/22 20:43*	*1*
o-Terphenyl	*95*		*70 - 130*	*01/24/22 11:46*	*01/24/22 20:43*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.02	U	5.02		mg/Kg			01/24/22 22:19	1

Client Sample ID: CS-10 (8")

Date Collected: 01/21/22 00:00
Date Received: 01/24/22 10:38

Lab Sample ID: 880-10483-10

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		01/24/22 11:15	01/24/22 18:30	1
Toluene	<0.00198	U	0.00198		mg/Kg		01/24/22 11:15	01/24/22 18:30	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		01/24/22 11:15	01/24/22 18:30	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		01/24/22 11:15	01/24/22 18:30	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		01/24/22 11:15	01/24/22 18:30	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		01/24/22 11:15	01/24/22 18:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*	*01/24/22 11:15*	*01/24/22 18:30*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*01/24/22 11:15*	*01/24/22 18:30*	*1*

Client Sample Results

Client: NT Global
Project/Site: Spruce Goose Fed 2H (10.15.21)

Job ID: 880-10483-1
SDG: Eddy Co NM

Client Sample ID: CS-10 (8")

Lab Sample ID: 880-10483-10
Matrix: Solid
Date Collected: 01/21/22 00:00
Date Received: 01/24/22 10:38

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			01/25/22 11:35	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			01/25/22 09:24	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		01/24/22 11:46	01/24/22 21:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/24/22 11:46	01/24/22 21:05	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/24/22 11:46	01/24/22 21:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*01/24/22 11:46*	*01/24/22 21:05*	*1*
o-Terphenyl	*95*		*70 - 130*	*01/24/22 11:46*	*01/24/22 21:05*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.12**		5.05		mg/Kg			01/24/22 22:26	1

Client Sample ID: CS-11 (8")

Lab Sample ID: 880-10483-11
Matrix: Solid
Date Collected: 01/21/22 00:00
Date Received: 01/24/22 10:38

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/24/22 11:15	01/24/22 19:52	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/24/22 11:15	01/24/22 19:52	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/24/22 11:15	01/24/22 19:52	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/24/22 11:15	01/24/22 19:52	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/24/22 11:15	01/24/22 19:52	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/24/22 11:15	01/24/22 19:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*01/24/22 11:15*	*01/24/22 19:52*	*1*
1,4-Difluorobenzene (Surr)	*79*		*70 - 130*	*01/24/22 11:15*	*01/24/22 19:52*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			01/25/22 11:35	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/25/22 09:24	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/24/22 11:46	01/24/22 21:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/24/22 11:46	01/24/22 21:48	1

Eurofins Midland

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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 96107

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 96107
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved.	5/3/2022